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## Abbreviations, symbols, and conventions

## Abbreviations used in glosses

| 1 | first person |
| :---: | :---: |
| 2 | second person |
| 3 | third person |
| 3:3 | third person subject with third person direct object |
| Abs | absolutive (viz., not possessed) |
| Aug | augment |
| Aux | auxiliary |
| Aw | motion away |
| Cm | compact |
| Cncsv | concessive |
| Crt | certainty |
| Crd | coordinator |
| DCL | declarative |
| DDS | demonstrative pronoun, distal singular |
| DDP | demonstrative pronoun, distal plural |
| DO | direct object |
| DPS | demonstrative pronoun, proximal singular |
| DPP | demonstrative pronoun, proximal plural or location |
| DP | dependent |
| DS | different subject |
| DT | distal |
| Em | emphatic |
| EQ | equative verb root |


| FE | female ego (relating to kinship terms) |
| :---: | :---: |
| FL | flexible, out of sight, or default |
| Foc | focus |
| HAVE | have (verbalizing prefix) |
| Hz | horizontal |
| Hypoth | hypothetical |
| ID | independent |
| IM | imperative |
| ImpF | imperfective |
| In | intransitive |
| INF | infinitive |
| Intns | intensifier |
| IO | indirect object |
| IR | irrealis |
| LC | location |
| LQ | liquid |
| MD | medial |
| ME | male ego (relating to kinship terms) |
| Mod | modified (e.g., for attenuation) |
| N | negative |
| ON | object nominalizer |
| P | possessor (as in 3P) |
| PL | plural |
| PON | proposition/oblique nominalizer |
| Pro | pronoun |


| PV | passive | SG | singular |
| :--- | :--- | :---: | :--- |
| PX | proximal | SN | subject nominalizer |
| QM | question modal | TR | transitive |
| RCP | reciprocal | TwD | motion toward |
| RHET | rhetorical | UO | unspecified object |
| RL | realis | US | unspecified subject or possessor |
| S | subject (as in 1PLS) | UT | unspecified time |
| SB | Subjunctive Irrealis | VT | vertical |

## Other abbreviations used

C consonant (sometimes referring to a consonant position without specified underlying features; see §27.5)
cf. see also

D determiner
DP determiner phrase
e.g. for example
f. female
ff and following pages
i.e. in other words
lit. literally
m. male
n (superscript n) variable
NP noun phrase
NTT New Testament translation.
Common abbreviations for particular books are used: Mt (Matthew), Mk (Mark), Jn (John), Ac (Acts), 1Ti (First

## Annotations of abbreviations used in glossing

FIRST PERSON. (a) First person independent pronoun he 1Pro (§16.1.1) is vague for number as is the (b) indirect object pronominal prefix he (1IO, §17.1.2.4, written as a separate word in the practical orthography). (c) First person subject (§17.1.2.1) and (d) direct object (§17.1.2.3) inflectional prefixes (the latter written as separate words in the practical orthography) distinguish singular from plural: h-1SGS.Tr, hp- 1SGS.In, ca- 1Em.S.In, $\mathbf{a}_{\text {Abl }}{ }^{-1 E m . S . T r, ~ h a-~}$ 1PlS, him 1SGDO, hizi 1PlDO.

SECOND PERSON. (a) Second person independent pronoun me 2 Pro ( $\S 16.1 .2$ ) is vague for number as is the (b) indirect object pronominal prefix me (2IO, §17.1.2.4, written as a separate word in the practical orthography). (c) Second person subject (§17.1.2.1) and (d) direct object (§17.1.2.3) inflectional prefixes (the latter written as separate words in the practical orthography) distinguish singular from plural: m-2SGS, ma-2PLS, ma 2 SGDO, mazi 2PlDO.

THIRD PERSON. (a) Third person independent pronoun ee 3 Pro (rarely used, §16.1.4). (b) Third person subject is generally
unmarked, as is (c) third person direct object (but see 3:3 below).
(d) Third person oblique/indirect object co- (3IO, §17.1.2.4) is vague for number.

THIRD PERSON SUBJECT WITH THIRD PERSON DIRECT OBJECT. The prefix i- 3:3 (§17.1.2.1) belongs to the subject inflection paradigm and is used when the subject is third person and the direct object is third person.

Abs ABSOLUTIVE. Most obligatorily possessed nouns may occur with a prefix that indicates the lack of a specified possessor (§13.1.2, §13.2.4).

Aug augment. Many verbs have derived stems that permit the inclusion of a causative agent (§19.5), an assistive agent (§19.6), an experiencer (§19.4), or some other special nominal.

Aux AUXILIARY. Irrealis verb forms typically require an accompanying auxiliary: ta (Aux.RL), pi (Aux.IR), ha/haa/a, ca/quee (Aux.SN) (Chapter 20).

Aw MOTION AWAY. A very small set of verbs inflect for either nt- Aw (away, andative) or mo- TwD (toward, venitive) (§17.1.6).

CM COMPACT. Compact profile definite article quij (the.Cm,
§21.2.2, which also is an element of complex demonstratives (e.g., hipquij Рх-См, §21.3).

Cncsv CONCESSIVE. Subordinator isax (§25.4.2.1).

CRT CERTAINTY. A postverbal adverb i (§20.4.2).

CRD COORDINATOR of nominals, xah. (§25.1).

DCL DECLARATIVE modal, (ha, §20.5) and (hi, ho, §20.7).

DDS DEMONSTRATIVE PRONOUN, distal singular. Contrastive (tiix) and noncontrastive (tii) are distinguished (§16.2).

DDP DEMONSTRATIVE PRONOUN, distal plural. Contrastive (taax) and noncontrastive (taa) are distinguished. Both may refer to plural or mass, an abstraction, or a location (§16.2).

DO DIRECT OBJECT. First and second person direct objects display inflection on the verb, although it is written as a separate word in the practical orthography, e.g. ma 2SGDO (§17.1.2.3).

DPS DEMONSTRATIVE PRONOUN, PROXIMAL SINGULAR. Contrastive (hipiix) and noncontrastive (hipii) are distinguished (§16.2).
DPP DEMONSTRATIVE PRONOUN, PROXIMAL PLURAL. Contrastive (hizaax) and noncontrastive
(hizaa) are distinguished. Both may refer to plural or mass, an abstraction, or a location (§16.2).

Dp DEPENDENT. Irrealis mood has two forms, including dependent po- Ir.Dp (p- before most vowels) (§17.1.1.1). The form $\mathbf{t}$ - RL is realis mood in dependent clauses (§17.1.1.5), but also occurs in some independent clauses.

DS DIFFERENT SUBJECT. Two forms:
ma in dependent realis clauses, $\mathbf{t a}$ in dependent irrealis clauses (§3.6.1 and §9.1.1).
DT DISTAL. (a) Distal realis mood prefix yo- (allomorph $\mathbf{y}$ - before most vowels) (§17.1.1.6). (b) Distal locative element himcombines with articles to form complex demonstratives such as himquij Dт-См (§21.3). (c) On distal/medial demonstrative pronouns, see DDS and DDP. EMPHATIC. (a) Emphatic realis mood prefix xo- (allomorphs xöand $\mathbf{x}$-before most vowels)
(§17.1.1.8). (b) Emphatic enclitic adverb xo after irrealis verbs (§20.4.3). (c) First person emphatic pronoun hatee (§16.1.5); First person emphatic prefix (§17.1.2.1).

EQ EQUATIVE COPULA VERB used in the predicate nominal construction (§10.3).

FE FEMALE EGO (relating to kinship terms); thus 3P-father.FE means 'her father'.

FL FLEXIBLE, out of sight, or default. The definite article quih (the.FL) occurs with flexible items (paper, cloth, etc.), but is also used for items that are out of sight, and also as a kind of default article. The verb $V_{\text {iih }}$ be.Fl is used with flexible items and also to mean live. The verb $\sqrt{ }$ ah put.FL takes direct objects that are flexible in nature.

FOC FOCUS. Various enclitics: ah (§24.2.2), h (§24.2.3), and hi (§24.2.4).
have have. Denominal verbs meaning have $X$ (or something derived from that meaning) utilize the prefix i- (§19.3.3).
Hz HORIZONTAL. Horizontal profile definite article com (the. Hz ) (§21.2.1), which also is an element of complex demonstratives (e.g., hipcom (Px-Hz) (§21.3). The verb $\sqrt{ }$ axquim (put.Hz) takes a horizontal item as direct object.

НYPOTH HYPOTHETICAL subordinator piquix (§25.4.2.2).

ID INDEPENDENT. Irrealis mood has two forms, including si- Ir.ID (sin many contexts) (§17.1.1.3).

Im IMPERATIVE. The imperative prefix has several allomorphs (§17.2.2) including $\mathbf{c}-, \mathbf{h}-$, and null.

ImpF IMPERFECTIVE. Verbs stems typically distinguish between perfective (usually unmarked) and imperfective aspect, the latter typically indicated by means of a suffix (§17.1.8).

In INTRANSITIVE. Various prefixes have transitive and intransitive allomorphs, including hp1SGS.In (§17.1.2.1), ica- Inf.In (§17.2.1), and ca- 1S.Em.In (§17.1.2.1).

Inf INFINITIVE. Two underlying allomorphs: ica- Inf.In for intransitive clauses and iha-abl InF.TR for transitive ones (§17.2.1).

Intns INTENSIFIER. Various adverbs, including anxö and hax, are glossed this way (Chapter 24).

IO INDIRECT OBJECT. Indirect objects and oblique objects display inflection on the verb (first and second person morphemes written as separate words): he 1IO, me 2IO, co- 3IO. They are vague with respect to number (§17.1.2.4). Two verbs have special stems when an indirect object occurs in the clause; they are glossed with ' + IO' (§19.12).

IR IRREALIS. Dependent (po-, Ir.Dp §17.1.1.1) and Independent si-, Ir.Id, §17.1.1.3) are distinguished. Also see SB (Subjunctive Irrealis).
LC LOCATION. The article hac (the.Lc, §21.2.5) with expressions of locations and also with some nominalizations.

LQ LIQUID. Some verbs meaning put are used primarily with liquids as direct objects (e.g. Vaca put.LQ).

Md MEDIAL. Medial locative elements ti- (singular) and ta(plural) combine with articles to form complex demonstratives, e.g. ticop $\mathrm{Md}-\mathrm{VT}$ (§21.3).

ME MALE EGO (relating to kinship terms); thus 3P-father.ME means 'his father'.

Mod MODIFIED. A word may have a shift in stress or an infix due to its occurrence with the attenuator $\mathbf{x a h}(\S 24.6 .1)$.

NEGATIVE. Prefix m-(§17.1.4) and its allomorphs due to assimilation.

OBJECT NOMINALIZER. This derivational prefix has several realis allomorphs including $\mathbf{o}_{\text {Abl }}{ }^{-}$ (§14.3.1).

POSSESSOR. Kinship terms, body part nouns, some personal items, and certain deverbal nouns may be inflected for possessor: hi- 1P,
mi- 2P (ma- before kinship terms), i- 3P (a- before kinship terms) (§14.1.1).

PL PLURAL. (a) Subject (§17.1.2.1) and (b) direct object (§17.1.2.3) inflection (the latter written as separate words in the practical orthography) distinguish plural from singular; e.g. m- $2 \mathrm{SGS}^{2}$, ma2PLS, him 1SGDO, hizi 1 PlDO. Indirect object inflection and independent personal pronouns do not distinguish number. Plural nouns are commonly inflected for a plural suffix (various allomorphs) (§13.2.1). Verbs with plural subjects typically carry a suffix indicating such (§17.1.3).

PON PROPOSITION/OBLIQUE
NOMINALIZER. Verbs have deverbal noun forms that refer to either the proposition or to some oblique object or the indirect object (§14.4).

Pro Pronoun. Two personal pronouns are commonly used: he 1Pro (§16.1.1) and me 2Pro (§16.1.2). On demonstrative pronouns, see DDS, DDP, DPS, DPP.

Pv

PASSIVE. The passive prefix (§17.1.5) has two basic allomorphs: $\mathbf{p}_{\text {Abl }}$ - before rootinitial vowels, and ah- elsewhere.

Only used with transitive stems.

RCP RECIPROCAL: pti (§11.5).
RHET RHETORICAL (§26.10).
RL REALIS. Four realis mood prefixes are distinguished: yo- Dt, mi- Px, xо- Em, and t-RL (§17.1.1.5). The latter is labeled simply RL because of its greater distribution.
PROXIMAL. (a) Proximal realis mood prefix mi- (§17.1.1.7). (b) Proximal locative hip- (singular), hiz- (plural) used with articles to form complex demonstratives (e.g., hipcom, $\mathrm{Px}-\mathrm{Hz}(\S 21.3)$ ).

QUESTION MODAL. An enclitic that is written as a suffix: -ya (Chapter 6 and §20.5).

SUBJECT. First and second person subjects display inflection on the verb, e.g. m- 2 SGS, ma- 2PLS
(§17.1.2.1). Third person subject is overtly marked only when the direct object is also third person (see 3:3).

Subjunctive Irrealis. One of the irrealis mood prefixes, tm(§17.1.1.4).

SINGULAR. (a) Subject (§17.1.2.1) and (b) direct object (§17.1.2.3) inflection (the latter written as separate words in the practical orthography) distinguish plural from singular; e.g. hp- 1SGS.In, h- 1 SGS.Tr, ha- 1 PLS, ma 2 SGDO, mazi 2PLDO. Indirect object
inflection and independent personal pronouns do not distinguish number. One postposition has a plural stem if the complement is plural and a singular stem if the complement is singular: $\sqrt{ } V \cot$ (with.PL), $\sqrt{ }$ Vhax (with.SG).

SN SUBJECT NOMINALIZER. This derivational prefix has three realis allomorphs: $\mathbf{i}-$ if the verb is negative, ha- otherwise if the verb is passive, and $\mathbf{c -} / \mathbf{q u -}$ otherwise (§14.1).
$\mathrm{Tr} \quad$ TRANSITIVE. The prefix i- occurs overtly (but is often deleted phonologically) in certain deverbal nouns (§14.1.1).

Various prefixes have transitive and intransitive allomorphs, including h- 1 SGS.Tr (§17.1.2.1), iha $_{\text {Abl }}{ }^{-I n F . T r ~(§ 17.2 .1), ~ a n d ~ a-~}$ 1S.Em.Tr (§17.1.2.1).

Twd MOTION TOWARD. A very small set of verbs inflect for either ntAw (away, andative) or mo- Twd (toward, venitive) (§17.1.6).

UO UNSPECIFIED OBJECT. The derivational prefix $\mathbf{o}_{\text {Abl }}-$ or one of its allomorphs indicates that the direct object (usually patient) is unspecified (§19.1.1).

US

UNSPECIFIED SUBJECT OR
POSSESSOR. The prefix ca- (a) on verbs (§17.1.5) and nouns
(§13.2.3.2).
UT UNSPECIFIED TIME. The enclitic $\mathbf{x}$ (§3.6.3) most commonly occurs on verbs of adverbial clauses.
Vt VERTICAL. Vertical profile

## Special symbols

$\S$
$\sqrt{ } \quad$ beginning of a root or stem

* ungrammatical (Inside of a crossreference to a dictionary entry, however, it indicates the head word.)
\#
\% stylistically unnatural
? before an example: of questionable grammaticality; in gloss, uncertainty of meaning of the morpheme itself
/ alternate or expanded gloss (E.g., sun/day, the gloss sun is basic and day is a contextuallyappropriate sense.)
~ variant; alternative
( ) with ungrammatical examples, parenthesized phrase indicates a target meaning
( ) with data, parenthesized words indicate optional elements
( ) with translations, parenthesized material provides additional
definite article cop (§21.2.3) with variant cap, which also is an element of complex
demonstratives (e.g., himcop DтVт (§21.3)).
information
[] with phonetic symbols, square brackets encloses phonetic transcription
[ ] with orthographic symbols, square brackets indicate (a) a morphological constituent or a syntactic constituent, depending on the context; or (b) material that was absent from the recording but supplied by an editor
/ / with phonetic symbols, diagonals enclose phonemic transcription
\{ \} enclose a putative underlying form of a morpheme. In Appendix E, boldface curly braces are also used as explained there.
divider between prefix and citation form.
... material omitted here
- follows a word or precedes and follows an idiomatic expression that is discussed in the idiom glossary, Appendix D; sometimes the literal translation appears in

|  | the gloss line but sometimes it only appears in Appendix D. |
| :---: | :---: |
| - | in the gloss line, indicates that no suitable gloss was available |
| + | joins certain glosses (those for the blended object prefixes §17.1.2.5, and for the derived dative verbs that (§19.12)) |
| $<$ | from (such as to show an underlying form or derivation) |
| < $>$ | surround glosses of special morphemes |

## Guide to orthographic symbols

The spelling of Seri words (including major loanwords) uses the following conventions to write the sounds corresponding to the symbols of the International Phonetic Association, although the phonetic facts presented in $\S 28.5$ need to be taken into consideration:

|  | IPA |
| :--- | :--- |
| a, aa | a, a a |
| $\mathbf{c}$ | k |
| cö | $\mathrm{k}^{\mathrm{w}}$ |
| e, ee | $\varepsilon, \varepsilon \varepsilon$ |
| $\mathbf{f}$ | $\Phi$ |
| $\mathbf{h}$ | $?$ |
| $\mathbf{i}, \mathbf{i i}$ | $\mathrm{i}, \mathrm{ii}$ |
| $\mathbf{j}$ | x |


|  | IPA |
| :--- | :--- |
| $\mathbf{m}$ | m |
| $\mathbf{n}$ | n |
| $\mathbf{0 , 0 0}$ | $\mathrm{o}, \mathrm{o} \mathbf{o}$ |
| $\mathbf{p}$ | p |
| $\mathbf{q u}$ | k |
| $\mathbf{r}$ | r |
| $\mathbf{s}$ | s |
| $\mathbf{t}$ | t |



Acute accent indicates primary word stress when stress does not follow the general rules (explained in more detail below). Acute accent is also written on interrogative pronouns and adverbs (as in Spanish), and sometimes on other words when helpful to the reader. Grave accent is occasionally used to indicate clearly that the usually-stressed word is unstressed in a particular context.

## Presentation of examples

Bold face is used for all Seri examples cited in the practical orthography. Example: haxz ${ }^{\circ}$.

Phonetic transcriptions are presented in square brackets using symbols of the International Phonetic Association. Example: haxz ${ }^{\circ}$ [' 1 a $\chi \mathrm{S}$ ].
'Regular font with single quotes' is used for Spanish translations. Example: haxz ${ }^{\circ}$ 'perro'.

Italics are used for English translations. Example: haxz ${ }^{\circ}$ dog.

Small capital letters are used occasionally to indicate focal stress. Example: I found a DOG.

Small capital letters are used for glosses
of grammatical morphemes. Example: cop the.Vт.

A hyphen marks a morphological division within a word or to divide glosses. Example: i-yo-m-aho 3:3-DT-N-see.

A full stop joins words that combine to gloss a single morpheme. Examples: cmaacoj old.man, cop the.Vт.

Subscripted indices indicate coreference ( $\mathrm{i} \ldots \mathrm{i}$ ) or lack of coreference $(\mathrm{i} \ldots \mathrm{j})$.

## Punctuation in the Seri examples:

The standard conventions used in the punctuation of Spanish are also used for punctuating Seri. This means that questions utilize an inverted question mark before the part of the sentence that contains the question, and exclamations utilize an inverted exclamation mark.

Accents in the Seri examples:
The conventions for representing stress in the Seri words in this grammar are different than those used in the 2005 dictionary. They are based more closely on the nature of the stress system of the language (see §28.2).
(a) If the penultimate syllable of the word is stressed, an accent is usually not written. Examples: mojepe (rather than mojépe) and itaasi (rather than itáasi).
(b) If the word ends in a consonant cluster and the vowel preceding that cluster is stressed, an accent is not used. Example: Tahejöc (rather than Tahéjöc).
(c) If the complex nucleus of the word is stressed, an accent is not used.
Examples: Comcaac (rather than Comcáac), and comcaii (rather than comcáii). This takes precedence over the other conventions. Thus I write yataamatot (rather than yatáamatot), and imiimlaje (rather than imíimlaje).
(d) Words having exceptional stress have a written accent, even when the placement of stress is predictable based on morphological information. Examples: xoját and yocáp (final stress despite having no consonant cluster, and itácatx (penultimate stress despite having final consonant cluster).
(e) Accent marks are sometimes used to distinguish homonyms, following conventions that are used in writing Seri locally. Examples: zó for how? , versus zo $a$, an and cói for still, versus coi the (plural).
(f) Accent is written on preverbal postpositions when they are stressed; sometimes this is crucial for the correct interpretation. Thus cootaj tintica iti yajast $s / h e$ stepped on the ant and cootaj tintica íti yajast the ant stepped on him/her.

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## 1. Introduction

### 1.1 The Seri people and their language

The name "Seri" refers to a particular indigenous people in Mexico (the Comcaac, as explained below) and to the language (Cmiique Iitom) that they speak. ${ }^{1}$ The Seri people live on the mainland coast of the Gulf of California in northwestern Sonora, primarily in two towns that evolved from fishing camps during the middle of the twentieth century: Haxöl Iihom (known as El Desemboque in Spanish, and not to be confused with another town of the same name a bit farther up the coast), ${ }^{2}$ and Socaaix (known as Punta Chueca by most outsiders). They also sometimes occupy temporary fishing camps elsewhere in the immediate area on their communal property, such as Saps and Xoop Cacöla Quih Inoohcö.


Figure 1.1: Area of Seri residence

The area where the Seri people reside is part of the great Sonoran Desert. It is especially picturesque and interesting because of the coastal location, the mountains, the islands, and the lush vegetation that includes giant columnar cacti and many other plants that have helped sustain the people in the past. ${ }^{3}$ The Seri communal property is almost completely unspoiled, and remains spectacularly beautiful, although areas around it have succumbed to different kinds of commercial development - land cleared for often short-term agricultural use (irrigation water comes at a premium), for tourist housing, and normally short-term shrimp cultivation, which has also caused the water table to drop or be influenced by salt water from the Gulf. Areas that were once part of Seri territory have been denuded of the mesquite trees that formerly were heavily utilized as a food resource. (Some individual trees were so valued at one time that they were given personal names.) The Gulf of

[^0]California itself has been degraded in various ways (overfishing, shrimp trawling, contamination from shrimp cultivation, etc.) such that its beauty conceals the fact that it is only a shadow of what it was a hundred years ago with respect to the species of marine life found in it. ${ }^{4}$ Finally, smoke from an oil-fired power plant just up the coast at Puerto Libertad (see below) typically drifts down the Gulf, staining the otherwise clear skies. Fortunately, some of the area within the Seri territory has recently been designated a protected wetlands site under the international Ramsar Convention. ${ }^{5}$ Other land in the area continues to be destined for massive tourist development.

The town of Haxöl lihom occurs toward the northern edge of the Seri land (at $29^{\circ} 30^{\prime} 12^{\prime \prime} \mathrm{N}$, $112^{\circ} 23^{\prime} 46^{\prime \prime} \mathrm{W}$ ). A fourteen-mile dirt road connects it to the paved highway (an extension of Calle 36 that is accessed from the highway connecting Hermosillo to Bahía de Kino) heading to Puerto Libertad, a small Spanish-speaking town with a power plant, one gas station and several stores. A few Seris occasionally reside in Puerto Libertad so that their children may attend the secondary or university preparatory schools there. Puerto Libertad is the closest town with which residents of Haxöl lihom have regular contact. Known as Xpanoháx in Seri, Puerto Libertad is located within traditional Seri territory.

The other Seri town, Socaaix, a relatively new settlement, ${ }^{6}$ is about 45 miles to the south ( $29^{\circ} 00^{\prime} 53^{\prime \prime} \mathrm{N}, 112^{\circ} 09^{\prime} 45^{\prime \prime} \mathrm{W}$ ). Winding, unimproved desert roads to various camps and locations, used primarily by non-Seris, did not directly connect Socaaix with Haxöl lihom in the past. That situation changed in the early 1970s when a raised, graded gravel road was constructed as part of a federal government assistance project under the administration of President Luis Echeverría. A severe storm in late 2006 damaged this road extensively in scores of places and yet the road remains the major connection between the two Seri towns. (The alternative is to go north from Haxïl lihom to the paved road that goes south from Puerto Libertad, which becomes the road called Calle 36, then go west on paved highway to Bahía de Kino, and then north to Socaaix.)

Socaaix is only 16 miles by graded gravel highway from the town of Bahía de Kino. Bahía

[^1]de Kino today is a busy town with schools, a small marina, two gas stations (one serving primarily tourists and boats), stores and other small businesses. It has two major parts: what are informally called in Spanish "Kino Viejo" ('old Kino') and "Kino Nuevo" ('new Kino'). Kino Viejo has developed out of a small fishing camp on traditional Seri territory and is now occupied primarily by Spanish-speaking Mexican residents. A few Seris also live there for economic reasons or for its proximity to established secondary and preparatory schools. Kino Nuevo is a several-mile long development of substantial vacation homes, condominiums, motels, trailer parks, restaurants and convenience stores along the coastline north of Kino Viejo. The owners of the homes are primarily well-off residents of Hermosillo (the state capital, about 65 miles away) and American and Canadian tourists who spend part of the winter there. It is the closest beach to Hermosillo and serves as a weekend getaway location for young people as well as older city residents who can afford its prices. The easy access to Bahía de Kino serves to connect residents of Socaaix with the outside world. From Bahía de Kino it is a short drive to the growing commercial town of Miguel Alemán (previously known as Calle Doce), which serves the local agricultural interests, and the state capital of Hermosillo. Socaaix is affected much more than Haxöl Iihom by visitors.

The Seri people's recent history has centered on Tahejöc (Tiburon Island; 'Isla Tiburón' or 'Isla del Tiburón' in Spanish), ${ }^{7}$ the largest of Mexico's islands, which has been a traditional homeland for some Seri families. This impressive island is more than 1200 square kilometers in size. ${ }^{8}$ It has a pivotal importance for the Seris although not all of them regard it in the same way. Only some of them are descendants of Tiburon Island-based families. ${ }^{9}$ The Seris have also

[^2]inhabited the much smaller island known as Cofteecöl (San Esteban Island). ${ }^{10}$ This small island has not been inhabited during the past century. ${ }^{11}$ According to Seri oral history corroborated by historical documents, the Seris have lived as far north as the mouth of the Colorado River, as far northeast as the area of Caborca, as far south as Guaymas, and also on Baja California (Hant Ihiin). ${ }^{12}$

The Seri names of these places have never appeared on any published map until the publication of the Seri dictionary (M. Moser \& Marlett 2005). This fact is in itself an indication of the degree of physical and cultural separation between the Seri people and their neighbors, a topic discussed in greater detail below. The lack of Seri names on maps is also due to the fact that no one would have known how to write them. Some of the sounds in Seri are quite unlike those found in Spanish and English. ${ }^{13}$

Although it is not known when the Seris arrived in this location, ${ }^{14}$ it is certain that they have been in this area for many hundreds of years. ${ }^{15}$ It is reasonable to propose - although it is uncertain - that their arrival in the Sonoran desert predates the arrival of the Uto-Aztecan groups that eventually occupied a much larger part of the region. ${ }^{16}$ The first historical records of contact with the Spanish date from $1536,{ }^{17}$ and (eventually unsuccessful) attempts at missionization of this group by the Jesuits and Franciscans were an important part of their history in the following two and a half centuries. The years between the first contacts with the Spanish through at least the early part of the twentieth century were characterized by conflict and pain for the Seri people. ${ }^{18}$ Killings went in both directions, but the disinterest by the Seris in plans to be
poachers), however, the Seris did not have the kind of complete access that they had in the past and permanent residence there by anyone was prohibited. This fact has been a source of some discontent in previous decades.
${ }^{10}$ The center of this island is somewhere near $28^{\circ} 42^{\prime} \mathrm{N}, 112^{\circ} 34^{\prime} \mathrm{W}$.
${ }^{11}$ See the detailed history of this island presented in Bowen (2000).
${ }^{12}$ Bowen (1983:231).
${ }^{13}$ In fact, Seri-looking names that appear on various maps of the past are without exception inventions by nonSeris even when they have used Seri words. The name Sierra Kunkaak, for example, appears on some maps as the name of a mountain range on Tiburon Island. The word Kunkaak is a popular amateur representation of the Seri people's autonym (see note 42 in this chapter), but that name does not appear in any place name that the Seris themselves use.
${ }^{14}$ Bowen (1983:232).
${ }^{15}$ Bowen (1983:232) uses the phrase "since the beginning of ceramic times," which may be understood as something like a minimum of twelve centuries before present. See also Bowen (1976).
${ }^{16}$ This is the view presented in Manrique Castañeda (1988:160-161), for example.
${ }^{17}$ Bowen (1983:233).
${ }^{18}$ See the summary of Seri history in Bowen (1983:232ff) and in Griffen (1961).
peacefully assimilated led to their being the object of attempts at genocide that almost succeeded.

The Seri people have certainly been at home in this part of the world and have known its flora and fauna intimately. ${ }^{19}$ While outsiders commonly use words like "harsh" and "hostile" to describe this area, the Seris do not use any term like this nor have they indicated that they feel this way despite having suffered from lack of food and water at different times. It is their home. And even as outsiders use the word "desert" or "monte" (in Spanish) to refer to any general area outside of town, the phrase most commonly used in Seri is hehe án plant area. The difference in vocabulary between the Seri culture and Western culture reveals an important difference in perspective between them.

The Seris have names for hundreds of locations along the coast of Sonora and on Tiburon Island, of which only a modest number have been recorded. ${ }^{20}$ Some of these names are likely to be of fairly recent origin, given the transparency of their meaning (example: Hastaacoj Cacösxaj High Big Mountain, ${ }^{21}$ referring to the highest mountain in the region, known as Pico de Johnson (Johnson's Peak) to outsiders), others certainly are indicative of a long residence in the area. ${ }^{22}$ Names like Tahejöc (for Tiburon Island, apparently extended to the island from some camp with this name), Saps (a camp name, known by Mexicans as Campo Dos Amigos), and Hoona (another important camp name, situated on a shell midden) do not have known, or even tentative, etymologies.

The modern Seri group is the remnant of six or more groups comprised of loosely organized units that spoke perhaps three distinct dialects. ${ }^{23}$ Descriptions of the dialects in modern Seri lore paint them as different enough that people were not able to communicate much with each other, however; they say that people could really only understand a few words in a conversation with people from farther south (the Xiica Xnaai iicp Coii, Those who Live toward the South Wind)

[^3]and those from San Esteban Island (Hast ano Comcaac, Seris from the Mountain). ${ }^{24}$ These differences tended to keep them separate socially. The Seris who lived on Baja California were linguistically more similar, but different in their habits. ${ }^{25}$ Some of the historically named groups that were definitely Serian include the so-called Tiburones, Guaymas and Tepocas. ${ }^{26}$

Far less prominent dialect differences exist today and these partly may be a carry-over from the earlier major groups, or to the fact that people come from different ihiizitim (homeland areas) in the immediate area. As hunter-gatherers, they were often quite dispersed. Older people today still remark that this word or that, or this pronunciation or that, is because it is a Tiburon Island word or one used by a person from the group of Xiica Xnaai iicp Coii. Some generational differences are also detectable (see §1.1.3.6). Otherwise no significant dialect variation can be observed today. ${ }^{27}$

One of the remarkable characteristics of the Seri language is that it is relatively unaffected by other languages (see §1.1.2), including Spanish and neighboring Uto-Aztecan languages, so far as one is able to determine, although it is beyond knowing at this point what influence there may have been in the more remote past from other languages of the general area. Therefore the study of its lexicon and grammar gives a particularly clear insight into the structure of a language that has developed in its own unique way during the past several centuries.

### 1.1.1 Basic history

In the past, the Seris had a nomadic or semi-nomadic way of life in the coastal part of the Sonoran desert. They must have had at least occasional contact with other Native American groups such as the Yaqui and O'odham (see §1.1.2), The Seris did not practice agriculture and were generally uninterested in being incorporated in to the mission programs of agricultural production and cultural incorporation that were typical of early colonial Mexican history. ${ }^{28}$ Tragedy after tragedy resulted in increased hostility between the Seris and the Spanish and later between the Seris and the non-Indian Mexicans.

[^4]Disease, high infant mortality, fights within the groups and conflicts with Mexican ranchers and the Mexican government eventually had their impact, and drastically reduced the group numerically as well as linguistically. ${ }^{29}$ By the year 1920, fewer than two hundred speakers remained, ${ }^{30}$ consisting primarily of only one dialect group. ${ }^{31}$ Fortunately, however, they have survived, despite predictions and even wishes that they would not. ${ }^{32}$ And just as they had adapted themselves to their physical environment, ${ }^{33}$ the Seris have shown their ability to control to a great degree the ever-encroaching technological world. Livelihoods based on fishing and fine artistry, ${ }^{34}$ a strong ethnic pride, possession of their own land, close-knit families, and other factors have enabled them to continue as a coherent cultural entity. ${ }^{35}$ On-going tensions with the outside world continue to maintain a barrier between the Seris and non-Seris. ${ }^{36}$

Today virtually all Seris, whose population has more than tripled in the past forty years, ${ }^{37}$ live on the Seri communal property, an ejido that was deeded to them by presidential decree in 1970. ${ }^{38}$ The Seris refer to their land as Comcaac hant iti yaii land where the Seris are; they do

[^5]not usually refer to it in terms of ownership, ${ }^{39}$ although they certainly feel a strong sense of belonging there and few leave for any length of time for any reason. Almost all of them also speak Seri as their first language if they have Seri parents. In fact, the combination of efforts by the Mexican government (in the areas of health, education, and economic development), the Christian church to which many Seri people belong (which has reduced alcoholism, substance abuse, and personal conflicts), ${ }^{40}$ and Mexican and foreign scientists (who have shown interest in the Seri language, culture and history), has helped this group to enter the twenty-first century far stronger than it entered the twentieth. Major credit also goes, of course, to the people themselves, because they are incredibly resilient and strong.

Great challenges remain as the people come closer and closer to a society that in many ways is the antithesis of their traditional cultural values. The formal school system has helped them understand Mexico better, but it has not helped them understand or appreciate their own language and culture very much. Fortunately, the new expressions of cultural and linguistic rights that have been encoded as Mexican law in recent years (witness the creation of INALI, the Instituto Nacional de Lenguas Indígenas, through the passage of the "Ley General de Derechos Lingüísticos" (General Law of Linguistic Rights). The making of roads and the accessibility to automobiles has made their life easier in obvious and inescapable ways, but these have brought the outside world much closer and its impact much stronger. Electric power lines, satellite television and internet cafés have suddenly brought a bombardment of Spanish and outsider values that may present the greatest threats to their cultural existence than anything in the past. ${ }^{41}$

### 1.1.2 The Seri language and its genetic affiliation

The Seris call themselves the Comcaac [koŋ'kaak], which is the plural form of Cmiique ['k $\tilde{W} i ̃ i \mathrm{k} \varepsilon] .^{42}$ Both words are used primarily to refer to Seri people today, in contrast to other

[^6]ethnic groups, although the words may be appropriately translated as simply people and person, respectively, in some limited contexts. ${ }^{43}$ Contrary to some earlier as well as recent claims, ${ }^{44}$ there is no known etymology for these words. The word Comcaac was first transcribed, so far as we know, by the United States Boundary Commissioner John Russell Bartlett, in 1852; he wrote komkak for 'Indians, people'; ${ }^{45}$ the word list is available from the Smithsonian Institution in Washington, D.C. The singular form was first recorded, so far as we know, by the French explorer and philologist Alphonse Pinart, in 1879; he wrote kmike for 'Seri'; this word list is also available from the Smithsonian Institution. While both transcribers understandably missed the contrastive vowel length in each of these words, each captured important details of the pronunciation before two small sound changes took place (affecting the phonetic pronunciation of the $/ \mathrm{m} /$ in these words; see $\S 28.5 .2$ and $\S 28.5 .4$ ).

The word "Seri" itself has an unknown etymology, and even how it came to be applied to the Seris is not known. It is not a Seri word. It is frequently claimed that this name (first appearing as "Heris" in 1645$)^{46}$ is derived from a Yaqui expression, but these claims are unsubstantiated and apparently not true. ${ }^{47}$ Claims that it is derived from Opata (an extinct Uto-Aztecan language, related to Yaqui) also have not been substantiated. ${ }^{48}$ Adamo Gilg, a Moravian-born Jesuit who spent some time in the Seri area, wrote in 1692 that the name "Seri" was from Spanish, but did not explain. ${ }^{49}$ Apparently the term was already being used by the Spaniards who were occupying the area as "a collective term for the nonagricultural and ... 'wild' peoples" of

[^7]the area. ${ }^{50}$ It is entirely likely, however, that the name would in fact have come from some neighboring linguistic group at the time of the Spanish conquest, and that group most likely was Uto-Aztecan (such as Yaqui, Opata, or O'odham). But we simply do not know.

The Seri language is most commonly referred to as Cmiique Iitom [kwiníkiitom] in the Seri language itself, sometimes as Cmiique $\operatorname{Iimx}\left[\mathrm{kw} \tilde{I}^{1} \operatorname{kiim} \chi\right.$ ], and sometimes as Comcaac quih yaza [koŋ'kaak ki? 'jafa] -as in the title of the 2005 dictionary. ${ }^{51}$ All of these expressions involve a noun (singular Cmiique Seri person or plural Comcaac Seri people) and a possessed noun that derives from a verb of speaking: iitom (3P-PON-speak) what s/he speaks with, his/her word; yaza (3P-PON-speak.PL) what they speak with, their words (the root $\sqrt{ }$ ooza is the suppletive plural form of the root $\sqrt{ }$ aaitom); and iimx what s/he speaks with (3P-PONsay/tell), using the root $\sqrt{ }$ amx. (Such deverbal nouns are extremely common in the language. See chapter 14.) It has been a common mistake by outsiders — at least since Hernández (1904) — to refer to the language itself as Comcaac.

The linguistic record indicates, by means of the relatively few loanwords that exist in the Seri language, some contact with Uto-Aztecan groups in the area; this is confirmed by historical records and by some shared culture. It is known that the Seris had close contact with the O'odham (formerly known as Papagos) and Yaquis during the last few centuries, although during the past several decades there has been no close contact with either of them. The Seris have adopted frybread as their own, referring to it as siimet (a loanword from a Uto-Aztecan language), certain music (the songs sung publicly while a dancer performs at a fiesta), certain musical instruments, and (to some extent) the deer dance. ${ }^{52}$ Traces of evidence of contact with other Uto-Aztecan groups are also found in the Seri language. ${ }^{53}$ As an example of one word that was adopted a long time ago, consider the word Cocsar, which refers to non-Indian Mexicans. It was not originally a Seri term, as evidenced by the presence of the non-Seri sound $\mathbf{r}$. The term appears as koksor, meaning Spaniard, in a dictionary of the extinct Eudeve language, a

[^8]language closely related to Opata. ${ }^{54}$ Beals’ (1961) comparison of the Seri kinship system with four Uto-Aztecan languages revealed some surprising similarities (and at the same time dissimilarities with Yuman languages) that perhaps indicate areal influence beyond what has been imagined. Likewise, the striking similarity between the Seri story about the constellation Hapj and the Maricopa and Tipai (Yuman languages) story suggests that the area influence was considerable, unless the similarity is due to a common ancestral culture. ${ }^{55}$ Likewise, the star Naapxa (from naapxa buzzard) gives its name to the month of December (Naapxa yaao when Naapxa travels) and presumably is Altair, which appears in December evenings; Altair in Luiseño and Tipai cultures is known as the buzzard. ${ }^{56}$ It is hard to know how much to make of the following observation, but it is perhaps worth pointing out that Seri has six basic color words ( $\sqrt{ }$ ooxp white, $\sqrt{ }$ oopol black, $\sqrt{ }$ heel red (with a synonym $\sqrt{ } \mathbf{C i h j o ̈}$, which may be older), $\sqrt{ }$ masol yellow, Vooil green/blue, Vimaaxat gray-brown) and would be categorized by the criteria and discussion in Berlin and Kay's (1969) study as a "problematical Stage IV" language. ${ }^{57}$ Three other languages of this type just happen to be languages of the American Southwest: Hopi, Papago (O'odham), and Western Apache. ${ }^{58}$ The use of the word for 'coyote' in the names of less-useful plants and animals (see §13.1.1), is strikingly similar to that found in O'odham, although the terms for 'coyote' are not cognate (it seems). Compare Seri toot icaanj」 (coyote 3P-Gulf.grouper) soapfish and O'odham ban-bawi (coyote-tepary) wild tepary. ${ }^{59}$

Apparent loanwords from Uto-Aztecan languages listed in the dictionary include caticpan work, Cocsar non-Indian Mexican, eenim metal, knife, haaonam hat, Hápats Apache, hasooma structure for a shade shelter, hatascar tortilla, hazaamt adobe, hocö sawn wood, moon pinto bean, pootsi short, stunted, sancaac brown sugar, siimet bread, siipoj osprey, teepar cultivated tepary (bean), †tison bighorn sheep, too turkey, tootar chicken, Yequim

[^9]Yaqui and zai a grass (see Appendix A). Someone gave the word †hoohopam to Edward Moser as an "old" word for mesquite. Since the word is of obvious Uto-Aztecan origin, what this shows is that some Seri families probably had begun to use it during a time of contact with Yaquis or another group, and then eventually the word lost out against the (presumably) native word haas. Some Seri consultant thought of it as the old Seri word.

Of course, some words may have been borrowed from Seri into the neighboring languages, although little investigation has been done about this. One word that is likely a borrowing from Seri into Yaqui and Mayo is the word for the once-common black sea turtle (Chelonia mydas): moosni in Seri and moosen in Yaqui and Mayo. ${ }^{60}$ It is highly likely that one language borrowed it from the other, and in this case it is most probably a loanword from Seri rather than to Seri. As supporting evidence, one might point out that it does not seem to have a history in the UtoAztecan family. ${ }^{61}$

Other linguistic evidence of contact with Uto-Aztecan groups comes from the way in which Spanish words have been incorporated; their forms sometimes seem to indicate that they were borrowed via an intermediary language: caamiz shirt, capreent pawn, caramozni beg, cootzi pig, coton short shirt or blouse, hasaaiti gasoline, icatoomec Sunday, week, izaayo Saturday, $\underline{\mathbf{l}} \mathbf{l} \underline{\underline{I} s i}$ candy, miist cat, paar priest, peez peso, pyeest fiesta, party, quiiz cheese, saaco long blouse, santaar soldier, seaato goat, siir saddle, soanno bed sheet, toaaz handkerchief, yaawlo demon, Yooz God (see Appendix B).

The genetic relationship of the Seri language to other languages is uncertain, although some evidence has been presented to include it within the (controversial) Hokan stock. ${ }^{62}$ Proposals have been made to claim that it has close affiliation to the Yuman family (in northwestern Mexico, Baja California, southern California and Arizona), but the evidence has been little or

[^10]unconvincing. ${ }^{63}$ This lack of evidence has led some scholars to simply abandon the hypothesis until appropriate evidence is found. ${ }^{64}$ Another proposal tied Seri to Salinan, a coastal language of California. This hypothesis has not been accompanied by any serious evidence. ${ }^{65}$ Today it seems best to consider it a language isolate. ${ }^{66}$

### 1.1.3 The sociolinguistic situation

No serious study of the sociolinguistic aspects of Seri culture has been done, and documented information about this topic is not easily obtained. ${ }^{67}$ Census information gives some approximate statistics, but the difficulties of asking and obtaining the correct answers in a simple census are well known or easily imagined. But even good census information would provide only a very small part of the information that is needed for a basic sociolinguistic study.

### 1.1.3.1 Who speaks the language

Most Seri people who have two Seri parents speak the language daily, whether they are old or young. Children who are raised with a non-Seri mother are likely to be Spanish-dominant and may not indicate that they understand the Seri language at all. Non-Seri residents of the Seri towns, even those who have Seri spouses, rarely venture to speak more than a few words of the language although they may understand considerably more.

### 1.1.3.2 Attitudes

Most of the Seri people have a good attitude about their language. They are unafraid to speak it publicly in almost any situation. A few have expressed the idea that they should learn more Spanish or English in order to do better economically, but this rarely means that they feel they

[^11]should stop speaking their own language. The Seris have always been proud to put on display those outsiders who have made some advances in learning the language, and outsiders are encouraged to learn and use the language.

### 1.1.3.3 Use of the language

Communication between members of the Seri community is almost always in Seri, in all domains with two major exceptions. One of these is the formal school system, in which materials and instruction is almost universally in Spanish. A Seri-speaking teacher or assistant may give occasional instruction in the Seri language, but this is not an integral part of any program. (One government-sponsored textbook was produced but was met with rejection because it was so poorly written.) The other major exception is the church (a denomination in Mexico known as the Iglesia Apostólica de la Fe en Cristo Jesús), in which Spanish use is higher than might otherwise be the case because of the regular presence of non-Seri evangelists and preachers, the use of the Spanish Bible from the pulpit, and a tendency for Seri preachers to switch to Spanish for various reasons.

### 1.1.3.4 Use of other languages

Spanish has an increasing role in the Seri community, primarily in its contacts with the Spanishspeaking world in the areas of education, commerce, government, scientific research, tourism, and the church. Formal education is given almost exclusively in Spanish. Outsiders (primarily Mexican, American or European) who come to do scientific research or initiate commercial ventures, tend to work in Spanish.

Seris who are married to non-Seri spouses have much greater contact with Spanish, and in these households Spanish may be the dominant language with any children that may live in them. As a result, those children also tend to use Spanish when playing with children from Seridominant households.

### 1.1.3.5 Use of the written languages

The number of books and booklets published in the Seri language has been very low. The earliest books were the primers produced by Edward and Mary Moser in the 1950s (see page 53); they went through various printings. People have given testimonials that those books and other early easy-reading materials were important factors enabling them to read and write the language. Other books included books of legends and history that were published by the Mosers in the 1970s. Some of these stories were printed again later in the slightly revised orthography that developed. The New Testament was published in 1982, and stories from the Old Testament a few years later. In 2005 those editions were made obsolete with respect to spelling conventions because of the standards that were adopted in the dictionary. In 2007 new materials began to be
drafted, and many previously published stories were re-edited with the new writing conventions. It is obvious that while the foundation for a literate society has been laid, not much advantage has been made of that work to date. In 2008 reading and writing workshops were organized and carried out, demonstrating clearly to the participants that in little time a Seri person who had basic reading and writing skills in Spanish could become fluent in reading Seri and also adept at writing.

Written Spanish has a role in various places in the community. It is used in the schools, of course, from kindergarten through secondary school. The Seri government also must use Spanish in its communication with outside governmental agencies, whether municipal, state, or federal. The church makes reports in written Spanish to the church hierarchy and uses written Spanish in local programs at times. Public readings of the Spanish Bible are not practiced, although a preacher may read some verses as part of a sermon. Young people seem to be using Spanish for Internet chatting (although oral conversations in the internet café have been observed being carried out in Seri). Web pages and blogs appear to be using primarily Spanish at the present time.

### 1.1.3.6 Dialectal differences

While in previous centuries there may have been three mutually intelligible dialects of Seri spoken, ${ }^{68}$ today no significant dialect differences exist.

For several decades now the Seri-speaking population has resided primarily in the two towns described above between which there has been regular communication and movement of populations. Communication between the various members of the Seri community is typically done in the Seri language and no problems of communication between them has been noticed or reported.

Nevertheless, variation in the Seri language does exist at various levels, as documented in this section. In many cases, however, the extent or distribution of these differences is not known since no systematic study of them has been done.

### 1.1.3.7 General phonetic and phonological differences

A few regular differences between Seri speakers are limited to phonetic details and rather regular phonological differences.

Some speakers use a voiceless bilabial fricative where others use a voiceless labiodental fricative for the phoneme $\mathbf{f}$ (§28.1.3).

[^12]Some variation is noted in the pronunciation of the velar and uvular fricatives, $\mathbf{j}$ and $\mathbf{x}$, respectively. The contrast between these two phonemes is well established, although the phonetic differences are not salient in ordinary speech in many cases - both are rather lenis in pronunciation. Perhaps as a result of this, some speakers disagree about which phoneme occurs in a few words. One example documented in the dictionary is the word for the plant Amoreuxia palmatifida: joját for some speakers and xoját for others. Similarly, there is disagreement on the word for ocotillo (Fouquieria splendens): jomjeeziz and xomjeeziz, among other variants (see the following section).

In recent decades it has been noticed that younger speakers began replacing the vowel $\mathbf{e}$ of posttonic syllables with $\mathbf{i}$ across the board except when the preceding syllable has stressed $\mathbf{e}$ (§28.5.11). (This means that these speakers will also be writing these words with $\mathbf{i}$ rather than with e.) Examples include: Cmiique $\sim$ Cmiiqui Seri person, quiipe $\sim$ quiipi (SN-good) good, coteja $\sim$ cotija (SN-lean) who leans, mojet $\sim$ mojit bighorn sheep. ${ }^{69}$

Another regular phonetic difference exists between speakers who pronounce the sequence cöp as $\left[\mathrm{k}^{\mathrm{w}} \mathrm{p}\right]$ and those who pronounce it as a long labial-velar stop with labialized release (§28.5.7).

About fifty years ago, pronunciation of the sequence $/ \mathrm{km} /$ in certain words varied between a [ km ] pronunciation and a $[\mathrm{k} \tilde{w}]$ pronunciation of certain words. The innovative pronunciation [ $\mathrm{kw} \tilde{\mathrm{w}}]$ has become universal today (§28.5.4). People have described pronunciation with $[\mathrm{km}]$ as the way their grandparents spoke.

### 1.1.3.8 Variations on specific lexical items

Some lexical items display a bit of phonetic variation between speakers that is highly idiosyncratic, unlike the variation described in the preceding section. Many of these variants are recorded in the dictionary, and include cset vs. set for magnificent frigatebird and the alternate plural forms csetcoj and cséticol; mojeziz and xomxeziz (plus other variants mentioned in the previous section) for ocotillo; Costeecöl and Cofteecöl for San Esteban Island; Hast Otiipa and Hast Atiipa for Patos Island; sahmees and zahmees (one family) for orange (the fruit).

More obvious variation occurs in a few grammatical morphemes and words. The definite article for a vertical item varies between cap and cop (§21.2.3), and the demonstrative adjectives formed on this article show the same variation - himcop / himcap, ticop / ticap, hizcop / hizcap (§21.3). The first person plural inflection prefix (written as a separate word in the ortho-

[^13]graphy) varies between hizi and hazi (§17.3.2.3). One intensifying adverb varies between hipi and hapi (§24.3.1). Some younger people have innovated plural forms for the independent pronouns (see note 4 in chapter 16).

### 1.1.4 The written form of the language

### 1.1.4.1 History

The Seri language has been a "written" language for more than fifty years now. It was for all intents and purposes an unwritten language before the arrival of Edward and Mary Moser, who developed an orthography under the auspices of the Summer Institute of Linguistics, in collaboration with the Seri consultants with whom they were working, especially Roberto Herrera Marcos and other community leaders, and within the guidelines of the Mexican Secretaria de Educación Pública.

### 1.1.4.2 Alphabet

The Seri alphabet of twenty-three letters and digraphs is fairly directly based on the twenty-two phonemes that have been proposed for the language. ${ }^{70}$ As was required for orthographies of indigenous language of Mexico of that were developed in the early 1950s, the alphabet is Spanish-based. This means that the conventions of $\mathbf{c}$ and $\mathbf{q u}$ are used rather than $\mathbf{k}$ for the phoneme $/ \mathrm{k} /$. These conventions were reviewed in the process of producing the 2005 dictionary and left unchanged by the Seri editorial committee. See page 28 in this grammar for a list of the symbols and their phonetic correspondences. Despite having similar symbols to Spanish, the use of $\boldsymbol{0}$ (o-dieresis) as part of the digraphs cö, jö and xö are obvious "badges" that a text is not Spanish, in addition to the ubiquitous consonant clusters and double vowels.

Seri has four vowel qualities, but these vowels also occur long as well as short. The vowel symbols $\mathbf{a}, \mathbf{e}, \mathbf{i}$, and $\mathbf{0}$ are used. The vowel symbol is repeated to indicate length: aa, ee, $\mathbf{i i}, \mathbf{o o}$. Only a few words arguably have sequences of identical vowels; these sequences sound identical to the long vowels and they are written the same. Nasalized vowels occur phonetically, but words are now written based on the updated phonemic analysis that sees nasalized vowels as resulting from $/ \mathrm{m} /$ that becomes [ $\tilde{w}$ ] after a velar stop. Therefore the word $/ \mathrm{kmiik} \varepsilon /[1 \mathrm{kw} \tilde{\mathrm{w}} \mathrm{i} \mathrm{i} \mathrm{k} \varepsilon$ ] Seri person is written Cmiique. For more details see §28.5.4.

The consonants $/ \mathrm{pthxsm} \mathrm{m} \mathrm{j} /$ are not very different from their counterparts in Spanish, although they lengthen because of stress on the preceding vowel (see §28.5.1 for details). See $\S 1.3 .6$ for introductory discussion of the consonant inventory. They are written with the symbols ptequjs miyr, respectively. (The spelling of /k/ follows Spanish conventions.)

[^14]Nevertheless, the phonetics of the nasals are different from Spanish because the Seri /m/ (rather than the $/ \mathrm{n} /$ ) is demonstrably the default and unmarked nasal (which undergoes assimilation); see $\S 28.5 .2$. This difference is difficult for non-Seris to understand and accounts for misspellings by outsiders of the autoethnonym Comcaac in which they erroneously write $\mathbf{n}$.

The consonants $\left./ \mathrm{k}^{\mathrm{w}}\right\} \Phi \pm \int \mathrm{x}^{\mathrm{w}} \chi \chi^{\mathrm{w}} /$ are not found in Spanish, and are represented with the symbols cö $\mathbf{h} \mathbf{f} \mathbf{l} \mathbf{j} \mathbf{j} \mathbf{x} \mathbf{x o ̈}$, respectively. The use of $\boldsymbol{0}$ (o-dieresis) as part of the digraphs for the labialized consonants mirrors their historical origin; morphophonemic alternations with sequences co, jo, and xo are typical (see §17.3.3.1). ${ }^{71}$ The very rare voiced lateral approximant $/ \mathbf{l}$ / is represented with $\underline{\mathbf{l}}$ (underlined $\mathbf{I}$ ) if it is distinguished at all orthographically.

### 1.1.4.3 Punctuation

The punctuation of Seri follows Spanish conventions to large extent, including the use of inverted question marks and exclamation marks at the beginning of question clauses and exclamations, respectively; accents on interrogative pronouns and certain adverbs, and the use of em-dashes before direct quotations. The 2005 dictionary included accents, following certain conventions that are not used in general writing of the language, to clearly record the accentual patterns of words (see §28.2); this grammar uses different conventions, however, that result in a less cluttered presentation (see page 28). ${ }^{72}$ These new conventions were also used in the second edition of the dictionary (2010). In recent years there has been an important increase in the use of commas to set off dependent clauses. The commas have also been increasingly important as clitics are written as separate words (beginning with the publication of the 2005 dictionary), as determined by the Seri editorial committee. In earlier stages of the written language, enclitics were written attached to the word on which they depended and the commas were less important than they are presently.

### 1.1.5 The study of the Seri language

The first work on the Seri language reportedly began with the arrival of Adamo Gilg, a Moravian-born Jesuit priest. Gilg claimed to have learned the language (although evidence suggests that he did not), and claimed to have compiled a Seri vocabulary and didactic grammar during the last decade of the seventeenth century. ${ }^{73}$ Unfortunately, these documents are not known to exist at present (if they ever did).
${ }^{71}$ Marlett (2006).
${ }^{72}$ These conventions are laid out a bit more explicitly in the document "La forma escrita de la lengua seri" (2007), found at http://lengamer.org/admin/language_folders/seri/user_uploaded_files/links/File/ ortografia_seri.pdf.
${ }^{73}$ Di Peso and Matson (1965).

A few vocabulary lists were compiled during the nineteenth century. ${ }^{74}$ José F. Ramírez, secretary of the Sociedad Mexicana de Geografia y Estadistica arranged to have eleven words elicited in 1850 to disprove the popular hypothesis that Seri was related to Arabic. ${ }^{75}$ United States boundary commissioner John Russell Bartlett made a second, longer list (about 170 words) in $1852 .{ }^{76}$ Another list obtained by D. A. Tenochio around 1860 was used by Francisco Pimentel in his classification of the Seri language. Pinart made yet another list in 1879 that was used by Gatschet in his comparison of Seri and the Yuman languages. ${ }^{77}$ Loustaunau made an extensive list in 1885 for the government of Mexico. In 1898 W. J. McGee published a vocabulary list (collected by himself in 1894) in his report for the Smithsonian. He also made available the data from the most important data-collectors and provided discussion and comparison with Yuman languages. Alfred Kroeber spent six productive days with the Seri people in 1930; his linguistic interests were primarily comparative and historical. ${ }^{78}$

The first comprehensive and serious linguistic investigation of the Seri language began with the arrival of Edward and Mary (Becky) Moser in 1951. Under the auspices of the Summer Institute of Linguistics and in cooperation with the Mexican Secretaría de Educación Pública, the Mosers began to document the Seri language in detail and learned to speak it. ${ }^{79}$ They

[^15]completed the first phonemic analysis and began studying the grammar in earnest. ${ }^{80}$ The Mosers recorded and transcribed the first serious texts in Seri, which are today still the best source of Seri narrative material. ${ }^{81}$ The Mosers' work has formed the foundation for most linguistic research that has taken place since 1951 relating to the Seri language and culture: a master's thesis, ${ }^{82}$ a small bilingual dictionary, ${ }^{83}$ a doctoral thesis, ${ }^{84}$ a contribution to the Intercontinental Dictionary Series, ${ }^{85}$ a comprehensive dictionary, ${ }^{86}$ a contribution to the Archive of Mexican Indian Languages series, ${ }^{87}$ a body of texts for an international electronic glossed text archive, ${ }^{88}$ and many articles. In addition, the Seri language has been used extensively in procuring and publishing data in various ethnographic and ethnobotanical publications of major importance, ${ }^{89}$ which has allowed these efforts to move to a higher level than what is often possible in crosscultural investigation. In recent years, work on the language has also been undertaken by other Mexican and American students. ${ }^{90}$

The author of this grammar began casual work on the Seri language in 1976 just before the death of Edward Moser; he married the Mosers' daughter Cathy that same year. He began to collaborate with Mary Moser and work with the bounty of material that was available in their personal files. He started to work personally with the Seri people in $1977,{ }^{91}$ and in 1981 completed the descriptive doctoral thesis mentioned above. Various articles on the language have subsequently appeared (referenced below when appropriate).
${ }^{80}$ E. Moser \& M. Moser (1965).
${ }^{81}$ Some of these texts were analyzed through the concordance project directed by Joseph E. Grimes (run at the University of Oklahoma Computer Laboratory under the Project for Computer Support for Linguistic Research, partially supported by National Science Foundation Grant GS-1605).
${ }^{82}$ E. Moser (1961). An earlier master's thesis (Schweitzer 1953) was based on tape recordings (from that time) and secondary data and unfortunately does not give a reliable portrayal of the language.
${ }^{83}$ E. Moser \& M. Moser (1961).
${ }^{84}$ Marlett (1981b). The present book is based partially on this work and on the short grammar that was published with the Seri dictionary (M. Moser \& Marlett 2005).
${ }^{85}$ M. Moser \& Marlett (2001a).
${ }^{86}$ M. Moser \& Marlett (2005). The final stages of this project were funded in part by the National Science Foundation (BCS-0110676).
${ }^{87}$ M. Moser (1996).
${ }^{88}$ Marlett \& M. Moser (2006).
${ }^{89}$ See Felger \& M. Moser (1985) and other references in it.
${ }^{90}$ Munguía Duarte (2005), Martínez Soto (2008), Larios Santacruz (2009), O’Meara (2010).
${ }^{91}$ This fieldwork was supported in part by grants from the Office of Graduate Studies and Research, University of California at San Diego, and the National Science Foundation (BNS-8001985).

### 1.2 Guide to this grammar

This book has been written as a reference grammar of Seri for people, especially linguists, who wish to know both general and detailed information about the language, As such, it covers a range of topics that are commonly included in grammars of this type. It presupposes familiarity with many basic grammatical notions, but it has tried to limit these to the cross-theoretically common ones.

### 1.2.1 Organization

The grammar is organized along fairly traditional lines except for the order: it presents syntactic constructions first, followed by morphology and finally phonology. Of course, a person may begin reading it in any place that one wishes; substantial cross-referencing is included. One of the reasons for beginning with basic syntax first was to give a broader view at the beginning and to avoid the minutiae of the complicated morphology until it makes more sense. The phonology and morphology have had greater prominence in published articles; it seemed appropriate to give a greater prominence to the syntax in this reference grammar.

### 1.2.2 Data

The data in this grammar have been taken from a variety of sources and were obtained during more than fifty-five years of fieldwork - first by the Mosers and then by the author. All of the data have been checked at different times with different people during the past few years, regardless of the original source. The data were digitally recorded in 2007-2010 (if not already recorded earlier) for the purpose of complementing the written description.

Some of the examples come from published or unpublished texts that were originally given in oral form and recorded by the Mosers. These texts are listed in Table 1.1 along with their narrator and the general date at which they were given. The published texts were chosen because the original recordings were retrieved and digitized, and they were a valuable resource for the analysis. Some of these texts were published in written form for the Seri community at different times in the past. In some cases the form published for the Seri community reflects editing by another Seri person. As much as possible, however, the interlinearized versions that have been archived present the unedited version as heard on the recording. These texts are identified in this grammar with shorthand names of the texts.

During 2007 some men and women were asked to write texts about different topics of interest to them. This was a new kind of activity for them, and they entered into it with enthusiasm. The texts - usually much shorter than the stories referred to above - were sometimes based on oral versions that they recorded of themselves and then edited. Others were written and edited heavily by the authors, with some outside help on orthographic conventions. The authors
then read and recorded most of these. These texts are identified as ES2007 (Enciclopedia Seri) and an identifying word that is the keyword for the essay.

Some sentences were overheard or were provided spontaneously in response to a discussion about some word. These are identified as such. Other examples in the grammar (those not identified with any source) were elicited specifically to demonstrate or clarify a point. Care was taken to not include sentences that seemed unnatural or strange unless that was relevant to the point at hand; these are identified with various symbols (see the conventions laid out on page 27).

Sentences are given with Spanish and English translations. The author is responsible for them, but they were checked carefully in different ways. René Montaño Herrera read each Spanish translation to verify the judgments and the translations. The Spanish translation given was part of the verification process used in preparing the grammar. ${ }^{92}$ As with the work on the dictionary, sometimes a bilingual consultant would say that the Seri example was fine but the translation into Spanish was not quite right. The Spanish translations are therefore retained here as part of the documentation of the language. But the translations into English and Spanish are always a bit on the literal side, and a translation should not be considered as the only or the best way to render a specific Seri example (although some attempts to indicate ambiguity are made when appropriate). The translations also typically reflect the context from which they were taken.

The illustrative sentences usually do not show morpheme breaks. In this respect, the presentation of Seri data looks similar to the presentation of data from major languages of the world; they are not subjugated to the atomization of word forms that is typical of grammars of lessstudied languages. The decision was made to not include morpheme breaks in the Seri words for two major reasons. First, in many cases they would be difficult to show or would be misleading because of the degree of fusion that takes place in many situations; there is frequent ablaut, deletion of vowels, and epenthesis of both consonants and vowels. Second, the presentation without hyphens allows the language to look fairly straightforward to Seri readers and make it more likely that they would spot errors in the transcription.

[^16]
## Table 1.1: Sources of data

This list includes only the items that are not identified explicitly with publication date and page number, such as Moser 1976:111, ex. 5. The word preceding the colon is the identifier used in the examples.

## New data or grammar-specific data

- [no explicit identifier]: elicited although often based, nevertheless, on some overheard conversation or on something found in a text. Some of these data were obtained in earlier years of research, but were verified again during the period in which this grammar was written.
- Overheard: overheard in a conversation.
- Offered: suggested by the consultant during discussions; not elicited directly or through translation.


## Recorded and unpublished oral texts

The reference numbers for these texts in the citations given are not particularly helpful since the numbering of them has not been finalized. Each of them was recored and transcribed by Edward W. Moser, probably with the assistance of Roberto Herrera Marcos. The recording probably took place shortly before 1968 , and the texts were included in the University of Oklahoma concordance project (see note 81 in this chapter).

- Apostador [Gambler]: This text is about a famous gambler. It was given by Antonio Burgos.
- Burgos: This text is a monologue by Antonio Burgos.
- Consejos_choya, Consejos_canasta, Consejos_perro, Consejos_sol: Traditional advice given to a child about what to do and what not to do in life, from a collection of more short texts of this genre, given by Roberto Herrera Marcos.
- Fishing. This text is a short conversation by two Seri men about things relating to fishing.
- Future Fishing. This text is a monologue by Óscar Romero about fishing.
- Multitopic: This text is a conversation about many topics between two Seri men.


## Recorded and published oral texts

Unless otherwise noted, the following texts are published on-line at the following location: http://lengamer.org/admin/language_folders/seri/user_uploaded_files/links/File/Textos/SeriTexts .htm. The metadata about these texts, including information about earlier publication, is given there. (The tags omit accents and special characters.)

- Canasta [Basketmaker]: This text appeared as a booklet prepared for promoting literacy and published in 1969 (see E. Moser 1969). It describes how a woman makes a Seri-style basket (hasaj 'canasta'). Exact details about how the text was obtained and the book was prepared are not known. The text was probably given orally first by Roberto Herrera Marcos and transcribed by Edward and Mary Moser. The recording is a reading by René Montaño Herrera.
- Conejo_Cuernos [Cottontail with Antlers]: Story about how the cottontail rabbit ('conejo') was
once given antlers ('cuernos') by the Creator, but since they didn't suit him, they were taken away. Narrator: unknown. Recording (reading) by René Montaño Herrera. The original recording of this text has not been located.
- Conejo_Coyote [How Rabbit fooled Coyote]: Story about how the cottontail rabbit fooled the coyote and escaped. Narrator: Roberto Herrera Marcos.
- Conejo_Puma [How Rabbit fooled Puma]: Story about how the cottontail rabbit fooled the puma and escaped. Narrator: Roberto Herrera Marcos.
- Coyote_Pinacate [How Stinkbug fooled Coyote]: Story about how the stinkbug ('pinacate') fooled the coyote and escaped. Narrator: Jesús Morales.
- Dos_Hermanos [Two brothers go away mad]: Narrative about two Seri brothers ('dos hermanos') who left the community and were captured by giants and then turned into giants. Narrator: Roberto Herrera Marcos.
- Gigante_Comelon [The Giant who was a glutton]: Narrative about how a baby found in the desert grew up to be a giant ('gigante') who had odd behavior, including being a glutton ('comelón'), and eventually left the Seris. Narrator: Roberto Herrera Marcos.
- Gigante_Huerfano [The orphan giant]: Narrative about how a giant who was an orphan ('huérfano') and his seven wives became the rainbow at the time of the world-wide catastrophe. Narrator: Roberto Herrera Marcos. The original recording of this text has not been located.
- Hipocampo [The seahorse's descent into the sea]: Narrative of how people turned into the seahorse ('hipocampo') and other creatures. Narrator: Jesús Morales.
- Hombre_Barril [The man named Barrel]: Narrative about a historical event involving a Seri named Baril, 'barril' Barrel). Narrator: Chico Romero. The original recording of this text has not been located.
- Mosca_Humo [The bluebottle fly's firemaking]: Explanation of how the fly ('mosca') makes smoke ('humo') signals over dead animals and attracts buzzards. Narrator: Roberto Herrera Marcos.
- Muerte_Cöquimaxp [The death of Cöquimaxp]: Narrative about a historical Seri man nicknamed (Cöquimaxp Light Pink) who died during an attack on his reed boat by a huge lizard-like creature that was then killed by an enormous shark. Narrator: Jesús Morales.
- Tramposo [The Trickster]: A well-known story about a famous Seri trickster named Hooro Cöicaasitim Quiya (gold 3IO-InF.In-UO.deceive SN-TR-know). This story was published in Romero et al. (1975) but has not yet been appropriately re-edited for more recent republication. ${ }^{93}$

[^17]- Saltar_Luna [When Coyote was going to jump over the moon]: Story about how the coyote once wanted to jump ('saltar') over the moon ('luna') like the birds were doing. He failed because the moon enlarged itself. The dark spots on the moon are his remains. Narrator: Jesús Morales. The original recording of this text has not been located.
- Topete [How Juan Topete was lost]. An account by Juan Topete about a nearly tragic event in his life when he was very young. Narrator: Juan Topete. The original recording of this text has not been located.
- Viaje_Tiburon [Trip to Tiburon Island]. An account by Robert Herrera Marcos about an eventful trip by boat to Tiburon Island when he was a boy. This text appeared in a book of stories (Romero et al. 1975). Edward and Mary Moser recorded it sometime before 1975. It has not been re-edited for publication yet and does not appear in the on-line archive as of this date of writing.


## Written and published texts

The following texts were written by contemporary Seri men. They are available in monolingual Seri version (with accompanying audio files in most cases) at the following site: http://lengamer.org/admin/language_folders/seri/user_uploaded_files/links/File/Acervo_de_Text os/acervo_de_textos.htm. Glossed versions of these texts may be found at http:// lengamer.org/admin/language_folders/seri/user_uploaded_files/links/File/Textos/SeriTexts.htm.

- Aves. A book (Montaño Herrera 2008) with clues and answers about various species of birds ('aves') found in the area. The recordings are a reading by the author, René Montaño Herrera.
- ES2007. A collection of short essays (Montaño Herrera, Moreno Herrera \& Marlett (eds.) 2007) about various topics that are forming a type of encyclopedia of information.
- Hast_Cacöla. An essay (Moreno Herrera, 2010) about two important peaks on Tiburon Island referred to by this name.
- Hast_Quita: An essay (Herrera Casanova, 2010) about the Seri people who lived on Baja California near a mountain by this name.
- Lagartijas. A book (Montaño Herrera 2007) with clues and answers about various species of lizards ('lagartijas') found in the area.
- Siete_Filos. An essay (Montaño Herrera, 2010) about the leatherback sea turtle ('siete filos'). [Also part of ES2007]


## Translated texts

- ALIM. A collection of isolated sentences elicited for the Archivo de Lenguas Indígenas de México, published as M. Moser (1996). The questionnaire for the project was designed by Dr. Jorge Suárez for the documentation of the indigenous languages of Mexico. These sentences are available now electronically at [http://lengamer.org/admin/language_folders/seri/user_uploaded_files /links/File/Textos/ALIM/ALIM_Metadata.htm]. [Key Seri consultant: Roberto Herrera Marcos.]
- DS2010. The Seri-Spanish-English dictionary (M. Moser \& Marlett 2010) included a large number of illustrative sentences. Some of these were prepared specifically for the dictionary (and should be considered elicited sentences), while others were taken from various natural texts or from overheard conversations. Unfortunately, the exact sources are not identified in the dictionary. When it was possible to pinpoint an original text, the original source is used in this grammar.
- HE. This booklet, Hablemos Español ("Let's Speak Spanish") was a piece designed by someone in the Secretaría de Educación Pública in Mexico in the 1960s to help promote bilingual education. The Seri version was published as E. Moser \& M. Moser (1964). A curious piece in many ways and now out-of-fashion, it nevetheless provided some interesting material. One consultant pointed out that this piece helped him become interested in reading the language. These sentences are published electronically now at [http://lengamer.org/admin/language_folders/seri/user_ uploaded_files/links/File/Textos/Hablemos/Hablemos.htm]. [Key Seri consultant: Roberto Herrera Marcos.]
- NTT: New Testament Translation (Ziix quih icaamx quih cmaa quiih quih Cristo quij itoon hant com cöoomjc ac 1982). [Key Seri consultant: Roberto Herrera Marcos] The translation of the New Testament into Seri (published 1982 but mostly drafted ten to fifteen years before that) has been an additional source of text material because of the complexity of the material that it presents. The main translator of most of that material was Roberto Herrera Marcos. His goal, as guided by Edward Moser, was to provide a translation that was as natural as possible; formal equivalence to the original was not an important consideration. All examples from that translation were updated in spelling and punctuation and rechecked and recorded. While occasionally some slight adjustments were made, the general reaction to that material has been that it is well-crafted prose.
- Viento_Norte: This short text was translated by Xavier Moreno Herrera to accompany the description of the phonetics of Seri published as Marlett et al. (2005). The text may be found at http:// lengamer.org/admin/language_folders/seri/user_uploaded_files/links/File/Textos/SeriTexts.htm.


### 1.3 Typological characteristics of the language

This section presents a concise overview of various typological characteristics. ${ }^{94}$ The topics covered are generally discussed in more detail in later chapters.

[^18]
### 1.3.1 Syntactic typology

### 1.3.1.1 Word order

The language is generally head-final. ${ }^{95}$ This fact is reflected in various ways in the grammar as shown below and summarized in Table 1.2. ${ }^{96}$

Main clauses typically follow dependent clauses (except purpose clauses); see chapter 3. See the example in (1) in which two dependent clauses precede the final, main clause in the typical order.
(1) Ixaap ${ }^{\circ}$ czooxöc coi iti toofin ma, days SN -four the. PL 3P-on RL-pass DS
เhacx tommiih $\lrcorner$ ma $x$, xepe com cöimqueelajc. apart RL-N-not.exist DS UT sea the. Hz 3IO-3:3-Px-return/PL
'Después de cuatro días, si no había muerto, lo devolvieron al mar.'
After four days, if it had not died, they returned it to the sea. (Mosnipol 47)
The verb typically occurs clause-finally, and therefore commonly follows the phrase that is the direct object (nominal phrase, infinitive or deverbal-noun "clause"); see chapters 3 and $12 .{ }^{97}$ The direct objects are bracketed in the following examples.
(2) $\quad \cdots$ [yeen cap] ipocaat $\quad$ x, $\ldots$

3P-face the.VT 3:3-Ir.Dp-yank UT
'.. si arranca la cabeza, ...'
... if it yanks its head, ... (DS2010, ccaat)
(3) Siip cop [iionam quij] iyaaihjö.
young.man the.VT 3P-hat the.CM 3:3-Dт-cause.red
El joven pintó de rojo su sombrero.'
The young man painted his hat red. (DS2010, caaiiio)
(4) [Icoos] ihmiimzo.

InF.In-sing 1SGS.TR-PX-want
'Quiero cantar.'
I want to sing.
${ }^{95}$ See Nichols (1986).
${ }^{96}$ Quantifiers are not included in this discussion because most are verbs; see §18.2. Adjectives are not included either because they are such an unusual category; see chapter 23. Adjectives follow the head noun. Most descriptive predicates are verbs that must appear in a deverbal form when modifying a noun; see $\S 10.4$ and $\S 18.2$. The language does not have discontinuous constituents although the situation with the semantic complements of P elements may cause one to think otherwise; see chapter 22.
${ }^{97}$ True finite complements are only marginally attested; see chapter 12.
(5) [ Hant miisaquim ] ihmiimzo. land 2P-PON-brush 1SGS.Tr-Px-want 'Quiero que barras el piso/suelo.'
I want you to sweep the floor/ground. (Ds2010, quisaquim)
Example (3) is also an appropriate example to illustrate the basic SOV order of constituents in the clause; the subject precedes the complement of the verb. While there is certainly some freedom of word order, it does not seem to be the case that the language should be classified as a "free word order" language. There are strategies for placing nominals to the left and to the right of the basic clausal elements, but one would not characterize these as "scrambling".

The language has postpositions rather than prepositions, as shown in (6). ${ }^{98}$
(6) $\left[\left[[\text { Hast ] } \quad \underline{\text { ano }}]_{\mathrm{PP}}\right.\right.$ ctam $]$

San.Esteban.Island 3P.in man
'hombre de la isla San Esteban'
man from San Esteban Island
The noun head follows a postpositional phrase modifier (although such modification is not common; see $\S 13.5 .3$ ). This is illustrated by example (6) above.

Subordinators follow their complements (§25.4).
(7) Taapl xox, ihyoohit.

RL-cold although 1SGS.Tr-Dt-eat
'Aunque estaba frío, lo comí.'
Although it was cold, I ate it. (DS2010, xox)
An auxiliary verb follows a lexical verb, although auxiliary verbs are not at all similar to those of Indoeuropean auxiliaries; see chapter 20.
(8) Siifp . ca teeme.

Ir.ID-arrive Aux.SN PX-say
'Dijo/dice que llegará.'
S/he said/says that s/he/it will arrive. (DS2010, ca)
A possessed noun follows the nominal that is the possessor (§8.3).

[^19]$\qquad$

## Table 1.2: Head-final characteristics

1. Dependent Clause, Main Clause

Complement, Verb
Complement, Postposition
Postpositional Phrase, Noun
. Clause, Subordinator Subordinate clause precedes subordinator.
6. Lexical Verb, Auxiliary

Nominal, Noun
Nominal, Noun
9. Nominal, Pronoun Nominal precedes pronoun in partitive expression.
0. Adverb, Verb

Nominal, Determiner

Adverbial clause precedes main clause.
Complement precedes verb.
Complement precedes postposition.
Postpositional phrase precedes noun.

Lexical verb precedes auxiliary verb.
Possessor nominal precedes possessed noun.
Nominal indicating material precedes head noun.
Nominal precedes pronoun in partitive expression.
Major adverb precedes verb.
Nominal precedes determiner.
(9) [cocazni ${ }^{\circ}$ com ] ilít quij
rattlesnake the.Hz 3P-head the.CM
'la cabeza de la víbora de cascabel'
the rattlesnake's head ... (DS2010, cactim)
The head noun follows a nominal that indicates the material from which the item is made (§8.2.1).
(10) hast hax
stone arrow.point
'pedernal'
stone arrow point (DS2010, hast "hax)
A pronoun follows the nominal with which it forms a partitive expression (§8.5).
(11) [seaatoj tanticat] pac
goat-PL Md-Aw.PL some
'algunos de los chivos'
some of the goats (DS2010, pac)
Verbs follow robust adverbs. (Some adverbs also follow the noun or adverb, so this generalization is not as strong as the others; see chapter 24.)
(12) Miizj ihmiya.
well 1SGS.Tr-Px-know
'Lo sé bien.'
I know it well. (DS2010, miiz)
(13) Cmaam tiquij cocazni ${ }^{\circ}$ quih anxö imiixim. woman Md-CM rattlesnake the.Fl Intns 3:3-Px-fear 'Esa mujer teme mucho a las víboras de cascabel.'
That woman is really afraid of rattlesnakes.
A (non-interrogative) determiner follows the nominal with which it is construed (§11.1). ${ }^{99}$
(14) haxz $^{\circ}$ cop
$\operatorname{dog}$ the.VT
'el perro'
the dog
Relative clauses (always formed with deverbal nouns, see §8.4) often appear to follow the head, but all of the examples can be analyzed as head-internal relative clauses, and some examples, such as (16) and (17), must be so analyzed. Therefore the following examples are bracketed as if they were head-internal relatives. The head nouns are underscored.


### 1.3.1.2 Clause chaining and different-subject marking

Sentences are commonly composed of a series of chained dependent clauses (with morphology that clearly marks them as such, although the verbs are inflected for person and number) followed by a main clause. ${ }^{100}$ The dependent verbs are underscored in the following example; the main clause (clause 5) happens to use a deverbal form.

[^20]
'Entonces el cerro lo vio, lloró y se puso triste.'
Then the mountain witnessed it, wept and was sad. Hast_Cacöla 5
When the subject changes person, this is marked by an enclitic at or near the end of the dependent clause. In the following example, the subject changes in clause 4 (note the marker ma near the end of clause 3 ), and in clause 5 (note the marker ma near the end of clause 4 ).
(19) clause 1
Icoohit ihtamzo $x$,

Inf.In-UO-eat 1SGS.Tr-Rl-want UT
'Cuando quiero comer,'
Whenever I want to eat,
clause 2
xepe com itacl ihpteectim $x$,
sea the.Hz 3P-surface/place.above 1SGS.In-RL-travel UT
'viajo sobre la superficie del mar,'
I travel above the surface of the sea,
clause 3
zixcám ${ }^{\circ}$ quih iiqui hptihiizat ma $x$,
fish the.FL 3P-toward 1SGS.In-Rl-cast.shadow DS UT
'hago sombra hacia el pez,'
I cast a shadow over the fish,

| clause 4 |  |  | clause 5 |
| :---: | :---: | :---: | :---: |
| thacx tmiih | ma | $\mathbf{x}$, | ihmiihit. |
| s/he/it.dies | DS | UT | 1SGS.Tr-Px-eat |
| 'muere,' |  |  | 'lo como.' |
| it dies, |  |  | I eat it. (Aves_6) |

The structural aspects of sentence construction are presented in chapter 3, and the facts about Different Subject marking in $\S 3.6 .1$ and $\S 9.1 .1$.

### 1.3.1.3 Non-tensed language

While mood and aspect are both obligatorily marked on the verb (for details see §17.3.1 and $\S 17.3 .8$ ), grammatical tense is not found. The mood prefixes distinguish primarily between realis and irrealis, which clearly distinguish between non-future and future, but there is no unambiguous marking of past versus present. By the criteria proposed in Stassen (1997), therefore, Seri is a non-tensed language. ${ }^{101}$

### 1.3.1.4 Pronoun drop

Seri is a pronoun-drop language. Pronominal participants of a clause are typically expressed only through the inflectional morphology on the verb, whether finite or non-finite (with the exception noted below), ${ }^{102}$ although an independent pronoun (which does not display case) may occasionally occur for emphasis.
(20) Iyaaihjö.

3:3-Dт-cause.red
'Lo/la pintó rojo/a.'
S/he painted it red.
(21) ŁHehe án」 $z$ ano mota, toc cömiiha iti, countryside a 3P.in TwD-RL-move there 3IO-TwD-3P-PON-move 3P-on
haa motat, itcaiilam ma,
there Twd-RL-move-Pl 3:3-RL-shoot-Pl-ImpF DS
tooxquim, tooxquim, toc cömoma.
RL-UO-put.Hz Rl-UO-put.Hz there 3IO-Twd-Px-move
'Venía del desierto, mientras venía allí, venían (otros) allí, estaban tirándole, le tiraba (rocas, etc.), tiraba, (y) venía.'
He was coming from the desert, (and) while he was coming there, they were coming, they were shooting him, he was shooting, he was shooting, he was coming there. (Hipocampo_9)

[^21](22) Comcaii quih himihazt ixoomzo ... old.woman the.FL 1SGDO Inf.Tr-tattoo 3:3-Em-want 'La anciana quiso tatuarme ...'
The old.woman wanted to tattoo me ... (DS2010, quizt)
(23) He hin yomaxpx.
(24) ¡Ihpoocta!

1Pro 1SGDO Dt-N-mad.at
1SGDO -Im-look.at
'No estaba enojada CONMIGO.'
‘¡Mírame!’
S/he wasn't mad at ME. (Ds2010, caafin)
Look at me! (Ds2010, hpo-)
Imperative verbs do not take normal subject person inflection; they are inflected in the imperative mood (§17.4.2).
(25) ¡Ox cmah!
thus Im-N-do
‘¿No hagas eso!’
Don't do that! (Overheard frequenty)
The subjects of atmospheric verbs are also non-overt (§18.1).
(26) Xocozim.

Em-hot.(weather)
‘¡Hace calor!’
It's hot (weather)! (Overheard)
Pronouns (or overt nominal phrases) are required in one situation: to express the subject of an independent clause headed by a noun phrase (§10.1) or a subject-oriented deverbal noun (§10.4). In all of these situations, the clause typically has a modal such as declarative or interrogative; see $\S 10.1$.


| Demonstrative | Predicate NP | Moda |
| :--- | :--- | :--- |
| Tiix | ctam immátiscal | iha. |
| DDS | man SN-N-braggart.IMPF | DCL |

'Él no es un hombre fanfarrón.'
He isn't a braggart. (DS2010, cmaiscal)

| (28) | Pronoun |  | Deverbal noun | Modal |
| :--- | :--- | :--- | :--- | :--- | :--- |
| He | Hezitmisoj quij ano | moca | ha. |  |
| 1Pro | Hermosillo the.CM | 3P.in | TwD-SN-move | DCL |
|  | 'He venido de Hermosillo.' |  |  |  |
| I have come from Hermosillo. (DS2010, ano) |  |  |  |  |

### 1.3.1.5 Subject - Object - Indirect Object

It is claimed in this grammar that the phrasal structure of the clause in Seri is relatively flat (see the beginning of chapter 2 ). To be specific, the phrase structure seems to string out the various
nominal phrases and then the verb and its special modifiers (which together form a VP). Nonetheless, the syntax is strongly oriented around the notions of subject, direct object, and oblique/indirect object. The notion of subject plays a pivotal role in a number of constructions, while direct and oblique/indirect objects are for the most part sharply distinguished. The notion of ergative subject plays a minor (and not entirely clear) role in the formation of questions (see chapter 6).

These grammatical notions have a pervasive effect on the morphology in that the transitivity of a clause has multiple morphological repercussions (see $\S 1.3 .4$ below).

### 1.3.2 Style typology

It is difficult to give a succinct characterization of the typical rhetorical devices of the language except to indicate that good style involves a fair number of words and a certain amount of repetition (although not as much as in some languages of this type). The clause-chaining structure of the language often typifies "tail-head" linkage of one sentence to another in certain narratives, as illustrated by the following example with the relevant "repetition" underscored. (See also §3.9.)
(29) ... toc cöquiij iha xo cöimiimjc. there 3IO-SN-sit DCL but 3IO-3:3-Px-take/bring

## Cöitamic ma, itoocta,

 3IO-3:3-RL-take/bring DS 3:3-RL-look.at‘... estaba allí sentado pero se la llevó [la comida]. Se la llevó, [él] la miró, ...' ... he was sitting there, but she took [the food] to him. She took it to him, he looked at it, ... (Hombre_Baril_ $22-64$ )

The number of words is also higher than might be expected because of the prolific use of idioms (chapter 7) and complex lexical items (§1.3.5). Polite talk (not discussed in this grammar) is characterized by extra words, circumlocutions, and passive voice.

Fairly formulaic negative existential constructions (also not otherwise discussed in this grammar) are liberally used. ${ }^{103}$ See the following examples, which are translated here with definite articles in English and Spanish although the original has indefinite articles (note the word $\mathbf{z o}$ ).

[^22](30) ŁZiix quiisax $\rfloor$ him imiixim zo $\llcorner$ haquix imiih」 iha. person $\quad 1$ SGDO SN-Tr-N-fear a there $\quad$ SN-N-be.Fl Dcl
'La persona que no me teme no existe.'
The person who doesn't fear me doesn't exist. (Less literally, Everyone is afraid of me.) (Lagartijas_15)

(31) Ziix quiisax $\lrcorner$ pootax ta quiho zo $\llcorner$ haquix imiih $\lrcorner$ iha, thing SN-have.life Ir.Dp-go DS SN-Tr-see a there SN-N-be.Fl DCL $\begin{array}{cl}\text { Lhant quixoaa」 } & \text { quij. } \\ \text { ghost.shrimp } & \text { the. } \mathrm{Cm}\end{array}$
'La persona que ha visto un camarón fantasma andar [en la tierra] no existe.'
The person who has seen a ghost shrimp go on the land doesn't exist. (Less literally, No one has ever seen a ghost shrimp travelling on the land.) (ES2007, hant_quixoaa_3)

tazo ipi zo quiho zo haquix imiih iha. ${ }^{104}$
one Intns a/one SN-Tr-see a/one there SN-N-be.Fl Dcl
'... el que lo ha visto de los niños de nuestra generación no existe.'
... the one who has seen it of the children of our generation doesn't exist. (Less literally, No present-day child has ever seen one.) (ES2007, lamz 12)
(33) $\ldots$ ziix $z$ ipoohit hant $z$ iti imiih iha. thing a 3:3-Ir.Dp-eat land a 3P-on SN-N-be.Fl DcL
'... no tenía qué comer.'
... the thing that he would eat didn't exist. (Less literally, He didn't have anything to eat.) (Gigante_Huerfano_06)
(34) He hooxi zo toc cöimiih iha.

1Pro 1P-ON-finish a there 3IO-SN-N-be.Fl DCL
'Nunca he hecho uno.'
What I have made doesn't exist. (Less literally, I have never made one.) (DS2010, quixi)
(35) Ziix cmeque zo quicápota zo toc cöimiij iha.
thing SN-warm a SN-TR-HAVE-jacket a there 3IO-SN-N-sit DCL
'Nadie tenía una chaqueta cálida.'
There wasn't anyone who was wearing a warm thing. (Less literally, No one was wearing a warm jacket.) (Viaje_Tiburon_3)

[^23](36) Ziix cmatj zo hapoosyoj, ziix zo hapoiitoj, thing SN-hot a 1 PlS-Ir.DP-drink.PL thing a 1PLS-Ir.DP-drink.PL
toc cöhimoii
ha.
there 3IO-1P-PON-N-be.PL DCL
'No habíamos bebido nada caliente ni habíamos comido nada.'
We were not there having drunk anything warm or having eaten anything. (Less literally, We had not drunk anything hot nor eaten anything.) (Viaje_Tiburon_64)

The devices of simile and metaphor (in the senses as these terms are used in standard discussions of style) are not used in the language.

### 1.3.3 Construction typology

This section presents information about a variety of constructions that occur in the language.
Seri has a passive construction (§9.2.2) that is of the cross-linguistically common type in which the agent cannot be overtly expressed. The patient is the surface subject of the verb (which has passive morphology).
(37) Ihpyopazt.

1SGS.In-DT-PV-tattoo
'Fui tatuado.'
I was tattooed.
Another passive construction of a much more unusual type also is found: an impersonal passive of transitive verbs (§9.2.2). The patient is not the surface subject of the verb, although the verb still has passive morphology. The patient looks like a direct object, although it arguably is not. The impersonal passive is used (obligatorily) if the patient is plural and also (obligatorily) when an indirect/oblique object occurs in the clause.
(38) Hizi yopázitim.

1PlDO DT-Pv-tattoo-ImpF
'Fuimos tatuados.'
We were tattooed.
There is no passive construction based on intransitive verbs.
A special construction is used when the main verb is a number predicate indicating the number of times the proposition expressed in the complement clause occurred (§9.1.2). The complement clause is headed by a deverbal noun, but the number verb is also inflected for the same person as the subject of the complement clause.
(39) [ Haptco miimalim quih ] inyahaatxo.
already 2P-PON-observe-ImpF the.Fl 2SGS-Dt-Times-many
'Ya los has mirado muchas veces.'
You have already looked at it many times. (DS2010, cahaatxo)
Reflexives are transitive clauses with a reflexive pronoun (see $\S 11.2$; there is much more to explain about this construction).
(40) Zaaj $z$ an hisoj ihyisxö.
cave a 3P.in 1P-self 1SGS.Tr-Dt-hide
'Me escondí en una cueva.'
I hid in a cave. (DS2010, iso, quiisxö)
Different-subject marking occurs on dependent clauses. The morphemes ta and ma follow dependent irrealis and dependent realis clauses (respectively) to indicate that the subject of one clause is not coreferential with the subject of the next clause. There is no overt marking of coreferentiality.
(41) (a) Dependent irrealis

Moosni hatiin pac ihpamotjö,
sea.turtle SN-Pv-slice some 1 SGS.Tr-Ir.Dp-cause.soft
(b) Dependent irrealis (c) Independent realis
ihpaatj ta, hasiiitoj aha.
1SGS.Tr-Ir.Dp-pound.flat DS 1PlS-Ir.ID-eat.Pl Aux-Dcl
'Voy a ablandar esta carne seca de caguama con golpes y la comeremos.'
I am going to tenderize this dry sea turtle meat by pounding it, and we will eat it. (DS2010, caati)
(42) (a) Dependent realis

Sahmees caacöl pac he itámlajc ma,
orange(s) SN-big-Pl some 1IO 3:3-RL-take/bring.PL DS
(b) Independent realis

เano hmeemjöc $\lrcorner$.
I.peeled.them
'Me trajeron algunas naranjas grandes, (y) las pelé.'
They brought me some large oranges, (and) I peeled them. (DS2010, queemoz)
(a) He hptahahásaquim
$\underline{m a} x$,
1Pro 1SGS.In-RL-Pv-comb.hair.of DS UT
(b) ihxoqueepe. 1SGS.Tr-Em-like
'A mí me gusta cuando me peinan.'
I like it when my hair is combed. (DS2010, ah-)
In example (43), the subject inflection on the verbs in both clauses is first person singular. (The
first verb is the passive form of a transitive verb $\sqrt{\text { ahásaquim comb the hair of someone, which }}$ is the augmented form of intransitive verb Vasaquim comb one's own hair.) Part of the reason for which Different Subject marking occurs in the first clause is the fact that the underlying subject (agent) of the first clause is not coreferential with the underlying subject (experiencer) of the second clause. See $\S 3.6 .1$ and $\S 9.1 .1$ for discussion of these and other important details.

There is no classical antipassive construction (a non-passive clause with an overt patient nominal that is not the direct object). There is no middle voice nor middle construction (but see the intransitive verbs (§18.4.6) that in their basic form are only interpreted reflexively). No evidence of serial verbs has been found.

### 1.3.4 Morphological typology

In some key ways Seri is a head-marking language. ${ }^{105}$ In the clause, the verb (as head) carries person and number marking for the subject and direct object, and person marking for indirect object. The nominals (as dependents) are not marked for case at all. ${ }^{106}$ This is shown in the following example.
(44) Heexoj zo mpaai, torch a 2SGS-Ir.Dp-make

| itaaij | iizc | tintica |  | compaapiö | ta $\mathbf{~ x , ~}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| shoreline | 3P-front | MD-AW |  | $3 I O-2 S_{G S} S$ IR.DP-illuminate | DS UT |

'Si haces una antorcha e iluminas la playa, ...' If you make a torch and light up the beach with it, ... (DS2010, caapio)

In the possessed noun phrase, the possessed item (as head) carries person marking that indicates the possessor (as dependent), which is not marked for case.
(45) [cocazni ${ }^{\circ}$ com] ilít quij
rattlesnake the.Hz 3P-head the.CM
'la cabeza de la víbora de cascabel'
the rattlesnake's head (DS2010, cactim)
Postpositional phrases and P-element phrases (chapter 22) have inflected P-elements as their head; their complements are not marked for case. ${ }^{107}$ (One P-element has singular and plural

[^24]forms that relate to the complement: hiihax with me, miihax with you (sg.), hiicot with us, miicot with you (pl.).)
(46) iMiizj hoocta! miti hpsozám xo tax. well Im-look.at 2P-on 1SgS.In-Ir.Id-UO-put.Vt Emph Sbrd ' i Cuidado! porque te puedo pisar.'
Be careful, because I might step on you. (DS2010, cozám)
(47) hant $z$ iti
place a 3P-on
'en algún lugar'
somewhere
(48) Ihptaalim, hamt ihtahojöz, iti hpyiij.

1SGS.In.-RL-play soil 1SGS.Tr-RL-cause.mounded 3P-on 1SGS.In-Dt-sit
'Cuando yo jugaba, hice una loma en la arena y me senté en ella.'
When I was playing, I made a hill in the sand and sat on it. (DS2010, canjöz)
In other ways, Seri is a dependent-marking language. Subordinate clauses are clearly marked as such by special morphology, both in relativized clauses (headed by deverbal nouns) and in adverbial clauses (non-final morphology and different-subject marking).
(a) Dependent, Dependent Irrealis po-

Caay cap yeen cap ipocaat $x$, horse the.VT 3P-face the.VT 3:3-Ir.Dp-yank UT
(b) Independent, Independent Irrealis si-

เanxö masaai」 haa hi.
Intns 2SGDO Ir.ID-make AUX DCl
'El caballo te va a herir si arranca la cabeza.'
The horse is going to injure you if it yanks up its head. (DS2010, ccaat)
(50) (a) Dependent, Realis t-

Sahmees caacöl pac he itámlajc ma, orange(s) SN-big-PL some 1IO 3:3-RL--take/bring.PL DS
(b) Independent, Proximal Realis mi-

เano h́ㅡeemjöc」.
3P.in 1 SGS.Tr-Px-?-ImpF
'Me trajeron algunas naranjas grandes, (y) las pelé.'
They brought me some large oranges, (and) I peeled them. (DS2010, queemoz)
Inflectional noun morphology is relatively simple. The prefixes that may occur on inherently possessed nouns are possessor prefixes and the absolute (i.e., lack of possessor). There are no diminutive or augmentative forms.
(51) a. milít
2P-head/hair
'tu cabeza/cabello'
your head/hair
b. halít
ABs-head/hair
'head'
head/hair

Suffixes that occur on nouns, sometimes with stem modification, indicate plurality.
(52)
a. hast
stone
'piedra'
stone
b. hásatoj
stone-PL
'piedras'
stones
(53)
$\begin{array}{ll}\text { a. } & \text { atcz } \\ & \text { 3P-younger.sister.FE }\end{array}$
b. atcal
'hermana menor de ella'
3P-younger.sister.FE-PL
her younger sister
'hermanas menores de ella'
her younger sisters
c. átcalcoj
3P-younger.sister.FE-PL-PL
'hermanas menores de ellas, hermana menor de ellas'
their younger sisters (of female), their younger sister

Verbs are morphologically complex. Almost all of the inflectional and derivational morphemes are prefixes. ${ }^{108}$ These include the following (an incomplete list):
(54) Mood

Imperative
Negation
Passive
Unspecified Object
Unspecified Subject
Causative
Person inflection (Subject, Direct Object, Indirect Object)
Nominalizers (Subject, Direct Object, Proposition/Oblique)
The most important suffixes and one infix conflate the indication of subject number and perfective/imperfective aspect (see §17.3.3). (Phasal aspect is indicated by phasal verbs; see §12.2.3 and §12.3.)
(55) extend (something) to dry out (DS2010, caas)
a. Vaasj (singular subject, perfective aspect)

[^25]b. Vaasal-im (singular subject, imperfective aspect)
c. Vatoosl-coj (plural subject, perfective aspect)
d. Vatoosal-am (plural subject, imperfective aspect)

Verbs may be derived from inherently possessed nouns by adding the prefix i- (§19.3); the result is a verb that means something like have $X$ or wear $X$.
(56) a. Vtaamt sandal, shoe
b. Jitaamt have sandals, shoes
(57) a. Vtemajeem younger sister's husband
b. لitemajeem have as brother-in-law (her younger sister's husband)

It is obvious from the above that the language is synthetic rather than isolating. ${ }^{109}$ An intransitive verb has more than one hundred different forms, and a transitive verb more than two hundred. Morphemes are relatively easy to segment, although there are significant exceptions; therefore the language would be categorized as quite agglutinative but also fusional in some cases. The verb for sing ( $\sqrt{ }$ oos) is an example that illustrates these facts; it is a typical intransitive verb that begins with $\mathbf{0}$. A few forms are listed below. Only simple morpheme breaks are indicated.

| (58) | c-oos | (one prefix) | the one who sings |
| :---: | :---: | :---: | :---: |
|  | i-m-oos | (two prefixes) | the one who does not sing |
|  | c-oos-tim | (one prefix, one suffix) | the one who sings (imperfective) |
|  | as | (one prefix with fusion) | Sing! |
|  | c-m-oos | (two prefixes) | Don't sing! |
|  | ihp-t-oos | (two prefixes) | I was singing, ... |
|  | ihp-yo-m-oos | (three prefixes) | I didn't sing. |
|  | yas | (one prefix with fusion) ${ }^{110}$ | S/he sang. |
|  | ihp-yás | (two prefixes with fusion) | I sang. |
|  | yo-m-oos | (two prefixes) | S/he didn't sing. |
|  | y-as | (two prefixes) ${ }^{111}$ | his/her singing / song |
|  | ih-y-as | (two prefixes) | my singing / song |

[^26]

A significant fact about the morphology is the way in which suppletive allomorphs of various morphemes are conditioned by (superficial) transitivity of the clause. Intransitive clauses (those without a superficial direct object, including passive clauses) are sharply distinguished from transitive clauses (those with such a direct object). Some examples of the kind of allomorphy conditioned in this way include those in Table 1.3; also see Appendix C.

The finite verb is obligatorily inflected for mood. In adverbial dependent clauses the choice is simply between realis and irrealis; see $\S 3.1$ and $\S 17.3 .1$. In realis main clauses, the options are greater in number; the choices obviously conflate other semantic features in that they are Emphatic, Interrogative, Proximal, and Distal (the latter two being uncertain labels representing as still nebulous distinction); see $\S 17.3 .1$. The situation of a main clause describing an unrealized future event is more complicated. The most common irrealis form virtually obligatorily takes a modal to indicate more information about the speaker's view on the event (see §20.2.1.1 and §17.3.1.3). In fact, the use of a deverbal noun construction using an irrealis verb form (see $\S 20.2 .2 .1$ ) comes into play here and expands the common options even more, making the translation of a simple future sentence no ordinary task.

There is no noun incorporation of the type where noun roots combine with standard verb roots. Compound verbs do not exist. ${ }^{113}$ There are no instrumental prefixes, unlike in neighboring Uto-Aztecan languages.

[^27]Reduplication is not used at all. There is no applicative morphology of any productive sort just as there are no applicative constructions.

### 1.3.5 Lexicon and word classes

The rich and expressive lexicon is notable in that it has not incorporated very many loanwords. The lack of loanwords is due primarily to the long isolation from Spanish-speakers and longstanding cultural distance, even hostility, between the national Mexican culture and Seri culture.

The major word classes are verbs and nouns. Postpositions / P-elements are very few in number. Adjectives are not an important class of word in Seri (see below). Most quantifiers, including numbers, are intransitive verbs (see §18.2). Determiners are richly represented (see chapter 20). The singular indefinite article, zo, is evidently related historically to the word for one, tazo. The definite articles have developed from subject nominalized verb forms of positional and motion verbs. Common articles with their stereotypical uses are:
(59) Article

| zo | a, an |
| :--- | :--- |
| pac | some (with count nouns or liquid/powder mass nouns) |
| cop | the (vertical, singular) |
| quij | the (compact, singular) |
| com | the (horizontal, singular) |
| quih | the (flexible; also a kind of default article in certain circumstances) |
| coi | the (general plural) |

Besides the above, the motion demonstratives tintica (singular) and tanticat (plural) apparently function as articles rather than demonstratives in some situations.

A noun class system is developing, although at this point its origin is still quite transparent in most cases (relating to physical orientation). This noun class system is indicated by the choice of definite article. The word zaah means sun and day and the meanings are distinguished by the article. Whereas the noun meaning sun takes the article quij as expected for a spherical object, the noun meaning day takes the article cop because this has become the standard article for abstractions of various sorts. See $\S 13.3$.
(60) a. zaah quij 'el sol' the sun
b. zaah cop 'el día' the day

Demonstrative adjectives are formed by combining a locative element and an article, yielding a rich and expressive set of forms, in addition to several that are formed using verbs of motion such as tintica and tanticat just mentioned. A few examples are:
(61) Demonstrative adjectives
hipcop this (proximal, vertical) ticop that (medial, vertical)
himcop that (distal, vertical) tiquij that (medial, compact)
himcom that (distal, horizontal) tacoi those (medial, plural)
hipquih this (proximal, flexible) hizcoi these (proximal, plural)
Verbs often include facets of meaning in them that makes them difficult to translate with simple glosses. These are meanings embedded in the roots themselves, not in some prefix that is added to a basic root. For example: $\sqrt{ }$ aazi and $\sqrt{ }$ aheectim transport, carry; $\sqrt{ } \mathbf{i i p}$ transport on head, $\sqrt{ } \mathbf{i z t i m}$ transport on hip, $\sqrt{ } \mathbf{i c s e e n p x}$ and $\sqrt{ } \mathbf{a s o o m p x}$ transport long thing under arm, $\sqrt{ } \mathbf{c o o i}$ carry in many trips, $\sqrt{ }$ sanj transport person on one's back, $\sqrt{ }$ ahasquim transport in boat or car, $\sqrt{ } \mathbf{a x o p}$ transport with pole over shoulder, $\sqrt{ }$ acaaix transport with pole, $\sqrt{ } \mathbf{a z n i}$ transport using a handle, $\sqrt{ }$ izcapxla transport under arm.

Adjectives are not numerous, and it could be argued that some or all of the few that exist are simply morphologically defective verbs (see §23.2). The vast majority of descriptive predicates in the language are no different from intransitive predicates that are active verbs. The examples that follow are therefore not adjectives modifying nouns but rather relative clauses, identical to those presented in §1.3.1.1 above (and see §8.4).

```
(62) a. cmaam caaspoj cop
    woman SN -write the.VT
    'la mujer que escribe/escribió'
    the woman who is writing / who wrote
    b. cmaam cacösxaj cop
    woman SN -tall/long the.VT
    'la mujer que es alta', 'la mujer alta'
    the woman who is tall, the tall woman
(63) a. cmaam imaaspoj cop
    woman SN -N-write the.VT
    'la mujer que no escribe/escribió'
    the woman who is not writing / who did not write
    b. cmaam ímacösxaj cop
    woman SN-N-tall/long the.VT
    'la mujer que no es alta', 'la mujer no alta'
    the woman who is not tall
```

Many transitive verbs have intransitive counterparts in which the patient is not expressed in the clause; in the simplest cases, the intransitive verb is derived by adding the prefix $\mathbf{o}$ (§19.1.1).
(64) a. $V_{\text {cazit }}$ $x$ take $y$ away forcibly
(65)
a. $\quad V_{i z i}$
$x$ defeat $y$
b. Vocazit
$x$ take away forcibly
b. Veezi
$x$ defeat

Causative verbs may be derived from simple verbs by adding one of the causative prefixes (see $\S 19.5$ for details).
(66)
a. $\sqrt{ }$ apca (impersonal)
rain
b. Vacaapca (intransitive) $z$ cause to rain
(67) a. $\quad \checkmark$ pasi (intransitive)
$x$ have wrinkles
b. لapasi (transitive) $z$ cause $x$ to have wrinkles ( x is direct object)
a. $\quad$ panim (intransitive)
$x$ wash (own) hair
b. Vapánomot (transitive) $z$ wash $x$ 's hair ( x is direct object)
a. Vaainim (transitive)
$x$ be mixed with $y$
b. Vaainim ${ }^{114}$ (ditransitive) $z$ cause $x$ to be mixed with $y$ ( x is indirect object)

The morphology of assistive verbs (§19.6) is similar to that of causatives but assistive verbs differ from causative verbs in the syntactic constructions in which they appear.
(70)
a. $\quad \sqrt{c}$ cazlil (transitive)
$x$ mash $y$ with teeth
b. Vácázatol (transitive) $z$ help $x$ to mash $y$ with teeth ( x is direct object)

And yet another kind of derived verb is similar to causatives and yet is even more distinct from them. The derived verb permits the expression of an experiencer (as subject).
a. $\sqrt{ }$ acat (intransitive) $x$ be bitter or salty
b. لacaacat (transitive)
$z$ find $x$ bitter or salty
( z is subject; x is direct object)

There are no complementizers, no relative pronouns, and no negative words per se; negation is only marked on the verb (by a prefix).
(72).. cmiique zo ma sconsacj aha.
person a $2 \mathrm{SGDO}_{\text {Ir.ID-N-carry.on.hip AuX-DCL }}$
... nobody is going to carry you. (DS2010, csaci)

[^28]| Table 1.4: Terms for sibling |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Male |  | Female |  |
| Female ego | Younger aacaz | Older $\dagger$ †amaac | Younger atcz | Older azaac |
| Female or male ego |  | axiiha |  |  |
| Male ego | azcz | anyaac | acoome | apaac |

(73) Ziix $\mathbf{z}$ imitaaicol iha.
thing a SN-TR-N-compare.with-PL DCL Nothing compares with it. (DS2010, quitai)

The language does not have auxiliaries of the type common to Indo-European languages. It also has does not have a grammaticalized set of evidential markers (but see the use of yoque one said in §12.4.3, and hax tahii hax maa it seemed in §12.2.1).

Demonstrative pronouns (§16.2), unlike demonstrative adjectives and pronouns derived from them, are either proximal (hipiix this one (contrastive), hipii this one (non-contrastive), hizaax these, this (liquid/powder mass) (contrastive), hizaa these, this (liquid/powder mass) (non-contrastive)) or non-proximal (tiix that one (contrastive), tii that one (non-contrastive), taax those, that (liquid/powder mass) (contrastive), taa those, that (liquid/powder mass) (noncontrastive)).

A clear morphological distinction exists between common nouns, kinship terms, and other inherently possessed nouns. Only the latter two classes generally can have morphological indicators of possessors; in fact, they must have some possessor indicated or else have the absolute prefix mentioned earlier: hipot my calf (of leg), mipot your calf, ipot his/her calf, hapot calf (of leg); hita my mother, mata your mother, ata his/her mother, hapete mother. These examples also indicate a morphological difference between kinship terms and other inherently possessed nouns: kinship terms take a different set of possessive prefixes in second and third person (mafor second person rather than mi-, which occurs for second person possessor generally) as well as a different absolute prefix.

The kinship terminology for Seri is perhaps one of the most extensive sets attested in the world, having more than fifty primary terms (§13.2.3.1) (which should make it a contender for this item in a book of world records). ${ }^{115}$ Relevant parameters include the sex of ego as well as the age and sex of the referent. Therefore, for example, nine terms exist for sibling, as shown in

[^29]the Table 1.4. Similar patterns exist for other relationships.
Seri does not have the kind of dynamic sound symbolism described for the neighboring Yuman languages, ${ }^{116}$ nor does it include a high degree of imitative words, although some vocabulary is obviously iconic. The vowels in the roots for big and little are open and close, respectively: $\sqrt{\text { aacoj }}$ big, $\sqrt{ }$ isil small. Certain roots relating to sounds include $\sqrt{ }$ pop pat, $\sqrt{\text { Voof } \text { blow (making }}$ " $f$ " sound), Voots sizzle (making " $s$ " sound), Vanoj roar (like the sea), buzz (like bee), $\sqrt{ }$ aplactim make slapping sound by hitting water or chewing loudly, $\sqrt{\operatorname{axax}}$ make a low or raspy or hollow sound, $\sqrt{ } \mathbf{i f a h z x}$ make a short sobbing sound to indicate unhappiness, $V_{i i f z}$ make snapping noise, $\sqrt{ } \mathbf{i i p c o ̈}$ make thumping, pounding or muffled sound, $\sqrt{\text { iisc }}$ make soft sound like when dragging foot on the ground, لiixaz make clacking or clinking sound, لiixëp make crunching sound; roar like ocean when the wind is blowing, Vanaao meow. (Most of these are the intransitive stems, cited in the singular perfective stem form.)

A striking characteristic of the Seri lexicon is the dynamic, creative, uncontrived and selfsufficient way in which it expands to include new items. The lexicalized phrases are not a new thing in the language as they reflect a well-established pattern that has been used in the past to replace lexical items that have become taboo. These expressions are often built around deverbal nouns. Some examples: eenm an iquiijim mirror (literally, metal in which one can see), eenm an iquiijim ziix cöimahnaxz glass, windshield (more literally, mirror on which something has not been painted), ziix iitax motor (literally, thing with which it goes), ziix icacötim blanket (literally, that with which one covers oneself up) ziix hacx tiij coos radio (literally, thing that, sitting outside, sings. See $\S 13.5$. Other new lexical items use established words in new domains. Such examples include ziix iitax itj iixquim belt (of motor) (more literally, what the motor puts around its waist), ziix iitax iyas battery (of car) (literally, motor's liver), and (the vehicle's) itoj its headlights.

One can also detect examples in the lexicon that are the result of lexical narrowing. A relatively new case of lexical narrowing would be the combination trooqui aapa (vehicle true) to mean a powerful and large sports-utility vehicle.

Idiomatic expressions (chapter 7) are numerous and broadly used. Some of them are similar structurally to English verb-particle idioms (§7.3).

This grammar takes as a working hypothesis the set of lexical categories in Table 1.5, ${ }^{117}$

[^30]ignoring here any subcategories and citing them in the entry form used in the 2010 dictionary. Only the first two classes (Noun and Verb) appear to be open categories in Seri, and they are the categories whose lexemes have the greatest variability due to inflection. Postpositions (or Pelements) also have inflected forms. Other categories have complexities of their own, but certainly not to the extent of the nouns and verbs.

### 1.3.6 Phonological typology

The phonological inventory is not particularly complex (see chapter 28). The language has four vowels, phonologically operating on a front-back and high-low system: /i/, / $/ /$, /o/ and $/ \mathrm{a} /$. Cross-linguistically this is considered a small inventory of vowels. ${ }^{118}$ Although it has a shortlong vowel contrast, it does not have any of the laryngeal modifications typical of many other languages in Mexico. It is not tonal and does not have phonemic nasalized vowels. ${ }^{119}$ The short vowels $/ \varepsilon /$ and $/ \mathrm{a} /$ are the "weak" vowels in that roots beginning with them display the greatest morphophonemic changes when conjugated.

The consonants include twelve obstruents (all voiceless) - /p/, /t/, /k/, /kw/, / $\Phi /$, /s/, / $/$ /, $/ \mathrm{S} /, / \mathrm{x} /, / \mathrm{x}^{\mathrm{w}} /, / \chi / / \chi^{\mathrm{w}} /$ — and six sonorants (all voiced, except for the glottal stop) — $/ \mathrm{m} /$, $/ \mathrm{n} /$, $/ 1 /, / \mathrm{f} / \mathrm{l} / \mathrm{j} /$, /?/. This is a moderately small inventory of consonants. ${ }^{120}$ Uvular fricatives are part of the inventory, placing Seri within the relatively small number of languages that have these sounds in the world. ${ }^{121}$ The lateral approximant is very uncommon and the tap is found only in loanwords. The glottal stop is an important consonant in the language and patterns phonotactically with the sonorants (see §28.3.1). Evidence is clear that the nasal $/ \mathrm{m} /$ is the unmarked nasal (see §28.5.2 and §28.5.4).

The greatest complexity in the phonology of Seri is the syllable structure; the language permits (and frequently uses) syllables with two consonants in the onset, two or three vowels in the nucleus (one of them shorter and higher than the others), and two or three consonants in the coda. The syllable structure is classified as complex in comparison to other languages. ${ }^{122}$

[^31]Stress generally occurs on the penultimate syllable of the root; prefixes and suffixes do not participate in the algorithm for assigning stress. ${ }^{123}$ Heavy final syllables attract stress, but final consonants are extrametrical; see $\S 28.2$. Primary stress occurs on the last constituent of a compound (§28.2.4) as on the last stressed word of a phrase: zixcolahapáh kite, ziix cola hapáh (thing high SN-Pv-put.FL) thing put up high. The following examples indicate stress explicitly. ${ }^{124}$ In all these examples, stress follows regular rules, as explained in $\S 28.2$.


[^32]
## 2. Constituent order in the clause

A basic clause consists of a series of nominal phrases followed by a verb phrase or predicate complement; see Figure 2.1. The nominal phrases are not marked for case. (The choice of definite article usually depends on the shape or position of the referent; see chapter 21.) Two simple examples with finite verbs are given in (1-2).
(1) Nominal Phrase Nominal Phrase

| Haxz $^{\circ}$ cop | zixcám $^{\circ}$ com | Verb Phrase |
| :--- | :--- | :--- |
| dog | the.VT | fish the.Hz |

'El perro ya comió el pescado.'
The dog already ate the fish.
(2) Zixcám ${ }^{\circ}$ com haxz $^{\circ}$ cop iyooho.
fish the.Hz $\operatorname{dog}$ the.Vт 3:3-Dт-see
'El pez vio el perro.'
The fish saw the dog.
The nominals are often not overt, as illustrated in (3) and discussed in detail in chapter 4. This is an important point since the presentation of information is usually structured so that multiple nominals do not typically co-occur in a sentence in normal discourse.
(3) Haptco iyoohit.
already 3:3-Dт-eat
'Ya lo/la comió.'
S/he/it already ate it.
The verb may occur with zero, one, two or three arguments (see chapter 18 as well as the sections that follow in this chapter) and adjuncts (see §2.7). The simple transitive verb in (1) and (3) expects a subject that is an agent and a direct object that is a patient.

The basic clause may also have predicate nominal phrase with a modal element (see $\S 10.1$ ) instead of a typical verb phrase, as shown in (4). Of course, the subject of such a clause may also be non-overt, as in (5).
(4) Ac quij xepe ziic iha. canvasback the.Cm sea bird DCL 'El pato coacoxtle es una ave marina.' The canvasback is a sea bird. (ES2007, ac)
(5) iXepe ziic -ya?
sea bird QM
‘¿Es una ave marina?'
Is it a sea bird?

Figure 2.1: Basic clause structure


Preferentially: Simple Adjunct $>$ Subject $>$ Indirect/Oblique Object $>$ Direct Object $>$ Other Adjunct

The order of constituents in the clause is the same in simple independent sentences, dependent clauses and embedded clauses, as discussed in §§2.1-2.5. Nominal phrases may appear in other positions than the basic ones indicated in Figure 2.1. Simple variations are discussed briefly in $\S 2.6$. Some of these alternate positions are best viewed as relating to the sentence rather than to the clause; they are discussed in $\S 3.10$ and $\S 3.12$.

The diagram in Figure 2.1 is obviously much simpler than trees that are commonly drawn for clauses in other languages. Perhaps compelling motivation exists in Seri for a more articulated structure, including a verb phrase that includes at least the direct object, but such motivation has not been found yet. ${ }^{1}$

Discussion of the verb phrase itself is reserved for chapter 5. The verb phrase essentially includes the verb and some tightly associated adverbs and nominals including the reflexive pronouns.

### 2.1 Subjects

In the absence of a simple adjunct (see §2.7.1), basic word order places an overt subject first in the clause. It therefore precedes the verb phrase, as in (6)-(8), or the predicate nominal, as in (4) above.

[^33](6) Maal quih yaanpx.

2P-spouse the.Fl Dт-go.home
'Tu esposo/a ha regresado a casa.'
Your spouse has gone home.
(7) Maal quih taanpx, hant yoom.

2P-spouse the.Fl Rl-go.home land DT-lie
'Tu esposo/a regresó a casa y se acostó.'
Your spouse went home and lay down.
(8) Maal quih taanpx ma, iicto ${ }^{\circ}$ coi max íqui imiiht.

2P-spouse the.Fl RL-go.home DS her.children the.PL even even 3:3-Px-see-PL
'Tu esposa regresó a casa y hasta sus hijos la vieron.'
Your spouse went home, even her children saw her.
This word order is the same whether the sentence is a statement (as in the examples above) or a yes-no question, as in (9). ${ }^{2}$
(9) $\quad$ Maal quih taanpx?

2P-spouse the.FL RL-go.home
'Regresó a casa tu esposo/a?'
Did your spouse go home?

### 2.2 Direct objects

Verbs subcategorize for up to two syntactic arguments other than the subject. ${ }^{3}$ In the unmarked word order, direct objects occur between the subject and the verb. This is illustrated in main clauses in (1-2) above for statements as well as (10) for yes-no questions.
(10) iHataai ${ }^{\circ}$ quih hast quii itaaplim?
cloth the.FL stone the.Cm 3:3-RL-cover.(passively)
‘¿Está la tela cubriendo la piedra?’
Is the cloth covering the stone?
The same order is found in dependent clauses, as in (11)-(12).
(11) Manuel quih itrooqui quii itacaatax, the.Fl 3P-vehicle the.Cm 3:3-RL-drive
'Manuel estaba manejando su carro, ...'
Manuel was driving his vehicle ... (DS2010, cacaatax)

[^34](12) Hapxa ticom oot cop itaho, ... cottontail Md-Hz coyote the.Vt 3:3-RL-see 'Ese conejo vio al coyote, ...'
That rabbit saw the coyote, ... (Conejo_Coyote_10a)
Example (13) shows this order for a direct object that is the addressee.
(13) ... quisil quij ctam oyaci quii ox itai, yoque: ...

SN-small the.Cm man 3P-ON-call.sibling the.Cm thus 3:3-RL-tell DT-US-say
'... el menor le dijo a su hermano (mayor), se dice: ...'
... the younger one said to his (older) brother, it is said: ... ${ }^{4}$ (Dos_Hermanos_2.1)
And finally, example (14) shows this order in a clause that has a deverbal noun as the main predicate (see §10.4).
(14) Ziic tiquih hax quih mos quisi ha, ... bird Md-Fl water the.Fl also SN-Tr-drink DCL 'Ese pájaro toma agua también, ...'
That bird drinks water also, ... (ES2007, acaam_ccaa_99)

### 2.3 Indirect objects

Indirect objects commonly precede direct objects. Examples (15)-(17) have causative verbs for which the syntactic properties are well known; the causee is the indirect object and the patient of the action is the direct object (see §19.5). ${ }^{5}$ These examples are not considered to be ambiguous. In some cases the lack of ambiguity is undoubtedly due to pragmatics or subtle clues in the choice of vocabulary, but in some cases, at least, it is not. (The indirect object determines indirect object inflection on the verb; for third person this is co-/cö-, which is also underscored in these examples.)
(15) iHataai ${ }^{\circ}$ quih hast quij contaaplim? cloth the.FL stone the.Cm 3IO-2SGS-RL-cause.cover.(passively)
'Cubriste la piedra con la tela?'
Did you make the cloth cover the stone?
(16) Juan cop Pedro quih hipi ihipon ${ }^{\circ}$ cop cöiyaqueecotol. the.VT the.FL InTNS his/her.voice the.VT 3IO-3:3-Dт-cause.listen
'Juan ${ }_{i}$ hizo que Pedro $_{\mathrm{j}}{\text { escuchara } \text { su }_{*_{i, j}} \text { voz.' }}^{\prime}$
Juan $_{i}$ made Pedro $_{j}$ hear his**, voice.
${ }^{4}$ The addressee is the direct object of the verb $\sqrt{ } \mathbf{a}$ i say to (see $\S 18.5 .9$ ).
${ }^{5}$ The examples here all have third person indirect objects. First and second person indirect objects are indicated only with inflection on the verb (see §17.3.2.4) and therefore those examples would not be relevant to the discussion of word order.

```
(17) i LEenim cosi}c\mathrm{ com hataai }\mp@subsup{}{}{\circ}\mathrm{ quih consaaipj haa -ya?
            needle the.Hz cloth the.Fl 3IO-2SGS-Ir.ID-make.transverse Aux QM
        `¿Vas a pasar la aguja por la tela?'
        Are you going to put the needle into (cause the needle to pass through) the cloth?
        (DS2010, caaip)
```

Examples of indirect objects that are recipients or addressees that demonstrate the same order (indirect object preceding direct object) include the following:
(18) Juan quih asaac quih caamiz cöiyaamx.
the.Fl 3P-son.ME the.Fl shirt 3IO-3:3-DT-say+IO
'Juan le prometío una camisa a su hijo.'
John promised a shirt to his son.
(19) María quih Juan quih tom coi cöiyeesxö.
the.Fl the.Fl money the.Pl 3IO-3:3-Dt-hide+IO
'María le escondió el dinero a Juan.'
Mary hid the money from Juan.
Other indirect objects for which a verb subcategorizes are unlike what one might expect from studying Indo-European languages. The derived intransitive verbs $\sqrt{ }$ apii taste like and $\sqrt{ }$ asii smell like subcategorize for an object of comparison (see §19.4.1); that is, these verbs must have an object of this type. This nominal may be either an indirect object or it may be a nominal that does not determine inflection (see $\S 2.5$ ). The difference in syntax corresponds to a difference in semantics as well. The former reflects a more attenuated relationship between the subject and the object of comparison - either less obvious or reflecting some choice.
(20) Hax hoosi hizcap panaal ih cömapii.
water 1P-ON-drink Px.VT honey FOC 3IO-Px-taste.like
'Esta agua que bebo tiene sabor a miel.'
This water that I am drinking tastes a bit like honey. (DS2010, capii)
(21) $\dot{\mathbf{Z Z o ́}}$ hamcaaxat -ya cötasii? which? smoke QM 3IO-RL-smell.like ‘¿Huele a qué clase de humo?'
What kind of smoke does it smell of?
(22) Icaaisx ${ }^{\circ}$ quih cöcasii ha.
soap the.FL 3IO-SN-smell.like DCL
'Huele un poco a jabón.'
It smells a bit like soap.
The expressions meaning have the form of - the verbs of which vary depending on the profile of the item (see §7.1) - subcategorize for an object of comparison that determines
indirect object inflection.
(23) Zixcám ${ }^{\circ}$ caanj hapáh com thant cocom」 iha.
fish Gulf.grouper SN-Pv-say the.Hz land 3IO-SN-lie DcL
'Tiene la forma del pez llamado "caanj" (baya).'
It has the shape of the fish called "caanj" (Gulf grouper). (ES2007, oot_icaan_2)

### 2.4 Cross-referenced oblique objects

Up to this point we have seen examples of verbs that require one or more nominals (which may be implicit) to be used appropriately. These nominals determine person inflection on the verb. A few examples of verbs that subcategorize for two nominals but inflect for only one are given in $\S 2.5$. Discussion of the various classes of verbs is presented in chapter 18.

The examples discussed in this section are different from the previous ones in an important way: they all contain a nominal - an oblique object - that presents an additional piece of information about the situation. In each of the examples, the verb has the same basic meaning and is perfectly grammatical if the oblique object and its cross-referencing morphology (§17.3.2.4) are removed. This "optionality" is the most important criterion for distinguishing these nominals from indirect objects, although the inflectional morphology is identical.

Oblique objects have a wide variety of semantic roles including means and instrument, reason and cause, name, destination, location, goal, source, manner, exchange item, topic, object of activity and object of comparison. (Benefactive is not one of these, and there is generally no way to express a simple benefactive in the language.) In each case the interpretation of the oblique object is determined by context in combination with the meaning of the verb itself.

Most of the examples below illustrate the presence of a third person nominal crossreferenced with the appropriate morphology (co-, cö-) drawn from the indirect object inflection paradigm. The absence of first and second person examples for most of these should not be allowed to obscure the fact that these are examples of agreement-type inflection and not simply "registration" of the presence of an oblique object.

Unlike in many other more familiar languages, these notions are expressed in Seri usually in only this kind of syntactic configuration. For example, there is no adposition (or P-element) that may alternatively express the notion of instrumentality. There are no paraphrases or near paraphrases that one can present for these sentences.

The examples below document both the type of oblique object and also its relative order in the clause. It is significant to note that these oblique objects sometimes occur closer to the verb than does the direct object. Thus, while it seems to be the unmarked location for an instrument
(for example) to precede the direct object, various factors can easily override the default order. One of these factors is definiteness: definite nominals tend to precede indefinite ones since universally established information tends to precede new information. ${ }^{6}$ A case where this may be relevant is example (86) below. Interpretation of what may seem to be potentially ambiguous examples is affected by the article that is present; the article com (the. Hz ) may imply that one item is prone and therefore is being acted on. This fact reinforces the default order (instrument precedes direct object) interpretation in the case of (29) since the article com is appropriate for a stick that is lying down but not for one that is being used to hit something else. In another situation the verb may affect the interpretation because some verbs require an argument that refers to an item of a certain shape.

### 2.4.1 Means and Instrument

The means or instrument is presented as an oblique object. Straightforward instruments are shown in (24)-(25).


Example (26) has an oblique object that is a less prototypical instrument (perhaps the means or the conduit), and (27) has an oblique object that is less prototypically instrumental.
(26) Hahoot hac ah contita, cömiizquim. Abs-entrance the.Lc FOC 3IO-Aw-Rl-move 3IO-Px-enter 'Entró por la puerta.' S/he entered by the door. (DS2010, ah)
(27) Hinaail com hax tmasol oo ma, coopol quih cömoospoj. 1P-skin the.Hz Intns Rl-yellow Dl DS SN-black the.Fl 3IO-Px-spotted 'Mi piel es muy amarilla y es manchada con negro.' My skin is very yellow and spotted with black. (Lagatijas 14)
Examples (28)-(30) show the instrument in a position before the direct object. (See $\S 2.6$ for other positions in which it occurs.)

[^35](28) José quih eenm icaati quii hast quij cöimaafc.
the.FL hammer the.CM stone the.CM 3IO-3:3-Px-pound
'José golpeó la piedra con el martillo.'
José pounded the rock with the hammer. ${ }^{7}$
(29) Cmaam quij hast quii hehe com cöimaafajquim.
woman the stone the stick the.Hz 3IO-3:3-Px-pound-ImpF
'La mujer está golpeando el palo con la piedra.'
The woman is pounding the stick with the stone.
(30) Icocozyax ${ }^{\circ}$ yaai com icaaspoj ${ }^{\circ}$ hipcom scissors 3P-side the.Hz pencil Px.Hz
cohsahita
aha.
3IO-1SGS.Tr-Ir.Id-make.sharp Aux-Dcl
'Voy a sacar punta a este lápiz con el filo de la tijera.'
I am going to sharpen this pencil with the scissor blade. (DS2010, icocozyax)

### 2.4.2 Reason and Cause

The oblique object may indicate the reason or the cause, as in (31)-(32).
(31) thaapl cop cöyaxyat.

3P-PON-cold the.VT 3IO-Dt-die.PL
'Murieron por causa del frío.'
They died from the cold (weather). (Offered)
(32) Zaah quii cocmatj iha.
sun the.Cm 3IO-SN-hot DCL
'Está caliente por causa del sol.'
It (e.g. pail of water) is hot because of the sun.

### 2.4.3 Name

The verb $\sqrt{ }$ ataasitot give name to (someone) may take an oblique object that is the name that is given, as in (33).
(33) Pedro quij cmaam yaazi ${ }^{\circ}$ í zo toc cötiij ma, the.CM woman his.child first a there 3:3-RL-sit DS
Juana hac cöimataasitot. the.LC 3IO-3:3-Px-give.name

[^36]'Pedro dio el nombre Juana a su primera hija.'
Pedro named his first daughter Juana.

### 2.4.4 Destination, goal and recipient

A destination or goal in a clause with a motion verb is expressed with an oblique object. The destination may be an object or a person, as shown by examples (34)-(35) with the verb $\sqrt{ }$ afp arrive.
(34) Cmaam tintica haat quii cötafp, ...
woman Md-Aw limberbush the.Cm 3IO-RL-arrive
'La mujer llegó al torote ...'
The woman went over to the limberbush, ... (DS2010, catoozi)
(35) Me hpmiifp.

2IO 1SGS.In-Px-arrive
'He llegado a ti.'
I have arrived to you (sg.). ${ }^{8}$
The destination maybe a location as well as a person, as shown by (36)-(40) with the verbs nt$\sqrt{ } \mathbf{a} g o$ (composed of the andative prefix nt- and a simple root of motion) and $\sqrt{ }$ iin $g o$.
(36) Caahit quih hant zo contita $\mathbf{x}$, ...

SN-fish the.Fl place a 3IO-Aw-Rl-move UT
'Cuando un pescador va a su lugar para pescar, ...'
When a fisherman goes to his fishing spot, ... (DS2010, caapioquii)
(37) Hoox he moya.

Intns 1IO Twd-Dt-move
'Vino directamente hacia mí/nosotros.'
S/he/it came straight toward me/us.
(38) $\quad i$ Miime hac cöhiin!

2P-home the.Lc 3IO-Im-go
'Vete a tu casa!'
Go home! (Nit, mk 2:11)
(39) iJuan quii cöhitooij!
the.Cm 3IO-IM-go.PL
‘「Vayan a Juan!’
Go (pl.) to John! (NTT, Lk7:22)

[^37](40) Ihiij hac cötiin,

3P-PON-sit the.Lc 3IO-RL-go
'Regresó al lugar en que estaba sentado, ...'
S/he returned to the place where s/he had been sitting, ... (Apostador_331)
The destination or goal (including a person, as recipient) may be relate to a transitive verb, as in (41)-(43) with the verb Vamje take/bring. The person might be interpreted as recipient, of course, in example (43).
(41) $\quad$.. hant hac cöiyoomlajc. place the.LC 3IO-3:3-DT-take/bring-PL
' ... lo trajeron al lugar.'
... they brought him to the place. (NTT, мк2:3)
(42) Cmoqueepe com $\llcorner$ ziix hapsx caaitim $\lrcorner$ quii cöimiimlaje,

SN-sick the.Hz doctor the.Fl 3IO-3:3-Px-take/bring.PL
'Llevaron el enfermo al médico ...'
They took the sick person to the doctor ..., (DS2010, cmoqueepe)
(43) ¡Zixcám ${ }^{\circ}$ zo he camjc!
fish a 1IO Im-take/bring
'Tráeme un pescado.'
Bring me a fish!

### 2.4.5 Location or situation

A general location in a clause with a stative verb such as $\sqrt{ }$ ahca be located, $\sqrt{ } \mathbf{i i j}$ be seated, $\sqrt{ }$ ap be standing or $\sqrt{ }$ oom be lying is expressed as an oblique object. ${ }^{9}$ This is shown for location that is an actually a physical object in (44), a pronoun in (45), and a named place in (46).
(44) Hamác zo cohpscmiij aha. ${ }^{10}$
fire a 3IO-1SGS.In-Ir.Id-N-sit Aux-Dcl
'No voy a sentarme cerca de la lumbre.'
I'm not going to sit by a fire.
(45) LIistox theemloj toc cötoii,

3P-?-PL RL-stink-PL there 3IO-RL-be.FL/stand-Pl
'Estaban allí enojados, ...'
They were there angry, ... (Dos_Hermanos_4.1)

[^38](46) Heezitim Betánia hapáh quij heezitim Jerosalém hapáh quii city SN-Pv-say the.CM city SN-Pv-say the.CM hantaxal xah cöquiij iha. near+Mod Atten 3IO-SN-sit Dcl
'Betanía está cerca de Jerusalén.'
Bethany is near Jerusalem. (NTT, Jn 11:18)
With the verb nt- $\sqrt{ }$ a go the oblique object may indicate a general location rather than a destination, as shown in (47).
(47)... , ᄂhehe án $\lrcorner$ com contita $\quad$, ... countryside the.Hz 3IO-Aw-Rl-move UT '..., andaba en el monte, ...'
... he went around in the countryside, ... (Gigante_Comelon_149)
The indirect/oblique object inflection on the final verb in example (48) is required because of the use of taax iti (DDP 3P-on), referring to the occasion.
(48) $\quad$ Ox tpacta ma $\lrcorner$, hant ihmaa $z$ iiqui tiin, then place other a 3P-toward RL-go

'Entonces fue a otro lugar y en esa ocasión vio a Leví, hijo de Alfeo.' Then he went somewhere else, and on that occasion he saw Levi, son of Alphaeus. (NTT, Mk 2:14)

Whereas time adjuncts usually occur as simple adjuncts without cross-referencing morphology on the verb (see §2.7.1.1), an expression such as zaah quih coox cah every day does require such morphology, as shown in (49).

(49) Zaah quih coox cah $\quad$\begin{tabular}{c}
caaytaj <br>
soi

 

coccaa
\end{tabular} ha.

sun/day the.FL all the.FL-Foc horse-PL the.PL
'Viene todos los días a buscar los caballos.'
S/he comes every day to look for the horses. (ALI 134)

### 2.4.6 Source

With certain verbs, the oblique object may indicate the person from whom something is obtained, as shown in (50)-(51).
(50) Juan quih hita eenim zo cöiyocooz.
the.FL 1P-mother knife a 3IO-3:3-Dt-steal
'Juan robó un cuchilllo de mi madre.'
Juan stole a knife from my mother.
(51) Juan quih eenim zo he iyocooz.
the.FL knife a 1IO-3:3-DT-steal
'Juan me/nos robó un cuchillo.'
Juan stole a knife from me/us.

### 2.4.7 Object of comparison

The oblique object may indicate an object of comparison. In examples (52)-(53) the predicates are activity verbs, while in examples (54)-(55) they are stative verbs.
(52) iHohra cootax!
donkey 3IO-Iм-go
'iAnda como burro!'
Go like a donkey!
(53) ¡Me xopanzx!

2IO Em-run
‘‘Corre como tú!’
S/he runs like you!
(54) Ziix zo contcmaaixaj iho.
thing a 3IO-2SGS-RL-N-strong Dcl
'No eres fuerte con respecto a nada.'
You aren't strong with respect to anything.
(55) $\quad . .$, tahac 00 compacta. that.Loc DL 3IO-Px-be.in.appearance
'..., era así.'
... he was like that. (Gigante_Comelon_145)
In examples (56)-(57) the oblique object represents the possessor of the item actually being compared.
(56) Me hpyaaco.

2IO 1SGS.In-Dt-have.house
'Tengo una casa como la tuya.'
I have a house like yours.
(57) Juan quih Pedro quih cöxaaco.
the.Fl the.FL 3IO-EM-HAVE.house
'Juan tiene una casa como la de Pedro.'
Juan has a house like Pedro's.

### 2.4.8 Exchange item

With some verbs the oblique object indicates the item that is exchanged for another, as shown in (58)-(59).
(58) ¿Caamiz zo cöitexl?
shirt a 3IO-3:3-Rl-take
‘¿Lo/la cambió por una camisa?’ o ‘¿Cambió una camisa por él/ella?'
Did s/he trade it for a shirt? or Did s/he trade a shirt for it?
(59) Xapij cooil hapáh quih toc cötoii ma $\mathbf{x}$, reed SN-blue/green SN-Pv-say the.Fl there 3IO-RL-stand-Pl DS UT $\begin{array}{lllll}\boldsymbol{t a a x} & \text { ah } & \text { cötpexl, } & \text { teeme, tacoi. }\end{array}$ DDP Foc 3:3-RL-Pv-take Px-say Dт-Pl
'Lo que se llama carrizo verde estaba allí y fue cambiado por esos, dijo.'
What is called green reed was there and it was traded for them, s/he said. (Hast_Quita)

### 2.4.9 Topic of discussion, etc.

A topic of the discussion, argument, or song may be included as an oblique object of the verb, as shown in (60)-(63).
(60) íÁz cössol quee -ya? what? 3IO-Ir.ID-argue Aux.SN QM
‘¿Acerca de qué va a discutir?’
What is s/he going to argue about?
(61) Ziix zo cöiyozaxö.
thing a 3IO-3.3-DT-discuss
'Le habló de una cosa.'
S/he spoke to him about something. (DS2010, czaẍ)
(62) Comcaii tiquij mosnipol cöcoos iha. old.woman Md-CM leatherback.turtle 3IO-SN-sing DCL
'Esa anciana tiene poder de la caguama de siete filos.'
That old woman has power of the leatherback sea turtle.
(63) Ctam ticop iiqui me yas.
man Md-Vt 3P-toward 2IO DT-sing
'Ese hombre cantaba acerca de ti.'
That man sang about you.
For this reason, the deverbal noun referring to a song commonly has an oblique object (the topic) preceding it and oblique agreement on the deverbal noun, as in (64).
(64) เziix hapx coom」 cöicoos 97
whale 3IO-3P-PON-sing
'canción acerca de la ballena'
song about the whale (DS2010, icoos)
The topic may be that about which one is mistaken, as in (65).
$\begin{array}{ll}\ldots & \text { cohptás, } \quad . . \\ & 3 \text { 3IO-1SGS.IN-RL-err }\end{array}$
'..., estaba equivocado con respecto a él/ella/ello, ...'
... I was mistaken about him/her/it, ... (DS2010, cas)

### 2.4.10 Object of activity

The oblique object may be the object of an activity described by an intransitive verb. See example (66).
(66) Tiix mos zamt quih cöcaticpan iha.

DDS also crab the.FL 3IO-SN-work DcL
'Él/ella también trabaja con la jaiba.'
S/he also works with crabs (for a living).

### 2.4.11 Special expressions

Some oblique objects are nominal expressions used adverbially. For example, an important expression for again is based on the noun itacl its surface, often modified by mos also. This noun phrase requires third person indirect object inflection on the verb. See (67)-(68).
(67)

¿ $\frac{\text { LMos itacl 00 }}{\text { again }} \frac{\text { cösonaaaij }}{\text { 3IO-Ir.ID-return AUX.SN }} \quad$| quee |
| :--- |
| QM |

' ¿Regresará otra vez?'
Will she return again?
(68) Imaaitom quih xox itaai max, $\mathbf{x}$ mositacl oo」 cöyooitom. SN-N-speak the.Fl even 3:3-Rl-make DS UT again 3IO-DT-speak
' Hace que hasta los mudos hablen otra vez.'
He even makes the mute to speak again. ${ }^{11}$ (NтT, мk7:37)
An expression to indicate a great degree of something is iisax quihiih quih/cah (3P-? SNstay.behind the.Fl / the.Fl-Foc). This expression also requires indirect object inflection on the verb. See examples (69)-(70).

[^39](69) Minl coi Liisax quihiih cah」 zixcám ${ }^{\circ} \underline{\text { cöxasii. }}$

2P-finger-PL the.PL great.degree fish 3IO-EM-smell.like
‘Tus manos huelen muchísimo a pescado.'
Your hands really smell like fish!
(70) $\mathrm{Hax}^{\circ}$ cop iisax quihiih cah cöcaapl iha. water the.VT great.degree 3IO-SN-cold DCL 'El agua está bastante fría.'
The water is really cold. (ALIM 80)
The expression iisax quih coox com (3P-? the.Fl all the.Hz) with all his/her heart, which inflects for person as indicated by the context, also determines third person indirect/oblique object inflection on the verb, as in (71).
(71) Hiisax quih coox com cohtamsisiin, ...
$1 \mathrm{P}-$ ? the.Fl all the.Hz 3IO-1SGS.Tr-Rl-love
'Le amé con todo mi ser, ...'
I loved him with all my heart, ... (NTT, M1 12:18)
The deverbal noun yamtxö is used to indicate straight ahead; it also requires third person indirect/oblique object inflection on the verb, as shown in (72).
(72) Haxaaza tintica yamtxö cöcatax iha.

Abs-arrow Md-Aw 3P-PON-straight 3IO-SN-go DCL
'La flecha va derecho.'
The arrow is going straight ahead. (DS2010, catax)

### 2.5 Other subcategorized nominals

A few verbs subcategorize semantically for two non-subject nominals but only inflect for one of them (see §18.6). Two such verbs are $\sqrt{\text { eCe give (food) and (irregular) iique give (gift). The }}$ unmarked order of the nominals in these cases is unclear as they occur together so rarely. Consultants gave both orders and did not agree on a preference. See examples (73)-(74).
Subject Other argument Direct Object Verb Phrase
a. Zixquisiil ${ }^{\circ}$ cop ziix ipxasi quih haxz ${ }^{\circ}$ cop iyoee.
child the.Vt thing 3P-flesh the.Fl dog the.Vt 3:3-Dt-give.food
Subject Direct Object Other argument Verb Phrase
b. Zixquisiil ${ }^{\circ}$ cop haxz ${ }^{\circ}$ cop ziix ipxasi quih iyoee.
child the.VT $\operatorname{dog}$ the.VT thing 3P-flesh the.FL 3:3-Dт-give.food
'El niño / La niña dio carne al perro.'
The child gave the dog meat.
(74) a Quihehe ${ }^{\circ}$ quij haaco zo cmaam ticop iiy
b. Quihehe ${ }^{\circ}$ quij cmaam ticop haaco $\quad$ z iiye.
'El gobernador regaló una casa a esa mujer.'
The governor gave that woman a house.
The derived intransitive verbs $\sqrt{ }$ asii smell like and $\sqrt{ }$ apii taste like subcategorize for a nominal that is an object of comparison. This nominal may be an indirect object, as illustrated by examples (20)-(22) ahove, or it may be a bare nominal without agreement inflection on the verb, as illustrated by examples (75)-(76) below. In both cases the clauses are intransitive by all known tests (see Appendix C). Note that the finite verb in (75) does not begin with the prefix 3:3 i- (§17.3.2.1) that would be required if these were transitive clauses. The nominal that is the object of comparison occurs between the subject and the verb.
(75) iMinl coi $\underline{\text { zixcám }}^{\circ}$ xasii!

2P-finger-PL the.PL fish Em-smell.of
‘Tus manos huelen a pescado!’
Your hands smell like fish! (Offered)
(76) Xapoo ipxasi quih hap ipxasi quih imapii ha.
sea.lion 3P-flesh the.FL mule.deer 3P-flesh the.FL SN-N-taste.of DCL
'La carne de lobo del mar no tiene el mismo sabor que la carne de venado bura.'
Sea lion meat does not have the same flavor as mule deer meat. (DS2010, capii)
The intransitive verb $\downarrow$ poct (be) full commonly occurs with or without a nominal phrase that indicates the contents of the subject. It is proposed in $\S 18.2 .4$ that this verb subcategorizes for this argument. This argument occurs after the subject, as shown in (77)-(78).
(77) $\left\llcorner\right.$ Hehe an icaaij quij hax quih cpoct iha. $_{\text {g }}$ water.drum the.Cm water the.FL SN-full DCL 'El tambo está lleno de agua.'
It is full of water.
(78) Haaco cop hamcaaxat quih impoct.
Abs.house the.VT smoke the.FL PX-full
'La casa se llenó de humo.'
The house filled with smoke.

### 2.6 Minor variation in word order

Variation in word order of the arguments is possible although this variation does not seem to be such that one would describe is as "scrambling" nor describe Seri as a free word order language. Probably the lack of case marking on the nominal phrases is one reason for a somewhat more
rigid word order. While some cases of fronting and postposing are discussed in $\S 3.10$ and $\S 3.12$, a few examples of non-basic word order are included here as well.

## Direct object precedes subject

(79) Tootjöc quij เzaxt quisil」 quih itcommactim iho. cholla.fruit the.Cm child the.FL 3:3-RL-N-handle DcL
'Un niño no debe tocar la fruta de la choya.'
A child doesn't (shouldn 't) touch a cholla cactus fruit. (Consejos_choy_6)

## Direct object precedes indirect object

(80) Juan quih caamiz tiquih asaac quih cöiyaamx.
the.Fl shirt Md-Fl 3P-son.ME the.Fl 3IO-3:3-Dt-say+IO
'Juan le prometío esa camisa a su hijo.'
John promised that shirt to his son.
(81) Ihyaazi ${ }^{\circ}$, ᄂhanzajipj quiipa hipcop mamaz cohqueetx!
my.child.ME frying.pan Px-Vт 2P-father's.mother 3IO-Im-return
'Mi hijo/hija, devuelve este sartén a tu abuela.'
My son/daughter, take this frying pan back to your grandmother. (DS2010, cqueetx)
(82) María quih tom coi Juan quih cöiyeesxö. the.Fl money the.Pl the.Fl 3IO-3:3-Dt-hide+IO
'María escondió el dinero de Juan.'
Mary hid the money from Juan. (compare with (19) above)

## Direct object precedes oblique object

(83) Hasahcapiö cop mos iif com cöitníp x, imiisi. senita.cactus the.VT also 3P-nose the.Hz 3IO-3:3-Rl-hit UT 3:3-PX-drink 'Picando el cacto sina con su pico, la toma.'
It stabs the senita cactus with its beak and drinks it. (Es2007, acaam_ccaa_8)
(84) Hast quii hehe zo cohyoáxazim.
stone the.Cm stick a 3IO-1SGS.Tr-Dt-beat.Hz.ImpF
'Golpeé a la piedra con un palo.'
$I$ beat the stone with a stick. ${ }^{12}$

[^40](85) José quih inol cop eenm icaati $_{\perp}$ quih cöimaafc.
the.Fl 3P-finger/hand the.VT hammer the.FL 3IO-3:3-Px-pound
'José se pegó en el dedo con el martillo.'
José $_{i}$ hit his $_{i}$ finger with the hammer. ${ }^{13}$ (Ds2010, caafc)
(86) Xapoo hooxi quih $\llcorner$ pazaatoj ihanaxz $\rfloor$ zo
sea.lion 1P-ON-finish the.FL shoe.polish a

## cohsnaxz aha.

3IO-1SGS.Tr-Ir.ID-rub Aux-DCL
'Voy a aplicar cera de zapatos al lobo marino que hice.'
I am going to apply shoe wax to the sea lion that I carved. (DS2010, colcnaxz)
(87) Coyote Iguana quij Lola Casanova quii am quii the.Cm the.CM 3P-father.FE the.Cm
cöitcazit, caay $z$ iti itcaaix, hant $z$ iiqui iyoqueetx.
3IO-3:3-RL-grab horse a 3P-on 3:3-RL-put.CM land a 3P-toward 3:3-DT-take
'Coyote Iguana raptó a Lola Casanova de su padre, y la puso en un caballo, y la
llevó a otro lugar.'
Coyote Iguana abducted Lola Casanova from her father, put her on a horse, and took her somewhere. (Offered)

### 2.7 Adjuncts

Two kinds of adjuncts are attested: simple adjuncts and P-linked adjuncts. Both of these adjuncts commonly have the form of a noun phrase that appears somewhere before the VP. The simple adjuncts (§2.7.1) have no morphology linking them to the verb. P-linked adjuncts (§2.7.2) require a P-element (which occurs in the VP — see the discussion in chapter 5). ${ }^{14}$

One kind of nominal that is not easily classified is the phrase, headed by a deverbal noun, describing an event that extends for a length of time described by the rest of the clause. The length of time of the event is expressed by N V , where N is a unit (e.g. day, month, year) and V is a number predicate. ${ }^{15}$ Examples are given in (88)-(91).
${ }^{13}$ The word order in this case (direct object preceding oblique object) is expected because of the identity between the subject and the possessor of the direct object.
${ }^{14}$ It is possible that some of these P-linked nominals are actually oblique objects in some cases. The best candidates for these are those occurring with verbs of speaking. See chapter 18.
${ }^{15}$ This construction has interesting details. The expression for hour is not used with it, for example. (One says instead the equivalent of Three hours passed, ....) Also note that with the verb for much, many in (90) the singular noun zaah day is used while with the number verbs the plural noun ixaap days is used, as in (89).
(88) Hant tahac iti cöihiij hac iiztox miipxa.
place Md-Lc 3P-on 3IO-3P-PON-sit the.LC 3P-moon/month-PL Px-three 'Estuvo allí por tres meses.'
He was there for three months. (Ac 20:3)
(89) Hita quih imoqueepe quih ixaap ${ }^{\circ}$ inzooxöc.

1P-mother the.Fl 3P-PON-sick the.Fl days Px-four
'Mi madre estaba enferma por cuatro días.'
My mother was sick for four days.
(90) Hameen tahac ziix quih iic cöhiqueepe $\perp$ quih zaah quih miitxo. family Md-LC my.helping.it the.FL sun/day the.FL Px-many 'He ayudado a esa familia por mucho tiempo.'
I have helped that family for a long time. (DS2010, zix quih iic colqqueepe)
(91) Haa himazcam quih zaah quih miitxo. there $1 \mathrm{P}-\mathrm{PON}-\mathrm{N}$-arrive.Pl the.Fl sun/day the.Fl Px-many 'No llegamos allí por muchos días.'
We didn't arrive there for many days. (DS2010, catao)

### 2.7.1 Simple adjuncts

Simple adjuncts are those adjuncts that appear with no P linking them to the verb. There appear to be three types: nominal phrases indicating time, nominal phrases indicating place, and stagesetting phrases headed by deverbal nouns.

### 2.7.1.1 Time adjuncts

Many of the simple adjuncts are expressions of time. ${ }^{16}$ Some examples are given in (92):
(92) a. moxima (quih) ${ }^{17}$ 'ayer', yesterday (yesterday (the))
b. moxima quih ipac moxima 'anteayer', day before yesterday
c. moxhamt (quih) ${ }^{18}$ 'el año pasado', last year (last.year (the))
d. zaah hipcop/hipcap 'hoy', today (sun/day this)
e. zaah ipac hac cöcaap cop 'el próximo día', the next day
(sun/day 3P-behind the.Lc 3IO-SN-stand the.VT)
${ }^{16}$ Many other expressions of time, including those meaning tomorrow, tonight, and this afternoon are idioms and/or are clausal in nature; see chapter 7. Yet other expressions of time require a verb of some sort to accompany the verb. One example:
(i) Ixaap ${ }^{\circ}$ czooxolcam Liti tòofin」 ma,... days SN-eight they.passed DS 'Ocho días después, ...' / Eight days later, ... (NTT, Lk 1:59)
${ }^{17}$ This expression may occur with or without the determiner quih.
${ }^{18}$ This expression may occur with or without the determiner quih.
f. zaah tacoyolca 'durante esos días', during those days (sun/day Md-Vt.PL) ${ }^{19}$
g. ihamoc quih 'anoche', last night (3P-PON-be.night the.FL) ${ }^{20}$
h. ihamoc hipcop 'esta noche', tonight (3P-PON-be.night Рх-Vт)

These adjuncts most commonly appear clause-initially and they are quite freely added to any clause. See examples (93)-(96).
(93) Moxima ctam hiyal quih colx maahit.
yesterday man 1P-spouse the.Fl high Px-fish
'Ayer mi esposo fue a pescar en alta mar.'
Yesterday my husband went fishing far out to sea. (DS2010, all)
(94) Moxhamt hant tsiijim ma, ....
last year land RL-move DS
'Cuando hubo el terremoto el año pasado, ....'
When there was an earthquake last year, .... (Ds2010, [hanty *csijim)
(95) Ihamoc quih comcaii tintica hast $z$ itatni, ... 3P-PON-be.night the.FL woman Md-Aw rock a 3:3-RL-make.contact
'Anoche la mujer tropezó con una piedra ....'
Last night the woman tripped on a rock .... (DS2010, quitin)
(96) Zaah hipcap haxöl pac ihpanamj ta, hasiiitoj aha.
day Px-Vt clam(s) some 1SGS.Tr-Ir.Dp-hurry DS 1PLS-Ir.Id-eat-Pl Aux-Dcl 'Hoy, si me apuro en juntar algunas almejas, las comeremos.'
Today if I quickly collect some clams, we will eat them. (DS2010, canami)
Example (97) uses a phrase headed by a deverbal noun as a simple adjunct of time.
(97) $\quad \mathbf{H e}$ hicmiiquet cah thant ihyomaamac.

1PRO 1P-PON-be.person the.Fl-Foc I.have.not.cooked.century.plant
'Nunca he cocinado maguey.'
I have never (lit., in all my life) I have not cooked century plant. (DS2010, caamac)
The word cmaax now, then has distributional properties similar to these simple adjuncts in
${ }^{19}$ This phrase is used in the following example.
(ii) ... zaah tacoyolca $\llcorner$ mositacl 00$\lrcorner\llcorner x i i c a q u i h q u i i s t o x\lrcorner$ quih tatxo, sun/day MD-Vt-PL again people the.FL RL-many
ptiti toii, toc cömoii.
together.on RL-be.PL there 3IO-PX-be.FL/stand.PL
' ... en esos días otra vez mucha gente se reunió.' /... once again in those days many people had gathered together. (NTT, Mk 8:1)
${ }^{20}$ This is not the most common way to say last night. The completely verbal expression thamoc ma, ... (RLnight when it was night ..., in the realis form) is heard more frequently.
that it commonly occurs sentence-initially, as in (98)-(99).

| (98) | Cmaax himcac iti coii$\quad$ ha. |
| :--- | :--- |
|  | now/then Px-LC 3P-on SN-be.Fl.Pl DCL |
| 'Ahora están allí.' |  |

### 2.7.1.2 Location adjuncts

In some kinds of clauses, including the stative clauses in (100)-(103), a simple adjunct may refer to a location.
(100) Hizaax ah oo cötpacta ma,

DPP FOC DL 3IO-RL-be.in.appearance DS
Tahejöc quij hap quih tatxo, iti moii. Tiburon.Island the mule.deer the.Fl Rl-many 3P-on Px-be.Fl.PL
'Por esta razón, hay muchos venados bura en la isla Tiburón.'
For this reason there are many mule deer on Tiburon Island. (ES2007, Hapj 15)
(101) Hant tahac hax quih catxo ha.
place Md-Lc water the.Fl SN-much/many Dcl
'Hay mucha agua en ese lugar.'
There is a lot of water in that place. (NTt, $\mathrm{Jn} 3: 23)$
(102) Xnapofc inoohcö ${ }^{\circ}$ quij hai quih xooixaj.

3P-PON-concave the.CM wind the.FL EM-strong
'El viento es fuerte en la bahía de Xnapofc.'
The wind is strong at Xnapofc Bay.
(103) Socaaix hac xocozim.

Punta.Chueca the.LC Em-hot.(weather)
'Hace calor en Punta Chueca.'
It's very hot in Punta Chueca.
However, such adjuncts cannot be added to just any clause, as examples (104)-(105) illustrate. ${ }^{21}$

[^41](104) * Socaaix hac caticpan iha.

Punta.Chueca the.Lc SN-work DcL
('Está trabajando en Punta Chueca.') (S/he is working in Punta Chueca.)
(105) * iSocaaix hac tiih? Punta.Chueca the.Lc RL-be.Fl
(‘¿Reside en Punta Chueca?’) (Does s/he reside in Punta Chueca?)

### 2.7.1.3 Stage-setting information

A phrase headed by a deverbal noun may precede a finite clause - often in sentence-initial position - to set the stage for the rest of the sentence. ${ }^{22}$ Examples (106)-(108) illustrate this with phrases that end in a focus adverb.
(106) Toc cömiiha cah, Hajháx hant taax เano toofin $\perp, \ldots$ there 3IO-TwD-3P-PON-move the.FL-Foc Tecomate place DPP s/he.was.passing 'Venía allí, pasaba Tecomate, ...'
He was coming there, he was passing by Tecomate, ... (Hipocampo_10.1-2)
(107) $\llcorner\underline{\text { Xiica quih quiistox }} \perp$ coi iitxo $\quad$ cah, people the.Pl 3P-PON-many/much the.Fl-Foc
'Había tantas personas, ...'
There were so many people, ... (NTT, Mk 2:4)
(108) Ihyaticpan quih ano cömiiha cah, 1P-PON-work the.FL 3P.in 3IO-TwD-3P-PON-move the.FL-Foc
Łpsaac cöhimooxi」 ha.
hunger(?) 3IO-1P-PON-N-die DCL
'Desde que he trabajado, no he tenido hambre.'
Since the time I have worked, I have not been hungry. (DS2010, mina)
Examples (109)-(110) illustrate this with phrases that do not have this focus adverb.
(109) Taax ah oo cötpacta ma,

DDP FOC DL 3IO-Rl-be.in.appearance DS
${ }^{22}$ It is perhaps more common for such a phrase to be followed by a postposition (see $\S 3.5$ ). In addition, such phrases may be sandwiched between finite clauses, as in the following example.
(iii) Tiimotoj, toc cötoii ma, toc cöiyaii cah,

RL-gamble-PL there 3IO-RL-be.FL.PL DS there 3IO-3P-PON-be.FL.PL the.FL-FOC
toc cöiyaii cah, tpezi, yoque. there 3IO-3P-PON-be.FL.PL the.Fl-Foc RL-Pv-defeat DT-US-say
'Estaban allí apostando, estaban allí mucho tiempo, él fue vencido, se dice.'
They were there gambling, they were there a long time, he was defeated, it is said. (Apostador_15)

| hoox cöiiha | hizac | max, | hant tahac |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Intns | $3 I O-3 P-P O N-b e$ | Px-LC | even | place | Md-L |
| Hant Haait Quih It | Iihca |  | hapáh iha. |  |  |
| place | Abs.blood the.Fl | $3 P-$ on | $3 P-P O N-b e . l o c a t e d ~$ | SN-Pv-say DCL |  |

'Por eso, aquel terreno se llama hasta el día de hoy Campo de Sangre.'
For that reason, to this very day that place is called Field of Blood. (NTT, мt 27:8)
(110) Taax 00 cöihapacta hac,

DDP DL 3IO-3P-PON-cause.be.in.appearance the.LC
'Habiendo hecho eso, ...'
Having done that, ... (NтT, мк7:34)

### 2.7.2 P-linked adjuncts

P-linked adjuncts are adjuncts that appear somewhere in the clause while at the same time a Pelement appears before the verb. The meanings of the P-elements (of which five are commonly used - see chapter 22) give a good idea of the range of meaning of the adjuncts that they link to: ano in, from, to; iicx near, iihax with (comitative and also interlocutor), iiqui toward, against, and iti on. The adjunct and the P-element may coincidentally be juxtaposed, but there is no evidence that they form a syntactic constituent.

The P-element must be in preverbal position; the complement may be — and often is — in clause-initial position. As this topic is discussed in much more detail in §21.3.3, only a few examples are given here.
(111) Ctam tintica canoaa com ano siij taa ityaai,
man Md-Aw boat the.Hz 3P.in Ir.Id-sit Aux.Rl 3:3-Rl-go.to
'El hombre estaba por subir a su panga, ...'
As the man was about to get into the boat, ... [DS2010, cahjiit]
(112) Iteen hac haait quih ano moma.

3P-mouth the.Lc Abs.blood the.Fl 3P.in/from Twd-Px-move
'Salió sangre de su boca.'
Blood came from his/her/its mouth.
(113) ..., hizac iti yiij.

Px-Loc 3P-on DT-sit
'..., estaba aquí.'
..., it was here. (Hipocampo_13.3)
(114) $\begin{array}{lllllllll}\text { Hant } & \text { iti } & \text { hihiih } & \text { zo } & \text { tziix hapahit } & \text { z } & \text { iti } & \text { tmiih, }\end{array}$..
'No hay comida en mi casa, ...'
There isn't any food at my house, ... (Burgos_41)

## 3. The common complex sentence

This chapter provides a general overview of the order of elements in the sentence, focusing primarily on multiclausal sentences that do not include complement clauses (see chapter 12 for the latter).

The chapter begins in $\S 3.1$ with a presentation of the important distinction between independent and dependent verb forms since this is crucial for understanding sentence structure.
$\S 3.2$ presents the juxtaposition of independent clauses in sentences, and $\S 3.3$ presents cases of clauses that are joined with subordinators and coordinators. The very common chained clause structure, which has multiple finite dependent clauses followed by an independent clause, without any explicit coordinator or subordinator involved, is presented in §3.4. Nominalized dependent clauses are mentioned briefly in $\S 3.5$.

The basic order is dependent clause followed by independent clause, as expected for a headfinal language. A brief introduction to Different Subject marking is given in §3.6 since it comes up so often in this context. This section also includes a discussion of the word $\mathbf{x}$ that appears so often at the end of dependent clauses.

Examples are shown of postposed dependent clauses in §3.7.
The semantic relationships between dependent clauses and main clauses are briefly reviewed in §3.8.

Some common devices for linking sentences together in a discourse are presented in §3.9.
Situations where a nominal occurs in a special sentence-initial position or a sentence-final position are taken up in $\S 3.10$ and $\S 3.12$ respectively.

A nominal phrase is sometimes presented at least one clause earlier than the verb of which it is an argument; this is discussed in $\S 3.11$.

Finally, a common construction that involves a dependent clause with significant semantic content and a following clause that primarily indicates physical orientation is discussed briefly in §3.13.

Sentential adverbs are discussed in chapter 24 rather than in the present one.

### 3.1 Dependent verb forms and independent verb forms

A distinction is made between "dependent verb" forms and "independent verb" forms (see $\S 17.3 .1)$. A clause headed by an independent verb form may stand alone as a sentence whereas a
clause headed by a dependent verb form cannot.
An independent clause may be headed by any one of the finite forms shown in (1), and for this reason they are referred to as independent verb forms.
(1) Independent, finite forms RMH_05-16-08_8

| a. | Imiipox. | (Proximal Realis, prefix mi-, §17.3.1.7) |
| :---: | :---: | :---: |
|  | 3:3-Px-pull.out |  |
|  | 'Lo/la arranca/arrancó.', S/he pulls/pulled it out. |  |
| b. | Iyoopox. | (Distal Realis, prefix yo-, §17.3.1.6) |
|  | 3:3-Dт-pull.out |  |
|  | 'Lo/la arranca/arrancó.', S/he pulls/pulled it out. |  |
| c. | ;Ixoopox! | (Emphatic Realis, prefix $\mathbf{x 0}$-, §17.3.1.8) |
|  | 3:3-Em-pull.out |  |
|  | 'iLo/la arranca/ | ulls/pulled it out! |

d. ¡Mojet xah zo tomhaa! (Subjunctive Irrealis, prefix tm-, §17.3.1.4) ${ }^{1}$ bighorn - a Sb-EQ ¡Que sea borrego!, May it be a bighorn sheep!
e. $\quad \underset{\text { IR.ID-1Em.S.Tr-pull.out-PL }}{\boldsymbol{S}} \quad\left(\right.$ Independent Irrealis, prefix si-, §17.3.1.3) ${ }^{2}$
‘¡Arranquémoslo/la!’, Let's pull it out!
An independent clause may also have an imperative verb, as in (2).
(2) Independent, imperative (§17.4.2) RMH_11-19-07_98b
¿Capox! (Imperative, prefix c- (of several), §17.4.2)
Im-pull.out
¡Arráncalo/la!’, Pull it out!
As illustrated in (3), an independent clause generally cannot be headed by a dependent verb form such as the Dependent Irrealis.
(3)


[^42]b. Ipoopox, ...

3:3-Ir.Dp-pull.out
'Cuando lo/la arranca (en el futuro), ...'
When s/he pulls it out (in the future), ... RMH_11-19-07_98g
If the Dependent Irrealis form is followed by the modal ho (§20.7), as in (4), the sentence is grammatical but then the form indicates possibility about a past event.
(4) Ziix caziim $\quad$ z ipooho ho.
thing SN-pleasant a 3:3-Ir.Dp-see DCL
'Posiblemente ha encontrado algo bonito.'
Maybe s/he has found something pretty. RMH_11-19-07_98c
In irrealis dependent clauses, the Dependent Irrealis form is the only option except when an auxiliary verb is used (see §20.3.1).

The realis verb form that uses the prefix $\mathbf{t}$ - is a bit more difficult to explain (see §17.3.1.5). It may head an independent clause under either of two conditions: either it must be a question (positive or negative), as in (5), or it must be a negative statement and be followed by the modal ho (§20.7), as in (6).

| ¿Itapox? | (Realis, prefix t-, as interrogative) |
| :--- | :--- |
| 3:3-RL-pull.out |  |
|  | ¿Lo/la arranca/arrancó?', Did/does s/he pull it out? RMH_11-19-07_98d |

b. iItemapox?
(Realis, prefix t-, as interrogative)
3:3-RL-N-pull.out
‘¿No lo/la arranca/arrancó?’, Did/does s/he not pull it out? RMH_11-19-07_98h
Itcmapox iho. (Realis, prefix $\mathbf{t}$-, with negative and modal)
3:3-RL-N-pull.out DcL
'No lo/la arrancó.', S/he didn't pull it out. RMH_11-19-07_98i
Obviously the modal ho (with allomorph iho) is crucially important for distinguishing the Realis example in (6) from the Subjunctive Irrealis shown in (1d) above.

The Dependent Realis form with the modal is ungrammatical if it is not negative, as in (7a), and it is ungrammatical in a main declarative clause, as in (7b).
a. * Itapox iho.

3:3-RL-pull.out DCL
('Lo/la arrancó.') (S/he pulls/pulled it out.)
b. * Itapox.

3:3-RL-pull.out
('Lo/la arrancó.') (S/he pulls/pulled it out.)

The same t-prefix is used for verbs in realis dependent clauses, and this is the only option in that situation.
(8)

Itapox, ...
(Dependent Realis, prefix t-, §17.3.1.2)
3:3-RL-pull.out
‘Cuando lo/la arranca/arrancó, ...’
When s/he pulls/pulled it out, ... RMH_11-19-07_98e
The irrealis form that uses the prefix si- is also a bit complicated to explain. It may occur in dependent clauses only if the clause is a purpose clause associated with an imperative verb, and then only under strict conditions (see §3.4.2). One example is given here as (9).
(9) Cöhahipet, haxöl isiip. (Independent Irrealis, prefix si-, §17.3.1.3) 3IO-Im-permit clam(s) 3:3-IR.ID-dig.up 'Déjale escarbar almejas.'
Let him/her dig up clams. RMH_05-16-08_9
But when it is used in ordinary independent clauses, the Independent Irrealis form is almost always accompanied by an auxiliary and a modal, as shown in (10) (see §17.3.1.3 and §20.2.1.1). ${ }^{3}$
(10) a. Isiipox aha.

3:3-Ir.Id-pull.out Aux-DcL
'Lo/la arrancará. o Lo/la debe arrancar.'
S/he will pull it out. or S/he should pull it out. RMH_11-19-07_98j
b. iIsiipox haa -ya? Aux QM
‘¿Lo/la arrancará?’ o '¿Lo/la deberá arrancar?’
Will s/he pull it out? or Should s/he pull it out? RMH_11-19-07_98f
c. * Isiipox.
('Lo/la arrancará.') (S/he will pull it out.)
An independent clause may also be headed by a variety of deverbal nouns (explained in detail in §10.4). ${ }^{4}$ A realis deverbal noun must be accompanied by a modal such as (i)ha or -ya, as shown in (11)-(12).
(11) a. Quipox
iha.
(Deverbal noun, realis; §14.1)
SN-Tr-pull.out DCL
b. * Quipox.

[^43]'Lo/la está arrancando.' S/he is pulling it out. RMH_11-19-07_99a
(12) iQuipox -ya?

SN-Tr-pull.out QM
‘¿Lo/la está arrancando?'
Is s/he pulling it out? хмн_60_21810
An irrealis deverbal noun must be accompanied by an auxiliary and a modal, as shown in (13).
(13) a. Siipox (Deverbal noun, irrealis; prefix si-; §14.5) IR.ID-pull.out AUX.SN-DCL
b. * Siipox.
'Lo/la arrancará.',
S/he will pull it out. RMH_11-19-07_99b
Deverbal irrealis forms share the formative si- with the finite independent Irrealis forms, but the deverbal forms do not have subject person inflection and they take a different auxiliary (see §20.1).

### 3.2 Juxtaposed independent clauses

Some combinations of clauses do not exist or are highly unusual. First, it is uncommon for clauses headed by independent verb forms to be combined in a single sentence with nonterminal intonation on the non-final clauses. The schema in (14a) is an attempt to express what is not possible, while (14b) clarifies that something very similar is indeed possible.
(14) a. * Independent, Independent.
b. Independent; Independent.

Example (15) is understandable, but it is $\underline{n o t}$ considered acceptable. It contains two clauses (headed by independent verb forms in the proximal realis) that are juxtaposed and pronounced with the same intonational pattern as (16).
(15) Independent Independent

* Cmiique cmaam quij mooha, hant $z$ iiqui miin.

Seri woman the.Cm Px-cry place a 3P-toward Px-go
('La mujer seri lloró, (y) se fue.') (The Seri woman cried (and) left.)
The normal and natural way to say what was intended in (15) is with a chained clause structure (see §3.4) of dependent clause followed by independent clause, as in (16). The verb tooha in (16) is in the Dependent Realis form (§3.1 and §17.3.1.2).
(16) Dependent Independent

Cmiique cmaam $\quad$ quij $\quad$| tooha, | hant | z | iiqui | miin. |
| :--- | :--- | :--- | :--- | :--- |
| Seri | woman the.CM | RL-cry | place a | 3P-toward |

PX-go
'La mujer seri lloró (y) se fue.'
The Seri woman cried (and) left. RMH_11-19-07_100

It is also possible to join the two independent clauses of (15) by putting a subordinator after the first clause, as shown in $\S 3.3$, although the meaning is different when this is done. (There are only three such subordinators; see §25.4.)
(17) Cmiique cmaam quij mooha yax, hant $z$ iiqui miin.

Seri woman the.Cm Px-cry because place a 3P-toward Px-go
'Porque la mujer seri había llorado, se fue.'
Because the Seri woman had cried, she left. RMH_11-19-07_101
Nevertheless, there are cases in which clauses headed by independent verbs are juxtaposed with fairly close transition between them. These seem to be ones in which the two clauses are not temporally ordered, but rather something more parallel in time or thought, as in (18) and (19). Or they are presented as alternatives, as in (20), using the coordinator $\mathbf{x}$ (§25.3). The independent forms are underscored in the following examples. The verb forms in one juxtaposed clauses are always the same mood as in the other clause with which it is paired (and most commonly it is the Proximal Realis form that is used in these sentences).
(18) Cmiique cmaam quij ziix hapi oaactim quih an person/Seri woman the.Cm thing Intns 3P-ON-use the.FL 3P.in
$\xlongequal[\text { imiiquim; ziix }]{\text {; quih ihmaa quih mos coimasiijim }}$.

3:3-Px-put.items thing the.Fl other the.Fl also 3IO-3:3-Px-do
'La mujer seri le metió sus cosas e hizo otras cosas con él.'
The Seri woman put her things in it and also did other things with it (a certain kind of basket). (ES2007, litro) RMH_11-19-07_102
(19) LZaxt quisil」quih xepe iteel cöquiih quij, child the.Fl sea 3P-edge 3IO-SN-be.Fl the.Cm
tiix canoaa heeque quih imacaalim;
DDS boat juvenile the.FL 3:3-Px-play.with

## hacaaiz heeque quih mos imacaalim;

 Abs-fishing.spear juvenile the.Fl also 3:3-Px-play.with| tist | heecto | coi mos |  | imacaalim. <br> harpoon.point-PL juvenile-PL <br> the.FL also |
| :--- | :--- | :--- | :--- | :--- |
| $3: 3-$ Px-play.with |  |  |  |  |

'El niño de la orilla del mar jugaba con las pequeñas pangas, jugaba con un los pequeños polleros, y jugaba con los pequeños arpones.'
The seaside child played with small boats, played with small fishing spears, and played with small harpoons. (ES2007 ool_itac_3) RMH_08-04-07_185
(20) Cmiique caii quij isiihit taa $\mathbf{x}$, imamaai $\mathbf{x}$; imiiznii $\mathbf{x}$. person mature the.Cm 3:3-Ir.Id-eat Aux.Rl UT 3:3-Px-roast or 3:3-Px-stew or 'Para comerlo, el adulto lo cocina con lumbre encima o lo guisa.' To eat it, an adult cooks it with fire on top of it or stews it. (ES2007, satoj 8)

Furthermore, imperatives are very commonly repeated or combined with another imperative. The pause between the imperatives is very slight. See the examples in (21)-(24).

| (21) | ¡Asjoj! ¡Asjoj! - ox xah yee. |
| :---: | :---: |
|  | Im-paddle-Pl Im-paddle-Pl thus - Dt-say |
|  | '¡Remen! ¡Remen! - dijo.' |
|  | "Paddle! Paddle!'", he said. (Muerte_Cöquimaxp_24,25) |
| (22) | ¡Cahit! ¡Cahit! - xah hin yooh. |
|  | Im-eat Im-eat - 1SGDO Dt-say |
|  | '¡Cómelo! ¡Cómelo! - me dijo.' |
|  | "Eat it! Eat it!, " she told me. (Topete_116) RMH_07-11-07_35c |
| (23) | ¡Hant hac cmaaix! ;Hant hac cmaaix! |
|  | land the.LC Im-N-go.away.from land the.LC Im-N-go.away.from |
|  | ¡No te apartes de este lugar! ¡No te apartes de este lugar!’ |
|  | Don't leave this place! Don't leave this place! (Topete_4.5) RMH_07-11-07_35d |
| (24) | ¿Mohat! $\quad$ Hizac iti cazcam! |
|  | Twd-Im-move-PL Px-LC 3P-on Im-arrive.PL |
|  | ‘「Vengan! ¡Vengan aquí!’ |
|  | Come! Come here! RmH_07-11-07_35b |

### 3.3 Clauses with explicit subordinators and coordinators

Clauses headed by independent verb forms may be readily combined into one sentence with a subordinator (see chapter 25) following one of them (typically the first), although the subordinators are few and have limited usage because of their meanings. ${ }^{5}$ This is shown schematically in (25).
(25) Independent Subordinator, Independent.

[^44]This construction is illustrated in (26) with an independent clause headed by a finite verb and in (27) with an independent clause headed by a deverbal noun plus modal.
(26) Independent Subordinator
LAn iquitzil」 pac me hyaamx tax,
pants some 2 IO 1 1SGS.Tr-Dt-say+IO Sbrd
Independent
cmaax ihmiimjc.
now 1 SGS.Tr-Px-take/bring
'Te prometí pantalones y los he traído.'
I promised you pants and now I have brought them. (DS2010, tax) RMH_-07-11-07_36a
(27) Independent [Deverbal noun plus modal] Subordinator Independent [Distal yo-]
Canoaa ticom imozaainim iha yax, xepe iyexl.
boat Md-Hz $\overline{\mathrm{S} N}-\mathrm{N}$-anchored Dcl since sea 3:3-DT-take
'Porque la panga no estaba anclada, el mar la llevó.'
Since the boat was not anchored, the sea carried it out. (DS2010, cozaainim) RMH_07-11-07_36b
Likewise, clauses headed by independent verb forms may be combined into one sentence with the coordinator xo but between them; see §25.2. This is shown schematically in (28) and illustrated in (29).
(28) Independent Coordinator Independent
(29) Misil $\underline{\text { xo }}$ maziim.

Px-small but Px-pleasant
'Es pequeño pero es bonito.'
It is small but it is pretty. (DS2010, xo) RMH_07-11-07_36c

### 3.4 Clause chaining

The most common type of sentence in the language has chained clauses - one or more (often many) clauses with dependent morphology followed by a final clause with independent morphology. No coordinating or subordinating coordinator occurs after these clauses. ${ }^{6}$ This is shown schematically in (30).
(30) (Dependent, $)^{\mathrm{n}}$ Independent.

The verbs of all of the finite clauses are fully inflected for person; they are not stripped

[^45]down forms morphologically nor are any of them participles. It is not entirely clear how these sentences should be diagrammed; perhaps the structure is as simple as that shown in Figure 3.1. ${ }^{7}$ The adverbial clauses are all headed by dependent verb forms and the final clause is headed by an independent verb form (which may be something non-finite, such as an imperative or a deverbal noun plus modal).

Examples (31)-(32) illustrate this construction with irrealis clauses.
(31) Dependent Irrealis Independent Irrealis

Caay cap yeen cap ipocaat $x$, Łanxö ma saai」 haa hi. horse the.Vt 3P-face the.VT 3:3-Ir.Dp-yank UT it.will.injure.you Aux DcL 'Si el caballo arranca la cabeza, te va a herir.'
If the horse yanks its head, it will injure you. (DS2010, ccaat) RMH_07-11-07_37a
(32) Dependent Irrealis Independent Irrealis

Hant an iihom hac paziit, saactam.
place 3P.in 3P-PON-lie the.Lc Ir.Dp-1Em.S.Tr-go.to.Pl Ir.ID-1Em.S.Tr-look.at-Pl
'Vamos a donde está, veámoslo.'
Let's go where he is, let's see it. (NTT, Jn 11:15) RMH_07-11-07_37d
Examples (33)-(35) illustrate this construction with realis clauses.

(33) | Dependent Realis |
| :--- |
| Sahmees caacöl pac he itámlaje Proximal Realis |
| orange(s) SN-big-PL some 1IO 3:3-RL-take/bring.PL DS |
| 'Me trajeron algunas naranjas grandes y las pelé.' |

Figure 3.1: Chained clause structure


[^46]| (34) |  |
| :---: | :---: |
|  | Dependent Realis Proximal Realis <br> hant ihptahjiit ma, <br> hitoaa   cop$\quad$miictim. <br> land |
|  | 'Pisé en una piedra, me resbalé en ella, me caí y me corté el pie.' <br> I stepped on a rock, slipped on it, fell down, and cut my foot. (DS2010, cminz) RMH_07-11-07_370 |
| (35) | Dependent Realis <br> Ox tpacta ma, Dependent Realis <br> cmaax taax iti tiij, <br> thus RL-be.in.appearance DS now DDP 3P-on RL-sit |
|  |  |
|  | 'Entonces, sentada allí, demostró su poder mágico, y la gente la miraba.' <br> Then, sitting there, she demonstrated her magical powers, and the people watched her. (ES2007, cmaam_ipca_quino_8w) |

It is possible, although less common, for a clause headed by a dependent verb form to follow the clause headed by an independent verb form (and end the sentence), as depicted in (36). This case is discussed in $\S 3.7$.
(36) [...] Independent, Dependent.

The semantic relationship between a dependent clause without a coordinator and the sentence is quite vague. Therefore the translations may vary considerably and also require some kind of conjunction, unlike the original; see §3.8. The conjunctions used in English may be coordinating conjunctions (and) or subordinating conjunctions (so, while, as, etc.). There does seem to be a general principle in operation: a dependent clause expresses an idea that is temporally or logically precedent to that of the clause that follows or which dominates it syntactically. This principle also relates to the fact that purpose clauses typically follow the main clause (see §3.4.2).

### 3.4.1 Mood concord

The following examples illustrate that (with special exceptions discussed in §17.3.1.1) the clauses in a chained clause structure generally agree in mood. They are all irrealis (including imperatives), or they are all realis.

## Realis examples

(37) Dependent Realis
Haaco ano hapaspoj cöicacoaat cop ano tiij,

Abs.house 3P.in paper 3IO-3P-PON-US-cause.know the.VT 3P.in RL-sit
Dependent Realis ${ }^{8}$
itaasi quih itaaspoj itemaxi ma,
3P-name the.FL 3:3-RL-write 3:3-RL-N-finish DS
Distal Realis
Pedro quih iyacospoj.
the.Fl 3:3-Dt-help.write
'Estaba en la escuela y no pudo escribir su nombre, entonces Pedro le ayudó a escribirlo.'
S/he was in school and couldn't write her/his name, so Pedro helped her/him write it. (DS2010, ac-) RMH_07-11-07_38a
(38) Dependent Realis Proximal Realis
Hahoot hac ah contita, cömiizquim.

Abs-entrance the.Lc Foc 3IO-Aw-Rl-move 3IO-PX-enter
'Entró por la puerta.'
S/he entered by the door. (DS2010, ah) RMH_07-11-07_38b
(39) Dependent Realis Emphatic Realis

He hptahahásaquim ma $x$, ihxoqueepe.
1Pro 1SGS.In-Rl-Pv-comb.hair.of DS UT 1SGS.Tr-Em-like
'A mí me gusta cuando me peinan.'
I like it when my hair is combed. (DS2010, ah-) RMH_07-11-07_38c

## Irrealis examples



[^47](42) Dependent Irrealis

Independent Irrealis
Ziix ipxasi quih miizj paaizi,
isaaitoj!
thing 3P-flesh the.Fl well Ir.Dp-1Em.S.Tr-make-Pl Ir.Id-1Em.S.Tr-eat-PL
'Conservemos la carne, y [después] comámosla.'
Let's preserve the meat and [later] eat it! (adapted from DS2010, capoci) RMH_07-11-07_39a
(43) Dependent Irrealis Independent Irrealis

Anxö pohamoc ta, siifp caha.
Intns Ir.Dp-be.night DS Ir.Id-arrive Aux.SN-DCL
'Cuando es muy noche va a llegar.'
S/he is going to arrive very late at night. (DS2010, anxö) RMH_07-11-07_39b
(44) Dependent Irrealis

Imperative
¡Haxz ${ }^{\circ}$ ctam cop poozoj oo ta, he camjc!
dog male the.Vt Ir.Dp-alone DL DS 1IO Im-take/bring
‘‘Tráeme solamente el perro MACHO!’
Bring me only the MALE dog! (DS2010, cazoi) RMH_07-11-07_39c

### 3.4.2 Purpose clauses

The verb of a purpose clause associated with an imperative occurs in the independent irrealis form (with the prefix si-) without any of the modals shown in (10). ${ }^{9}$ See examples (45)-(46).
(45) Canoaa zo hataahoj, ano hpsiij.
boat a Im-make.ready-PL 3P.in 1SGS.IN-Ir.Id-sit
‘¡Preparen una barca para que me vaya en ella!’
Get a boat ready for me to go in! (NTT, мk 3:9) RMH_07-11-07_39d
(46) Cöhahipet, zixcám ${ }^{\circ}$ com isiihit.

3IO-Im-permit fish the.Hz 3:3-Ir.Id-eat
'Déjale comer el pescado.'
Let him/her eat the fish. RMH_07-11-07_40a
When the purpose clause is combined with another clause that is in the realis mood, the
${ }^{9}$ Purpose clauses are avoided when the subject of the main clause and the subject of the purpose clause are coreferential. (Attempts to construct them were rejected as unacceptable.) Instead, a simple chained clause construction is used.
(i) Satoj zo me hpoomjc, me hsacohot aha.
mussel a $2 I O 1 S G S$.Tr-Ir.Dp-bring ${ }^{2}$ 2IO 1 SGS .Tr-Ir.ID-cause.see AUX-DCL
'Te traeré un mejillón para mostrártelo.' / I will bring a mussel to show it to you. RMH_08-04-07_186a
Alternatively, a clause headed by a deverbal noun might be used instead of the finite purpose clause.
(ii) Siimet coaatjö tazo hisoj cohsahipit aha, cöhisiihit hac. bread SN-sweet one 1P-self 3IO-1SGS.Tr-Ir.ID-permit AUX-DCL 3IO-1P-IR.ID-eat the.LC 'Me permitiré a comer UN pan dulce.' / I will permit myself to eat ONE sweet roll. RMH_08-04-07_186b
purpose clause must be accompanied by the (unstressed) realis auxiliary verb taa, thereby satisfying the requirements of mood concord. This is shown in examples (47)-(51).
(47) Cmoqueepe com ıziix hapsx caaitim」quij cöimiimlajc,
SN-sick the.Hz doctor the.CM 3IO-3.3-Px-take/bring.PL
isaai taa ma.

3:3-Ir.ID-make Aux.RL DS
'Llevaron al enfermo al médico para que lo curara.'
They took the sick person to the doctor so that s/he would treat him/her. (Ds2010, cmoqueepe) RMH_07-11-07_40b
(48) Hintaac quih ool ipxasi coi iyoocöim, 1P-aunt the.FL organ.pipe.cactus 3P-flesh the.PL 3:3-DT-grind.dry

| hocö | ine | pac | isaai |
| :--- | :--- | :--- | :--- |$\quad$| taa. |
| :--- |
| pine |$\quad$ 3P-mucus | some | 3:3-Ir.ID-make |
| :--- | :--- |

'Mi tía estaba moliendo la pulpa de pitaya para hacer chapopote.'
My aunt was grinding organ pipe cactus pulp to make tar. (DS2010, caacoim) RMH_07-11-07_40c
(49) Cöiyahipet, zixcám ${ }^{\circ}$ com isiihit taa ma.

3IO-3:3-DT-permit fish the.Hz 3:3-Ir.ID-eat Aux.RL DS
'Le dejó comer el pescado.'
S/he let him/her eat the fish. RMH_07-11-07_40d
(50) Quiimla ha, hai cah contisa taa ma.

SN-Tr-open-Pl DCl wind the.Fl-Foc 3IO-Aw-Ir.Id-move Aux.Rl DS
'Están abiertas [las ventanas] para que pase el aire.'
[The windows] are open to let air in. RmH_07-11-07_40e
(51) Hita quih cafee ooztoj quij hapx itaca, 1P-mother the.FL coffee 3P-ON-cook.in.water the.Cm outside 3:3-RL-put.LQ
iyoozaj, isahaapl taa.

3:3-Dt-do.back.and.forth 3:3-Ir.ID-make.cold Aux.RL
'Mi madre vertió el café de un contenedor a otro para enfriarlo.'
My mother poured the coffee back and forth to cool it down. (DS2010, quizai) rMH_07-11-07_40f
When the main clause is not an imperative and is in the irrealis mood, the purpose clause is embedded with the irrealis auxiliary $\mathbf{p i}$ (§20.3.1), as in example (52). ${ }^{10}$

[^48](52) Cöisahipet aha, zixcám ${ }^{\circ}$ com isiihit pi ta x. 3IO-3:3-Ir.Id-permit Aux-DCl fish the.Hz 3:3-Ir.Id-eat Aux.Ir DS UT
'Le dejará comer el pescado.'
S/he will let him/her eat the fish. RMH_07-11-07_41a
The purpose clause is also embedded under the auxiliary pi when the entire proposition is hypothetical because of negation in the main clause, as in example (53). (Such examples are obvious exceptions to mood concord.)
(53) Hapapje ${ }^{\circ}$ zo hesexl pi, hiz comhima ha.
bead(s) a $\overline{1 S} \bar{G}_{G} S$.Tr-Ir.Id-buy Aux.Ir here 3IO-Twd-1P-PON-N-move Dcl
'No vine acá para comprar chaquiras.'
I didn't come here to buy beads. RMH_07-11-07_41b

### 3.5 Deverbal nouns as the heads of dependent clauses

Some dependent clauses have predicates that are deverbal nouns (of the proposition/obliqueoriented type, see $\S 14.4$ ). Clauses of this type may set the context for the rest of the sentence, and the deverbal noun is followed by the postposition iti on, in the sense of while. ${ }^{11}$ The subject of this deverbal noun (expressed morphologically as the possessor) is very commonly coreferent with the subject of one or more important clauses in the sentence, but it need not be. In examples (54)-(56), such coreference is found.

```
(54) Toc contiiha iti, zaaj pac toc cötahca ma,
    there 3IO-Aw-3P-PON-move 3P-on cave some there 3IO-RL-be.located DS
    cötafp ma, hapxa pac ano toii,
    3IO-Rl-arrive DS cottontail some 3P.in Rl-be.Fl-PL
    toc cöcoii ha.
    there 3IO-SN-be.Fl.Pl DCL
    'Mientras iba allí, vino a algunas cuevas en que estaban conejos.'
    While he was going there, he came to some caves where there were some rabbits.
    (Conejo_Puma_4)
(55) &Ox tpacta ma」, haa ntiihat iti, ...
    then there Aw-3P-PON-move-Pl 3P-on
    'Entonces, mientras iban allí, ...'
    Then, while they were going there, ..., [they were going to run under the bush].
    (Conjo_Puma_17.1)
```

[^49](56) Toc cöihiihtolca iti x, zo hant sahjiit haa hi. there 3IO-3P-PON-be.Fl-Pl-ImpF 3P-on UT a/one land Ir.Id-fall Aux Dcl 'Estando allí, uno de ellos va a caerse.'
They are there, one is going to fall. RMH_07-11-07_410
In examples (57)-(60), there is no coreference between the "subject" of the denominal verb and another major clause in the sentence.
(57) Toc cöhihiihtolca iti, canoaa ano hiihca quih there 3IO-1P-PON-be.Fl-Pl-ImPF 3P-on boat 3P.in 1P-PON-sit.Pl the.FL

## yotápolquim.

Dт-broken
'Mientras estábamos allí, la panga en que estábamos se quebró.' While we were there, the boat that we were in broke up. (Offered) RMH_07-11-07_42a
(58) Cói hihiim iti,
still 1P-PON-sleep 3P-on
(59) Haa nthiihat iti, 'Mientras yo todavía dormía, ...' While I was still sleeping, ...
there Aw-1P-PON-move-PL 3P-on 'Mientras íbamos allí, ...' RMH_08-21-07_73

While we were going there, ...

Ziix ipxasi hizcoi cói immiipla iti, thing 3P-flesh PX-PL still 3P-PON-N-bad 3P-on
hsatázata
aha.
1SGS.TR-Ir.ID-cut.into.strips Aux-DCL
'Antes de que esta carne se pudra, voy a cortarla en tiras.'
Before this meat spoils (more literally, while it has not yet spoiled), I will cut it into strips. (DS2010, calázata) RMH_08-21-07_74b

A clause with a deverbal noun may also appear without the postposition, but then it is more likely to end in an article, either simply hac, as in (61), or the focus-modified version of this article, cah (see §24.3.2), as in (62)-(Error! Bookmark not defined.).

$\ldots$ hascám com iti cöiihca $\quad$ hac, | Tahejöc |
| :--- |$\quad$ quij

ABS-reed.boat the.Hz 3P-on 3IO-3P-PON-sit.PL the.LC Tiburon.Island | the.CM |
| :--- |

(62) Hax ihyaahazxim cah, hant ihmaa z iqqui iquin just 1P-PON-sneeze-ImpF the.Fl-Foc land other a 3P-toward Inf.In-go

## ihyomamzo.

1SGS.Tr-Dt-N-want
'Porque estoy estornudando, no quiero salir para otro lugar.'
Because I am sneezing, I don't want to go anywhere. (DS2010, caanzx) RMH_07-11-07_42b
(63) He hicmiiquet cah, thant ihyomaamac..

1Pro 1P-PON-be.person the.Fl-Foc I.have.not.cooked.century.plant
'Nunca he cocinado maguey.'
I have never (lit., in all my life) I have not cooked century plant. (DS2010, caamac) RMH_07-11-
07_42c
A repetition of such a clause may indicate a longer period of time over which the event occurred, as in (64) and (65).


### 3.6 Excursus about the Different Subject markers and the word x

Three unstressed words are intimately associated with finite dependent clauses. These words are discussed here briefly for two reasons. First, they are extremely common in fairly simple sentences, and so some early explanation is needed. Second, it needs to be shown that they are not subordinating conjunctions. These words - the Different Subject markers and the word $\mathbf{x}$ - are helpful indicators of clause boundaries. No other words in a clause may follow them except for right-dislocated nominals (§3.12).

### 3.6.1 The Different Subject markers

The Different Subject (or switch-reference) markers ma and ta indicate disjoint reference between the subject of one clause and the subject of another - usually the following. The important details of the switch-reference system are discussed later (see §9.1.1), but some basic facts are presented here. ${ }^{12}$

[^50]A dependent clause in realis mood (the verb of which is always in the mood marked by $\mathbf{t}$-, as seen in $\S 3.1$ above) may have the Different Subject (DS) marker ma. To be more explicit, it must have this DS marker if the relevant subjects are not coreferential (with some important exceptions discussed in $\S 3.6 .2$ ). This is seen in the following simple example that changes from the first person singular subject (of the verb $\sqrt{ }$ ahjiit in the expression for fall) and the third person singular subject (of the verb $\sqrt{ }$ actim be cut). The example is ungrammatical without ma.

> ... hant ihptahjiit $\stackrel{\text { ma, }}{\text { land 1SGS.In-RL-fall } \mathrm{DS}}, \begin{aligned} & \text { hitoaa } \\ & \text { 1P-foot/leg }\end{aligned}$ '...me caí y me corté el pie.' ... I fell down, my foot got cut... (DS2010, cmihzz)

A dependent clause in irrealis mood (the verb of which is always marked by po-, as shown in §3.1) has the DS marker ta under the same conditions.
(67) Anxö pohamoc ta, siifp caha. Intns Ir.Dp-be.night DS Ir.Id-arrive Aux.SN-DCL 'Cuando es muy noche va a llegar.' S/he is going to arrive very late at night. (more literally, When it is very late at night, $s$ /he will arrive. (DS2010, anxö) RMH_07-11-07_43b

As can be seen in many examples, including those in (68)-(72), ${ }^{13}$ the DS marker may appear on a postposed dependent clause. This shows, of course, that the relevant notion is not the next clause (since the next sentence is never relevant for the marking of DS in Seri), but something more abstract. See the discussion in $\S 3.7$.
(68) Siifp caha, anxö pohamoc ta. Ir.ID-arrive Aux.SN-Dcl Intns Ir.Dp-be.night DS 'Va a llegar muy noche.'
S/he is going to arrive very late at night. RMH_07-11-07_47d
(69) $\llcorner$ Hehe an icaaij $\rfloor$ com ihapooin quij cöiyacaapis, water.barrel the.Hz 3P-PON-Pv-cause.closed the.CM 3IO-3:3-DT-shut.tightly

| hasaaiti áno | caap | cop | anxö | Lhimo tpazjc $\lrcorner$ | ma. |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| gasoline | $3 P$. in | SN-stand | the.VT | INTNS | it.spilled.out | DS |

'Cerró el tapón del tambo; se había tirado mucha gasolina.'
S/he closed the screw-in opening of the barrel, a lot of gasoline having spilled out. (DS2010, cö|cacaapis) RMH_07-11-07_43c

[^51](70) Trooqui quij thant iyootyajc $\iota_{\perp}$, iquiisaxim itemá ma. vehicle the.CM they.towed.it InF.In-have.life-ImpF 3:3-RL-N-know DS 'Arrastraron el camión porque no pudo arrancar.' They towed the truck because it couldn't start. (DS2010, quitox) RMH_08-21-07_81a
(71) Siimet quih imiye, isiihit taa ma.
bread the.FL 3:3-Px-give.food 3:3-Ir.ID-eat Aux.Rl DS
'Le dio el pan para que lo comiera.'
S/he gave him/her the bread to eat (so that s/he would eat it). RMH_08-21-07_81c
(72) Zixcám ${ }^{\circ}$ com imiixquim, haxz ${ }^{\circ}$ cop isiihit taa ma. fish the.Hz 3:3-Px-put.Hz dog the.Vt 3:3-Ir.Id-eat Aux.Rl DS 'Tiró un pescado para que el perro lo comiera.' S/he threw a fish for the dog to eat. (Moser 1978: 119) RMH_08-21-07_81d

While a dependent clause must have an indicator of DS under the conditions of disjoint reference, main clauses do not ever have these morphemes, as indicated by the parenthesized asterisked material in (73).
(73) Yoofp (*ma) xo hyomaho.

DT-arrive DS but 1SGS.Tr-Dt-N-see
'Llegó pero no lo/la vi.'
S/he arrived, but I didn't see him/her. RMH_08-21-07_81e
Disjoint reference is also not marked on complement clauses (see chapter 12), or clauses headed by deverbal nouns. It is not marked at the end of indirect quotes or direct quotes (see §12.4), or parenthetical remarks.

When there is coreference between subjects of the clauses, DS marking does not occur. Examples like (74) and (75) would be grammatical with DS marking on the first clause, but coreference of the subjects would be impossible.
(74) Itaht, mójocam.

3:3-RL-see-PL Px-flee-PL
'Cuando los vieron ${ }_{\mathrm{i}}$, huyeron ${ }_{\mathrm{i}}$.'
When they $y_{i}$ saw them, they $y_{i}$ fled. RMH_08-13-07_38a XMH_08-15-07_55
(75) Cmaam quij itaxi, izquipót coi imazeee. woman the.CM 3:3-RL-finish inferior.material the.PL 3:3-Px-make.coil.filler 'Cuando la mujer termina ${ }_{\mathrm{i}}$, hace $_{\mathrm{i}}$ relleno del material inferior.
When the woman ${ }_{i}$ finishes it, she $e_{i}$ makes coil-filler from the inferior quality splint material. (improved from Canasta_15) RMH_08-13-07_38c

In examples (76)-(77) the asterisked material in parentheses indicates an addition that would be ungrammatical.

```
(76) María quih yoofp, soos taa (*\underline{ma).}
    the.Fl Dt-arrive Ir.ID-sing Aux.Rl
    'María llegó para cantar.'
    María arrived in order to sing. RMH_11-19-07_104
(77) Minaail com impoqueejc (*)\underline{ma}) x, taax oo iti hataap
    2P-skin the.Hz 2SGS-Ir.DP-cause.wet DS UT DDP DL 3P-on ABS-mucus
        cömiisa aha.
        3IO-2SGS-Ir.ID-be Irreg Aux-DcL
```

    'Si te mojas la piel, te resfriarás.'
    If you wet your skin, you will catch a cold. RMH_08-13-07_38b
    Given the type of clause chaining depicted in Figure 3.1, the prototypical situation is to have a series of dependent clauses followed by a main clause. In a situation such as the one depicted in (78), the implication of the lack of DS marking is that the subject of each clause is coreferential.
(78) Dependent $_{1}$, Dependent $_{2}$, Dependent ${ }_{3}$, Dependent ${ }_{4}$, Dependent ${ }_{5}$, Independent

On the other hand, the implication of the presence of ma in clause $D_{3}$ of the schema in (79) is that the subjects of $D_{3}$ and $D_{4}$ are not coreferential, and similarly its presence in $D_{6}$ indicates that the subjects of $D_{6}$ and $D_{7}$ are not coreferential, as well as that the subjects of every other pair of adjacent clauses are coreferential. There is no vagueness or ambiguity.
(79) Dependent ${ }_{1}$, Dependent $_{2}$, Dependent $_{3}$ ma, Dependent ${ }_{4}$, Dependent ${ }_{5}$, Dependent $_{6} \mathbf{m a}$, Dependent ${ }_{7}$, Dependent ${ }_{8}$, Independent

This is illustrated by a few simple examples. In (79) the subject of the verb itcooz in clause (a) is not coreferential with the subject of itaht in clause (b); DS marking is required. But since the subject of itaht is coreferential with the subject of cöiyacoaaxoj in clause (c), DS marking at the end of clause (b) is not permitted.
(80) (a) $\begin{array}{lllllll}\text { Ctam } & \text { himcap } & \text { eenim } & \text { z } & \text { itcooz } & \text { ma, } \\ & \text { man } & \text { DT-VT } & \text { knife } & \text { a } & \text { 3:3-Rl-steal } & \text { DS }\end{array}$
(b) $\underset{\text { 3:3-RL-see-PL }}{\text { itaht }}\left({ }^{* \mathbf{m a}}\right)$,
(c) cöiyacoaaxoj.

3IO-3:3-Dt-remove-PL
'Ese hombre robó un cuchillo; lo vieron y se lo quitaron.' RMH_07-11-07_43d
That man stole a knife; they saw him and took it away from him. (DS2010, cöcacoooix)
Example (81) demonstrates that the question of coreference of the subjects is determined
from one clause to the next (generally); the fact that the subject of clause (a) is not coreferential with the subject of clause (c) is not pertinent. Clause (a) is compared with clause (b), and clause (b) with clause (c).
(81) (a) Canoaa $z$ an hatahca (*ma), boat a 3P.in 1PLS-RL-sit.PL DS
(b) Łziix coaafp $\lrcorner$ pac ano Lhant cöhatpamlcam $\lrcorner$ ma, mullet some 3P.in 3IO-1PLS-RL-connected-Pl-ImpF DS,
(c) yaafipolca.

DT-bounce.upwards-PL-IMPF
'Cuando estábamos en la panga, llegamos a algunas lisas, estaban brincando.'
When we were in the boat, we came across a school of mullet, and they were
jumping. RMH_07-11-07_44a
The slightly longer examples in (82) and (83) illustrate the same point.
(82)

(b) yaazj com iti itatni (*ma),

3P-ankle.nerve the.Hz 3P-on 3:3-RL-make.contact DS
(c) itaactim ma,
3:3-RL-cause.be.cut DS
(d) miizj icapanzx iyomá.
well Inf.In-run 3:3-Dt-N-know
'El hombre le tiró al venado bura y le pegó en el tobillo, cortando el nervio, entonces el venado no pudo correr.'
The man shot the mule deer and hit it in ankle, cutting the nerve, so the deer couldn't run. (DS2010, yaaz) RMH_07-11-07_44b
(83) (a) Ctam ticop tmozime,
man Md-VT RL-drunk
(b) cmiique ihmaa ticop isníp xah taa tamoz ma, person/Seri other Md-Vt 3:3-Ir.Id-hit - Aux.RL RL-think/try DS
(c) tapoti ma,

RL-duck.a.blow DS
(d) haaco quih ihapooin cop itníp ma, Abs.house the.Fl 3P-PON-Pv-cause.closed the.VT 3:3-RL-hit DS
(e) yanopj quij yopete.

3P-fist the.CM DT-swollen
'Ese hombre estaba borracho e intentó pegarle al otro hombre, pero el hombre se agachó, así que el borracho le pegó a la puerta de la casa, y su puño está hinchado.' That man was drunk and tried to hit the other man, who ducked down, so the drunk man hit the door of the house instead, and his fist is swollen. (DS2010, yanopj) RMH_07-11-07_44c

Examples (84)-(88) have disjoint reference overtly marked. Compare (84) to (74) above.
(84) Itaht ma, mójocam.

3:3-RL-see-PL DS Px-flee-PL
'Cuando los vieron ${ }_{\mathrm{i}}$, huyeron $\mathrm{n}_{\mathrm{j}}$.
When they ${ }_{i}$ saw them, they $y_{j}$ fled. (Moser 1978: 116) RMH_08-13-07_39
(85) Impoofp ta, tmaticpan. Haptco yaticpan.

2SGS-Ir.Dp-arrive DS Sb-work already DT-work
'Cuando llegas, podría haber empezado a trabajar. [Pero de hecho] Ya está trabajando.'
S/he could have started working at the time of your arrival. [But in fact] $S / h e$ 's already working. (Offered) ${ }^{44}$ RMH_08-13-07_40a
(86) Minl quih pozatx ta $\mathbf{x}$, insooha aha. 2P-finger-PL the.FL IR.Dp-have.glochids DS UT 2SGS-Ir.ID-cry Aux-DCL 'Si tus dedos tienen alguates en ellos, llorarás.'
If your fingers get thorns in them, you will cry. (Consejos_choy__03) RMH_08-13-07_40b
(87) Tommeque ma, hyomasi. RL-N-warm DS 1SGS.Tr-Dt-N-drink
'Como no estaba caliente, no lo tomé.'
Since it wasn't warm, I didn't drink it. RMH_08-13-07_40c
(88) Taax iti tap ma, yax quij an itatni ma, DDP 3P-on RL-stand DS 3P-belly the.CM 3P.in 3:3-RL-make.contact DS
icaatax itcmaa, tahac iti tap ma, cöhamiizcam.
Inf.In-go 3:3-RL-N-know Md-LC 3P-on RL-stand there 3IO-1PLS-PX-arrive-PL
'[Un caballo] estaba allí, [uno de nuestro grupo] lo tiró en la panza, [el caballo] no pudo andar, se quedó allí parado, nos acercamos a él.' RMH_08-21-07_82 It (a horse) was standing there, he (one of our group) shot it in the belly, it (the horse) wasn't able to walk, it stood there, we went to it. (Viaj_Tiburon_98, Moser 1978: 116)

[^52]This marking of disjoint reference, an almost classic switch reference system, is redundant when the overt subject marking clearly indicates that the two clauses have different subjects. Nevertheless, it is obligatory. Virtually every example where DS marking occurs would be ungrammatical or have a different interpretation if the DS marking were missing.

A longer, text-extracted example of multiple clauses chained together without subordinating conjunctions and with DS markers crucially distributed is given as (89):
(89) a. Ziix cameepit timoca - ziix caacoj timoca haa mota, thing SN-strange Md-TwD thing SN-big Md-Twd there Twd-Rl-move That strange thing [giant] - that big thing came,
b. comcaac coi quino tafp ma, ${ }^{15}$ person/Seri-PL the-PL 3P.in RL-arrive DS he arrived among the Seris
c. - cöpamiiit hax pàa ta, 3:3-Ir.Dp-ask.about just Ir.Dp-be DS

- perhaps he asked about her,
d. cmaam quij cöpamiiit hax pàa ta, -
woman the.CM 3:3-Ir.Dp-ask.about just Ir.Dp-be $\overline{\mathrm{DS}}$
perhaps he asked about the woman [who had been his wife] -
e. ctam ical quij ${ }^{16}$ -
man $\mathrm{SN}-\mathrm{Tr}$-accompany the.CM
the man who was now her spouse -
f. cmaax yaacni zo toc cotom ma, now 3P-bow a there 3IO-RL-lie DS a bow of his was lying there, -
g. itexl,
3:3-RL-take
h. cöitahizj
he [new spouse] grabbed it
3IO-3:3-RL-tie.up
he strung it,
i. ziix timoca ihaai zo haa siihca xah taa tamoz, thing Md-Twd 3P-PON-make a there Ir.ID-be.located - Aux.RL RL-think he thought he would do something,
j. ziix xah $z$ เiicp cösiipe」 taa tamoz, thing Atten a it.will.be.useful Aux.Rl Rl-think he thought he would do something useful,

[^53]
m. เiiqui tojoz」 itexl,
suddenly 3:3-RL-take
he [giant] suddenly grabbed him,
n. izcapxla hac an itaxquim ma, 3P-armpit the.Lc 3P.in 3:3-RL-put.Hz DS he put him in his armpit,
o. inol cop iiqui totofz ma, 3P-arm the.VT 3P-toward RL-squeeze.in DS his arm squeezed in on him,
p. cöipatj ${ }^{\circ}$ hac เiti cöitcazx $\lrcorner$, his/her.side the.Lc s/he.split.it.open he split open his side,
q. hant xah him itácatx ma, r. thacx tmiih」, land - elsewhere 3•3-RL-release DS he threw him down,
s/he.died
he [new spouse] died,
s. toc cotom,
there 3IO-RL-lie
there he [new spouse] lay,
t. [yoque.] ${ }^{18}$

DT-US-say
it is said. (Dos_Hermanos_66)

A crucially important issue, of course, is what constitutes a change of subject. This is taken up in §9.1.1.

### 3.6.1.1 Relevance of the complement clause

When a dependent clause precedes a complement clause of a verb like Vamzo want, the same or different subject question is decided by looking at the subject (qua possessor) of the complement clause and not the subject of the verb Vamzo. This is illustrated by examples (90)-(93).
(90) Siimet pac ihpaaitim $\underline{\text { ta, }}$ miihit ihmiimzo.
bread some 1SGS.Tr-Ir.Dp-make-ImpF DS 2P-PON-eat 1SGS.Tr-Px-want
'Si hago pan, quiero que lo comas.'
If I make bread, I want you to eat it. RMH_11-19-07_105a

[^54](91) Haa mpoofp (*ta), ziix zo miihit ihmiimzo. there 2 SGS-Ir.Dp-arrive DS thing a 2P-PON-eat 1SGS.Tr-Px-want 'Si llegas allí, quiero que comas algo.'
If you arrive there, I want you to eat something. RMH_11-19-07_105b
(92) Haa hpoofp ta, icapazt ihmiimzo. there 1SGS.In.Ir.Dp-arrive DS Inf.In-Pv-tattoo 1SGS.Tr-Px-want 'Si llego allí, quiero ser tatuado.' If I arrive there, I want to be tattooed. ${ }^{19}$ RMH_11-19-07_105c
(93) Haa hpoofp (*ta), ziix z ihaahit ihmiimzo. there 1SGS.In-Ir.Dp-arrive DS thing a Inf.Tr-eat 1SGS.Tr-Px-want 'Si llego allí, quiero comer algo.'
If I arrive there, I want to eat something. RMH_11-19-07_105d

### 3.6.2 Parallel event clauses and background information

Some adverbial clauses are not marked for DS, demonstrating clearly that the device is not used mechanistically only on the basis of surface structure.

DS marking does not occur when the clause is presented as being an event parallel to another clause in which similar actions are taking place; in these situations no physical or logical sequence is involved. One particularly good example is given in (94). All three animals are presented as participating in parallel actions. Obviously the subject of each clause is distinct, but DS is not present - and not allowed.
(94) Hap quih haa ntita (*ma), mule.deer the.FL there Aw-RL-move DS
mojet quih haa ntita (*ma),
bighorn.sheep the.FL there Aw-RL-move DS
haamoja quih mos toc contima.
antelope the.Fl also there 3IO-Aw-Px-move
'Iba allí [en el cielo] el venado bura, iba allí el borrego cimarrón, e iba allí también el berrendo.'
The mule deer was going there [in the sky], the bighorn sheep was going there, and the antelope also was going there. (Es2007, Hapi_4)

Two more examples are given in (95)-(97).

[^55]（95）Ticop $z$ itaazi，ihmaa，ticop $\operatorname{mos} z$ itaazi ma，．．． Md－Vt one 3：3－RL－carry other Md－Vt also one 3：3－RL－carry DS ＇Ésa llevó a uno（de los hermanos），y la otra llevó a uno，．．．＇ That one took one（of the brothers），the other took one，．．．（Dos＿Hermanos＿50－51）
（96）Miist zo toc cötiij（＊ma），haxz ${ }^{\circ} \operatorname{mos}$ zo toc cötiij，yoque． cat a there 3IO－RL－sit DS dog also a there 3IO－RL－sit DT－US－say ＇Había un gato y un perro．＇ There once was a cat and a dog．RMH＿08－14－07＿03b
（97）Haxz ${ }^{\circ}$ heeque zo $\llcorner$ ziix canaao」 heeque zo cötiih（＊ma）， dog juvenile a cat juvenile a 3IO－Rl－be．FL DS
Łhehe zamij」com án hac ano moii．
box the．Hz 3P．place．inside the．Lc 3P．in Px－be．Fl．PL
＇Un perrito y un gatito están en la caja．＇
A puppy and a kitten are in the box．RMH＿08－14．07＿105b
A dependent clause may，under certain conditions that have not been fully explored，provide information about something relevant to the story but not contributing to the action．The clause may introduce a prop not previously mentioned．DS marking does not occur on the clause preceding the＂prop－introducing＂clause if the preceding and following clauses have coreferential subjects，although DS marking does occur on the prop－introducing clause itself．${ }^{20}$ See examples（98）－（99）．
（98）LIsax theemt ${ }_{\lrcorner}$，ittii，hasaj zo toc cötap ma， s／he．was．angry 3：3－RL－feel basket a there 3IO－RL－stand DS
tiix 00 เixtamt yaai」 iiha ha．$\lfloor$ Iti tinol」，
DDS DL what．s／he．did．easily only DCL s／he．grabbed．it

| eenim | zo | toc | cötap | ma，cöittaxazim， | $\ldots$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| knife | $a$ | there | 3IO－RL－stand | DS | 3IO－3：3－RL－hit．Hz－IMPF |

＇Estaba enojado，lo sintió，facilmente agarró una canasta que estaba allí．La agarró y la pegó con un cuchillo que estaba allí，．．．＇
He was angry，he felt it，he easily grabbed a basket that was there．He grabbed it and hit it with a knife that was there，．．．（Consejos＿canasta＿174）RMH＿11－19－07＿106
（99）Cötafp，itexl，hant itáh， 3IO－RL－arrive 3：3－RL－take land 3：3－RL－put．FL

| hehe zo toc cotom ma， | itaai， | heete cöitáh， |
| :--- | :--- | :--- | :--- | :--- |
| stick a there | $3 I O-R L-l i e ~ D S$ |  |$\quad$| 3：3－RL－make tip |
| :--- |

[^56]'Le llegó [a la carne que estaba en una percha], la agarró, la bajó, la puso en la punta de un palo que estaba allí, ...'
He arrived to it [the meat that was on a drying rack], he grabbed it, he took it down, he put it on the end of a stick that was there ... (Gigante_Comelon_485-490)

One expression for suddenly - built around the verb $\sqrt{ }$ eme depleted - is variably or optionally marked for DS. See example (100).
(100) ¿Hoo xah teme (ma)」, hant yahjiit. suddenly DS land DT-fall
'De repente cayó.'
All of a sudden, s/he/it fell down. RMH_07-11-07_45a

### 3.6.3 The word $x$

The word $\mathbf{x}$ has an unclear meaning although it is extremely common and good writers are careful to include or exclude it from dependent clauses. It occurs at the very end of a finite dependent clause, whether realis or irrealis. This is the very last word that may appear in any finite dependent clause except for right-dislocated nominals (§3.12). ${ }^{21}$ It follows the DS marker, if one is present, as the examples below illustrate.

This word often indicates something like unspecified time and frequently seems to change the meaning from when (when $\mathbf{x}$ is absent) to whenever (when $\mathbf{x}$ is present) (in the case of realis clauses), as in example (101).
(101) He hptahahásaquim ma $\underline{x}$, ihxoqueepe.

1Pro 1SGS.In-Rl-Pv-comb.hair.of DS UT 1SGS.Tr-Em-like
'A mí me gusta cuando me peinan.'
I like it when my hair is combed. (DS2010, ah-) RмH_07-11-07_-45b
Likewise, it often seems to change the meaning from when (when $\mathbf{x}$ is absent) to if (when $\mathbf{x}$ is present) (in the case of irrealis clauses), although that may not always be indicated explicitly in the translation, as in examples (102)-(104). (Example (104) involves a postposed dependent clause; see §3.7.)

| (102) | Minaail com impoqueejc | $\underline{\mathbf{x}}$, | hataap | cömiisa |
| :--- | :--- | :--- | :--- | :--- |
| 2P-skin the.Hz 2SGS-IR.DP-cause.wet | UT | ABS-mucus | 3IO-2SGS-IR.ID-be ${ }_{\text {Irreg }}$ AUX-DCL |  |
| 'Si te mojas la piel, te resfiarás.' |  |  |  |  |
| If you wet your skin, you will catch a cold. | RMH_-07-11-07_45c |  |  |  |

[^57]（103）Hamatj somcooxi aha，hapete quij pahcoxl $\underline{x}$ ． thirst（？）Ir．Id－N－US－die Aux－Dcl Abs－mother the．Cm Ir．Dp－Pv－tend UT ＇El que se quede con su mamá no tendrá sed．＇
One won＇t get thirsty if one stays with one＇s mother．（DS2010，cacox）RMH＿11－19－07＿107
（104）Ziix ipxasi cmiipla zo hpoohit ta $\underline{x}$ ， Lhiiqui saa」 aha． thing 3P－flesh SN－bad a 1 SGS．Tr－Ir．Dp－eat DS UT it．will．harm．me Aux－Dcl ＇Si como carne podrida，me hará daño．＇
If I eat rotten meat，it will do me harm．（DS2010，caa）RMH＿07－11－07＿45d
Examples（105）－（107）illustrate the word $\mathbf{x}$ at the end of dependent clauses where the meaning is more unclear but seems to fit with the idea of a nonspecific time．
（105）LZaxt quisil」quij itaast sahcapzx taa max，mooha， child the．CM 3P－tooth Ir．Id－Pv－pull．out Aux．Rl DS UT Px－cry
\[

$$
\begin{array}{cllll}
\text { Lhacx smiih」 } & \text { ca } & \mathbf{x a h} & \boldsymbol{t a m o z} & \underline{\mathbf{x}} . \\
\text { s/he.will.die } & \text { AUX.SN } & - & \text { RL-think/try UT }
\end{array}
$$
\]

＇El niño lloró cuando se le iba a sacar el diente porque pensó que iba a morir．＇ The child cried when his tooth was about to be pulled out，because he thought he was going to die．（DS2010，ccapzx）RMH＿07－11－07＿46b
（106）Ziix canaao」 ticom tiim，hax yoneeej oo，tahaapl x． cat Md－Hz RL－sleep Intns DT－curled．up DL RL－feel．cold UT
＇El gato tenía frío y dormía encogido．＇
The cat was cold and slept all curled up．（DS2010，cneeej）RMH＿07－11－07＿46c
（107）Siimet coaatjö quih ihyoqueepe，htahit $\underline{\text { x }}$ bread SN－sweet the．Fl 1SGS．Tr－Dt－like 1SGS．Tr－Rl－eat UT ＇Me gusta comer pan dulce．＇
I like to eat sweet rolls．（DS2010，coaajio）RMH＿－07－11－07＿46d
It is often the case that if one dependent clause has the word $\mathbf{x}$ ，most or all of the dependent clauses in that sentence also have it．See example（108）．
（108）Hap com tooxi ma $\underline{x}$ ，ano caafajquim hapáh quij mule．deer the．Hz RL－die DS UT SN－Pv－say the．Cm
hant zo cötiij $\underline{x}$, isct xah，imoz xah， place a 3IO－Rl－sit UT 3P－lung CRD 3P－heart Crd
taax ah imexl．
DDP FOC 3：3－Px－take

## Figure 3.2: Postposed dependent clause


'Cuando se mata un venado bura, la persona llamada "ano caafajquim" toma los los pulmones y el corazón.'
When(ever) a mule deer is killed, the person who is called "ano caafajquim" takes the lungs and heart. (DS2010, caafi) RMH_07-11-07_46e

### 3.7 Postposed dependent clauses

It is not uncommon for one dependent clause - and occasionally more than one - to follow the independent clause (see Figure 3.2), as illustrated by the examples that follow. As was pointed out and illustrated at the end of $\S 3.1$, this order of clauses is typical for purpose clauses. The intonation contour on such a postposed dependent clause tends to begin on a lower level.

DS marking occurs on this postposed clause as appropriate for relating it to the preceding clauses. In the simplest cases it is the subject of the main clause to which the subject of the postposed clause is compared for calculating DS marking. Examples (109)-(112) have DS marking on them because the preceding clause (the main clause) has a different subject.
(109) Haa hpyomafp, comcaac quih tatxo ma.
there 1SGS.In-Dt-N-arrive person/Seri-Pl the.Fl Rl-many DS
'No llegué allí (a la fiesta) por que había mucha gente.' ${ }^{\text {вмн_07-11-07_47a }}$
I didn't arrive there (at the party) because there were lots of people. (ALIM 29)
(110) Ziix hai hax hapx cöquica quij $\iota$ toii spot」 caha,
thing air/wind water outside 3IO-SN-Tr-put.LQ the.Cm will.spin Aux.SN-DCL
hai zo mpaait ta $\quad$.
air/wind a TwD-IR.DP-arrive DS UT
'El papalote va a girar si hay viento.'
The windmill is going to turn if the wind blows. (DS2010, toii *cpot) RMH_07-11-07_47c
(111) Siifp caha, anxö pohamoc ta. Ir.ID-arrive Aux.SN-DCL InTNS Ir.Dp-be.night DS 'Va a llegar muy noche.'
S/he is going to arrive very late at night. RMH_07-11-07_47d
(112) Hax ihmaa cah itixö ma x, $\llcorner$ toc cöcahca」 ha, just other the.FL-FOC 3:3-RL-jump.over DS UT there 3IO-SN-be.located DCL
iizax quij toc cötiij ma x. 3P-moon the.CM there 3IO-Rl-sit DS UT
'Uno por uno estaban saltando la luna.'
They were jumping over the moon one by one. (Sallar_Luna_3)
Examples (113)-(115) do not have DS marking on them because the preceding clause (the main clause or the only relevant clause) has a coreferential subject.
(113) Moxima hpmopím, hap inaail pac ihtacoxl.
yesterday 1SGS.In-Px-UO-make.sandal mule.deer 3P-skin some 1SGS.Tr-RL-tend
'Ayer hice huaraches, porque tenía cuero de venado bura.'
I made sandals yesterday since I had deerskin. (DS2010, copim) RMH_07-11-07_47b
(114) Tom quih anxö iyizi,

Méjico hac ano tiih. money the.FL Intns 3:3-DT-defeat/earn the.Lc 3P.in Rl-be.FL
'Ganó ${ }_{i}$ mucho dinero cuando vivía ${ }_{i}$ en México.'
$S / h e_{i}$ earned a lot of money when s/he $e_{i}$ lived in Mexico. RMH_08-21-07_83
(115) Comcaac coi cötiin, [yoque], hascam z iti tiii.
person/Seri-Pl the.Pl 3IO-Rl-go DT-US-say ABS-reed.boat a 3P-on Rl-sit 'Regresó a la gente, se dice, en una balsa.'
He returned to the people, it is said, in a reed boat. (Dos_Hermanos_59)
Example (116) shows that the relevant clause to compare the postposed clause to cannot always be the main clause. DS marking never occurs on the clause immediately preceding yoque since yoque is a verb of speaking with indirect discourse complements (see §12.4). So the postposed clause does not come from that position. The postposed clause in this example cannot have been simply transposed from just before ihít tactim either, since if that were the case, there should be DS marking on the verb tcooo. It is possible, however, that the clause has been postposed from the position just before cmaax.

$$
\begin{array}{llllllll}
(116) & \cdots & \text { cmaax xiica quih cmam } & \text { xah ziix quih spahit ca } \\
& \text { now stuff the.FL SN-cooked } & \text { CRD thing the.FL IR.ID-PV-eat AUX.SN }
\end{array}
$$

## Bariil quii coox itahit ma. the.CM all 3:3-RL-eat DS

'.. se terminó toda la comida preparada que se iba comer, se dice, porque Barril la había comido toda.'
... all of the food that prepared to be eaten was gone, it is said, because Barrel had eaten all of it. (Hombre_Baril_32-33)

A dependent clause with a deverbal noun as head may also occur in a postposed position, as shown by example (117).
(117) Siimet $\llcorner$ hant cafeaa $\lrcorner \mathbf{z}$ itaho, hans iyocaao, bread day.old a 3:3-RL-see just 3:3-DT-chew
icoohit iimzo cah. Inf.In-UO-eat 3P-PON-want the.FL-Foc
'Vio un pan pasado y tenía tanta hambre que no hizo más que ronzarlo.' S/he saw a piece of day-old bread and chewed it, because s/he wanted to eat so badly. (DS2010, ccaao) RMH_11-19-07_108

### 3.8 Semantic relationships of chained clauses

Chained clauses display a variety of semantic relationships that must be inferred from the context since no overt indicator of these relationships is provided. A few simple examples are given here. Some examples of simultaneous events have an additional morpheme, not described in any of the previous literature (either the suffix $-\mathbf{a}$ or the infix $-\mathbf{a}-$ or stress shift), glossed ? here, which is identical in form and distribution to a morpheme that occurs with some adverbs (see §24.4.1.3).

### 3.8.1.1 Realis examples

Chained realis clauses may indicate sequential events, as in (118).
(118) Tooxi, mheemt. (sequential events)

RL-die Px-stink
'Después de que murió, apestó.'
After it died it stank. (Moser 1978: 117) RMH_08-04-07_187a
Chained realis clauses may indicate simultaneous events or states, as in (119)-(125). In some of these examples the special morpheme a (or its allomorph of stress shift) appears.
(119) Tapca ma, hpyiim. (simultaneous events) RL-rain DS 1SGS.In-DT-sleep
'Mientras llovía, yo dormía.)
While it rained I slept. (Moser 1978: 116) RMH_08-04-07_187b
(120) Tapca ma x, ihpyiim. (simultaneous events)

RL-rain DS UT 1SGS.In-Dt-sleep
'Duermo cuando llueva.'
I sleep when it rains. RMH_5-17-08_96a
(121) Toosà, tii ntiya. (simultaneous events)

RL-sing-? DDS Aw-DT-move
'Se iba cantando.'
S/he was going along singing. RMH_5-17-08_96b
(122) Toosà, hant $\mathbf{z}$ iiqui yiin. (simultaneous events)

RL-sing-? land a 3P-toward DT-go
'Estaba cantando cuando salió.'
S/he was still singing when s/he left. RMH_5-17-08_96c
(123) Tosípàxoj, tii ntiya. (simultaneous events)

RL-whistle-<?> DDS Aw-DT-move
'Se iba chiflando.'
S/he was going along whistling. RMH_5-17-08_97a
(124) Tàsí́m, tii ntiya. (simultaneous events)

RL-laugh-<?> DDS Aw-DT-move
'Se iba riéndose.'
S/he was going along laughing. RMH_5-17-08_97b
(125) Haxz $^{\circ}$ hizquih tiifnii, (simultaneous states)
dog Px.PL-FL RL-have-nostril
titoj, miixax.
RL-have-eye-PL PX-HAVE-snout
'El perro tiene narices, tiene ojos, tiene hocico.'
A dog has a nose, eyes, and a snout. (HE 94 modified, DS2010 quififi) RMH_08-04-07_-67
A dependent realis clause may indicate the amount of time relevant for another action, as in (126), or the reason for which another action happened, as in (127).
(126) Ixaap ${ }^{\circ}$ tapxa ma, yoozcam.
(indication of time)
days RL-three DS DT-arrive.PL
'Llegaron en tres días.' RMH_-08-04-07_187c
They arrived in three days. (Moser 1978:116) ${ }^{22}$

[^58](127) Tommeque ma, hyomasi.

Rl-N-warm DS 1SGS.Tr-Dt-N-drink
'Como no estaba caliente, no lo tomé.'
Since it wasn't warm, I didn't drink it. RMH_08-13-07_400

### 3.8.1.2 Irrealis examples

Irrealis chained clauses also exhibit a range of semantic relationships. Example (128) illustrates a sequence of events.
(128) (sequential events)
Taax hapafitlam hapoox, cmaax hasaaitoj aha.
DDP 1PLS-Ir.Dp-pull-Pl 1pS-Ir.Dp-finish-Pl now/then 1PlS-Ir.Id-fish-Pl Aux-Dcl 'Cuando terminamos de jalarlos, iremos de pesca.'
When we finish pulling them in, then we will go fishing. (Fishing_Conversation_4) RMH_07-11-07_107
Examples (129)-(130), both with the morpheme a, indicate simulatenous events.
(129) Pas a, tii ntisa caha. (simultaneous events) Ir.Dp-sing ? DDS Aw-Ir.ID-move Aux.SN-DcL
'Se irá cantando.'
S/he will go away singing. RMH_5-17-08_98a
(130) Pas a, hant $z$ iiqui sin caha. (simultaneous events) Ir.Dp-sing-? land a 3P-toward Ir.Id-go Aux-SN-DCL
'Estará todavía cantando cuando sale.'
S/he will still be singing when she leaves. RMH_5-17-08_98b
Example (131) has a dependent clause that indicates time between the speech act and the action indicated in the main clause.

(131)

(indication of time)

Ixaap ${ }^{\circ}$ poopxa ta, ¿me cösitooij quee -ya?
days Ir.Dp-three DS 2Pro 3IO-Ir.Id-go.Pl Aux.SN QM '¿Van a salir Uds. en tres días?'
Are you (pl.) going to leave three days from now? RMH_08-13-07_45a
Example (132) has a dependent irrealis clause that expresses the protasis of a conditional clause.
(132) Impoohit $\mathbf{x}$, insmoqueepe aha. (protasis)

2SGS-Ir.Dp-eat UT 2SGS-Ir.Id-sick Aux-Dcl
'Si lo comes, te enfermerás.'
If you eat it, you will get sick. RMH_08-13-07_45b
And finally, example (133) has a dependent irrealis clause that is construed as an alternative
action to that expressed in the main clause.


### 3.9 Sentence-linking devices

Some of the devices most commonly used for linking sentences together are in fact clauses themselves, headed by either a finite verb or a deverbal noun. Examples (134)-(137) are dependent clauses of the chained clause type. They all have Different Subject marking (§3.6.1) in them.
(134) Ox tpacta ma $\mathbf{x}$, ... ${ }^{23}$
thus RL-be.in.appearance DS UT
'Entonces, ...'
Then, ... (ES2007, Azoj_Canoj_Imatax_4a)
(135) Ox tpacta ma, \&taax ano cöititaai」 ma, ...
thus RL-be.in.appearance DS DDP 3P.in 3IO-3:3-RL-? DS
'Entonces, en ese mismo momento ...'
Then, at that very moment, ... (Viento_Norte_3) RMH_07-11-07_48a
(136) Taax ah aa itáh ma, ...

DDP FOC - 3:3-RL-do DS
'Por eso ...'
Because of that, ... (ES2007, Hapj_16a)
(137) Taax ah oo cötpacta ma, ... DDP FOC DL 3IO-RL-be.in.appearance DS
'Por esa razón, ...'
For that reason, ... RMH_07-11-07_48b
Examples (138)-(139) have an independent clause followed by a coordinator or a subordinator.

[^59]（138）Ox oo mpacta xo，．．．
thus DL Px－be．in．appearance but
＇Sin embargo，．．．＇o＇Pero ．．．＇
However，．．．or But ．．．（ES2007，seeten＿7a）
（139）Taax oo compacta tax，．．．
DDP DL 3IO－Px－be．in．appearance SBRD
＇Desde que es así，．．．＇
Since it＇s like that，．．．（ES2007，caasquim＿13a）
And examples（140）－（142）have clauses headed by deverbal nouns．
（140）LHantx cömiiha」 hac，.$^{24}$
base 3IO－TwD－3P－PON－move the．LC
＇En los tiempos antiguos，．．．＇
In the old days，．．．（ES2007，acaam＿caa 12a），RMH＿07－11－07＿48c
（141）$\llcorner$ Hantx cömiiha $\lrcorner$ ，taax，．．．
base 3IO－TwD－3P－PON－move that
＇Pasó hace mucho tiempo，．．．＇
It happened a long time ago，．．．（Gigante＿Comelon＿01）RMH＿07－11－07＿48d
（142）a．ŁOx cöiiha」 hac，
thus $3 \mathrm{IO}-3 \mathrm{P}-\mathrm{PON}-\mathrm{be}$ the．LC
b．Cmaax Łox cöiiha」 hizac，．．． now／then thus 3IO－3P－PON－be Px－Loc
＇En la actualidad，．．．＇
Nowadays，．．．RMH＿07－11－07＿48e
The construction in（143）with a nominal phrase as complement of the postposition iti is not common（unlike the use of iti with a clause headed by a deverbal noun，as shown in $\S 3.5$ above）．
（143）Zaah ipac hac cöcaap cop iti， sun／day 3P－back the．Lc 3IO－SN－stand the．VT 3P－on ＇El próximo día，．．．＇
On the next day，．．．RMH＿－08－21－07＿75
The postposition iti following the demonstrative pronoun taax（§16．2）is quite common to refer to the circumstances just alluded to in the context．The verb of the next clause is inflected for third person indirect object to indicate the presence of an oblique object（the

[^60]circumstances). ${ }^{25}$ In examples (144)-(145), the verbs would not have cö- (3IO, §17.3.2.4) if it were not for the presence of the phrase taax iti.
(144) Taax iti, María quih cöyoofp.
DDP 3P-on the.FL 3IO-DT-arrive
'En ese momento / en esa circunstancia, María llegó.'
At that moment (or, under those circumstances) María arrived. RMH_08-21-07_76b
(145) Taax iti, María quih hant $z$ iiqui cöyiin. DDP 3P-on the.Fl land a 3P-toward 3IO-Dt-go
'En ese momento / en esa circunstancia, María salió.'
At that moment (or, under those circumstances) María left. RMH_-08-21-07_76c
Another common characteristic of the structure of texts is "tail-head linkage": a sentence ends with a particular clause, and the next sentence begins with a repetition of that clause (adjusted for appropriate morphology). See examples (146)-(149).

| $\cdots$ | Hant Ihiin ticom, tiix | contitat, | yoque. |
| :--- | :--- | :--- | :--- | :--- |
| Baja.California MD-Hz | DDS | $3 I O-A W-R L-m o v e-P L ~$ | DT-US-say |

Hant Ihiin com contitat,
Baja.California the.Hz 3IO-Aw-Rl-move-PL
‘... iban hacia Baja California. Iban hacia Baja California, ...'
... they headed toward Baja California. They headed toward Baja California, ...
(Dos_Hermanos_9.4-10.1)
(147) ..., haa ntiihat iti, haxoj com cömiizcam.
there Aw-3P-PON-move-Pl 3P-on shore the.Hz 3IO-Px-arrive.PL
Haxoj com cötazcam, haxoj tooiti, shore the.Hz 3IO-Px-arrive-Pl shore RL-lie.PL
${ }^{25}$ In example (iii) María is the goal of the arrival, as hinted by the choice of the article cop (standing) rather than quih (see §21.2). This clause has two motivations for the indirect/oblique object inflection since it has two oblique objects, but the morphology for such inflection only permits double marking in one very special situation (see §17.3.2.4).
(iii) Taax iti María cop cöyoofp.

DDP 3P-on the.VT 3IO-DT-arrive
'En ese momento / en esa circunstancia, llegó a María.'
At that moment (or, under those circumstances) s/he arrived to Maria. RMH_08-21-07_76a
The linking device in (iv) is a deverbal noun followed by the demonstrative pronoun taax used for emphasis (§16.2.4); this complex is the complement of the postposition iti.
(iv) Taax cöiiha, taax iti, DDP 3IO-3P-PON-be DDP 3P-on
'En esa ocasión, ...' / At that moment, ... RMH_07-11-07_48f
'... (y) durante sus viajes, llegaron a tierra. Llegando a tierra, atracaron, ...' ... (and) during their travels, they came to shore. Coming to shore, they landed, ... (Dos_Hermanos_10.3-11.1)
(148) Tiix zaah himquij siicp ityai , tiimotoj toc cötoii, DDS sun DT-CM s/he.opposed.him/her RL-gamble-PL there 3IO-RL-be.FL-PL yoque. Tiimotoj toc cötoii, toc cöiyaii,
DT-US-say RL-gamble-PL there 3IO-RL-be.FL-PL there 3IO-3P-PON-be.Fl.PL

| toc | cöiyaii | cah, | tpezi, | yoque, |
| :--- | :--- | :--- | :--- | :--- |
| there | 3IO-3P-PON-be.Fl.PL | the.FL-Foc | RL-Pv-defeat | DT-US-say |

Cöset hapáh quij. Tpezi ma, tatax, yoque. SN-Pv-say the.CM RL-Pv-defeat DS RL-go DT-US-say
'Ése [Cöset] se oponía al sol, estaban allí jugando a juegos de azar, se dice. Estaban jugando juegos de azar, estaban allí por mucho tiempo, y Cöset fue vencido, se dice. Fue vencido y se fue, se dice.'
That one [Cöset] was opposing the sun, they were there gambling, it is said. They were there gambling, they were there a long time, and Cöset was defeated, it is said. He was defeated and he left, it is said. (Apostador_15) RMH_5-17-08_99

```
(149) ... hapxa hapáh quij itataamalca, yoque.
    cottontail SN-Pv-say the.CM 3:3-RL-put.antler(s) DT-US-say
    Tahtaamalca ma, ...
    3:3-RL-Pv-put.antlers DS
`... puso cuernos en el conejo. Se le pusieron cuernos, ...'
    ... put antlers on the cottontail rabbit. He had antlers put on him, ... (Cuernos 01b-02a)
```

Example (149) demonstrates two important facts. First, the repetition may be a slight paraphrase - in this case, the voice is switched from active to passive. Second, the repetition or near repetition of the words does not imply that the action was repeated or was on-going. It is a rhetorical device that does not convey new information.

### 3.10 Sentence-initial position

Any nominal constituent of the first clause of a sentence may appear in sentence-initial position. There may be more than one reason for this position - topicalization, focus, or cohesion. Examples (150)-(154) document cases where a non-subject nominal phrase precedes the subject or where the nominal phrase (including the subject) at least occurs first in the clause and not in its more common position. Recall from chapter 2 that the preferred order of constituents in the clause is Simple Adjunct $>$ Subject $>$ Indirect/Oblique Object $>$ Direct Object $>$ Other Adjuncts.
（150）Subject（preceding simple adjunct）
Ctam hipcop moxima tahoiitoj，
man Px－Vt yesterday RL－hunt．in．middle．of．day
‘Este hombre fue a la cacería al medio día ayer ．．．．＇RмH＿08－04－07＿188a
This man went hunting in the middle of the day yesterday ．．．．（DS2010，cahoiito）
（151）Direct object（preceding subject）
Eenim zo Juan quih hita cöiyocooz．
knife a the．Fl 1P－mother 3IO－3：3－DT－steal
＇Juan robó un cuchillo de mi madre．＇
Juan stole a knife from my mother．（Offered）RMH＿08－04－07＿188b
（152）Oblique object（preceding subject）
$\llcorner$ Hehe cpooin $\lrcorner$ zo $\llcorner$ ziix yacoso caaixaj」 cop cötafp ．．．
forest a donkey the．VT 3IO－RL－arrive
＇El burro llegó a un bosque，．．．＇
The donkey arrived at a forest ．．．（from original recording of Tramposo）RMH＿09－28－07＿126a
（153）Oblique object（preceding subject）
．．．，seeten quih he cösaticpan xah taa camjöc iha． pen．shell the．Fl 1Pro 3IO－Ir．ID－work－Aux．RL SN－think－Pl DCl
＇．．．，（entonces）pensábamos trabjar con callo de hacha．＇
．．．，（then）we intended to work with pen shells．（Fishing＿80）RMH＿09－28－07＿126b
（154）Oblique object（preceding subject）
Cotopis quii José quih hast quij cöimaafc．
turban．snail the．Cm the．Fl stone the．Cm 3IO－3：3－Px－pound
＇José golpeó la piedra con el caracol．＇（también：＇José golpeó el caracol con la piedra．＇
José hit the stone with the turban snail．（also：José hit the turban snail with the stone．）RMH＿11－19－07＿109

The complement of at least one partitive construction（see §8．5）may be fronted．Note that in example（155）the phrase precedes the adverb haptco already and is not adjacent to the word antá some．
（155）Comcaac ctamcö coi haptco antá xah miizcam． person／Seri．Pl man－Pl the．Pl already some Atten Px－arrive．Pl
＇Algunos hombres seris ya llegaron．＇
Some Seri men already arrived．（DS2010，antä）RMH＿08－04－07＿248a
The fronted nominal phrase may also be the complement of a P－element，as examples（156）－ （159）show．These particular types of examples are discussed in detail in chapter 22.
（156）」Hantx cömiiha」，taax，Tahejöc himquii long．time．ago DDP Tiburon．Island DT－См

```
comcaac quih iti toii,
person/Seri.PL the.FL 3P-on Rl-be.Fl-Pl
```

'Hace mucho tiempo la gente seri estaba en la isla Tiburón, ...'
A long time ago the Seri people were on Tiburon Island, ... (Gigante_comelon_1-2)
(157) Iteen hac haait quih ano moma.

3P-mouth the.Lc Abs.blood the.Fl 3P.in/from Twd-Px-move
'Sangre salió de su boca.'
Blood came from his mouth. RMH_09-28-07_127a
(158) Hant iti hihiih zo $\leq$ ziix hapahit」 $z$ iti tmiih, place 3P-on 1P-PON-be.FL a food a 3P-on RL-N-be.FL
'No hay comida en el lugar en que vivo, ...'
There isn't any food in the place in which I live ... (Burgos_41) RMH_09-28-07_127b
(159) Hateeya com hax quih ano caap iha. Cpoct iha. bottle the.Hz water the.Fl 3P.in SN-stand DCL SN-full DcL
'La botella contiene agua. Está llena.'
The bottle has water in it. It is full. (Literally, The water is in the bottle. It is full.) (HE 17) RMH_09-28-07_127C

Of course, the placement of a nominal in sentence-initial position may result in ambiguity in some cases, as illustrated by (154) above and also by (160).
(160) Hast quii José quih cotopis quij cöimaafc. stone the.Cm the.FL turban snail the.CM 3IO-3:3-Px-pound RMH_11-19-07_110 'José golpeó la piedra con el caracol.' o 'José golpeó el caracol con la piedra.' José hit the stone with the turban snail. or José hit the turban snail with the stone.

Examples (161)-(162), variations on (154), are ungrammatical. The reason for this, based on the preceding presentation, is that they have two nominal phrases before the subject. While the first of these easily occupies the special sentence-initial position, the other one cannot be construed as a simple adjunct.


Such facts support the contention made earlier that the observed word order facts are not due to scrambling or free word order.

### 3.11 Dangling nominal phrase

Not infrequently a definite nominal phrase appears early in the sentence separated from the clause to which it belongs. In example (89) above, which is too long to repeat here, such a nominal is found in line (e) of the sentence. This might be thought of as some kind of topicalization - presentation of the topic of the sentence - since within a clause or two a clause appears in which the dangling DP could belong grammatically. See Figure 3.3.

The translations of other examples below are difficult to give since we simply construct the sentences quite differently in English and Spanish. More literal translations than those given here would be misleading, as well as awkward, because they would imply major intonational breaks that do not occur. The em-dash in the transcription of these examples does not indicate such an intonational break.

In all the observed and elicited examples, the extreme left-dislocated nominal is coreferential with a null pronoun in the second or third clause of the sentence. In the examples below the dangling nominal phrase is underscored and followed by an em-dash and the first clause in which a coreferential null pronoun exists is also underscored.

Most commonly the role of this null pronoun is as subject, whether a subject as agent or a subject as patient. ${ }^{26}$

## Subject / Agent

(163) Cmiique cmaam tintica - haat hanoohcö quij person/Seri woman MD-Aw limberbush SN-Pv-make.concave the.Cm
hizac oo iti tiij ma, imiiix.
Px-LC DL 3P-on RL-sit DS 3:3-Px-go.away.from
'La mujer seri dejó la canasta aquí.'
The woman left the basket here. (ALIM 135) RMH_11-19-07_111

[^61]Figure 3.3: Dangling nominal phrase

$\emptyset_{i}$
(164) Xiica hizcoi - loomz cah tihiiha ma, imiimlajc. thing.Pl Px-PL baby.mussel the.Fl-Foc RL-pure DS 3:3-Px-take/bring.PL
'Estas personas han traído pura CRÍA DE MEJILLONES.'
These people have brought just BABY MUSSELS. (EZ2007, Ioomz 05)
(165) $\left\llcorner\right.$ Ox tpacta ma」, Jesús quij - zixquisiil ${ }^{\circ}$ zo toc cötap ma, then the.CM child a there 3IO-RL-stand DS
itexl imozít hac an iyozám.
3:3-RL-take 3P-middle the.LC 3P.in 3:3-DT-put.VT RMH_07-11-07_49d
'Entonces Jesús tomó un niño que estaba allí y lo puso en medio de ellos.'
Then Jesus took a child who was there and put him/her in their midst. (NTT, мt 18:2)
(166) $\underline{\text { Haxz }}^{\circ}$ ticap - ctam ticap ipaai ta $\mathbf{x}$,
dog Md-Vt man Md-Vt 3:3-Ir.Dp-make DS UT
ziix itac $z$ isiihit aha.
thing 3P-bone a 3:3-IR.ID-eat Aux-DCL
'Ese perro comerá el hueso, el hombre lo causará.'
That dog will eat the bone, the man causing it. RмH_08-13-07_47a
(167) ... comcaac cmajiic xah ctamcö xah coi person/Seri.Pl woman.Pl Crd man-PL CRD the.PL
canoaa com haxoj toom ma $x$, cötazcam $\quad x, \cdots$
boat the shore RL-lie DS UT 3IO-RL-arrive-PL UT
' $\ldots$ los hombres y las mujeres llegaron a la panga cuando atracó, ...'
... the men and the women arrived to the boat when it arrived to shore, ...
(Enciclo_loomz4) RMH_5-17-08_100

## Subject / Patient

(168) Eenim cop - hinl itimla ma, hant yaait. knife the.VT 1P-finger-PL 3:3-RL-open-PL DS land DT-arrive 'Se cayó el cuchillo cuando mi mano se abrió.'
When my hand opened, the knife fell. (DS2010, quiimt) RMH_07-11-07_49a
(169) Hipi ziix comsisiin Lásaro com - zaah xah zo toc cötap, Intns thing SN-pitiable the.Hz sun/day - a there 3IO-RL-stand

## hax taa ma, เhacx immiih.

Intns Rl-be DS s/he.died
'Un día el pobre Lázaro murió, ...'
One day the poor man Lazarus died, ... (NTt, Lk 16:22) RMH_07-11-07_49c
In some examples the role of the null pronoun is direct object, as in (170)-(171).

## Direct Object / Patient

(170) $\frac{\mathbf{H a x z}^{\circ}}{} \frac{\text { ticap }}{\text { - ctam ticap ipaai }} \mathbf{x}$,

$$
\begin{array}{lllll}
\text { ziix } & \text { itac } & \text { zo } & \text { cöisaahit } & \text { aha. } \\
\text { thing } & \text { 3P-bone } & \text { a } & \text { 3IO-3:3-IR.ID-cause.eat } & \text { AUX-DCL }
\end{array}
$$

'Ese hombre dará de comer el hueso al perro.'
That man will feed the bone to the dog. RMH_08-13-07_47b
(171) ... xpasiiticl quih - cmiique quih thehe án」 quih antelope.squirrel the.FL person/Seri the.Fl countryside the.FL
ano tiih $x$, itaho $x$, ...
3P.in Rl-be.Fl UT 3:3-Rl-see UT
‘... cuando una persona está en el monte y ve una ardilla antílope, ...'
... when a person is in the countryside and sees an antelope squirrel, ...
(Gigante_Comelon_154)

### 3.12 Right Dislocation

A definite nominal - typically a nominal phrase with a determiner - may occur postposed to the sentence; ${ }^{27}$ and this nominal commonly has a clear drop in intonation before it. Examples are given below of some different types of right-dislocated nominals. Those in (172)-(175) have a right-dislocated subject as agent.

[^62]
## Subject / Agent

(172) ..., imooctam, comcaac coi.

3:3-Px-look.at-PL person/Seri.PL the.PL
' ... la miraron - las personas.'
... they watched her - the people. (ES2007, cmaam ipca 08)
(173) Ox tee itaxi, mos ox tee, yoque, hapxa com: .. thus RL-say 3:3-RL-finish also thus RL-say DT-US-say cottontail the.Hz 'Cuando terminó de decir eso, también dijo, se dice - el Conejo: ...'
When he had finished saying that, he - Rabbit — also said: ... (Conejo_Puma_11.1-2)
(174) Ano siizcam aha, zixcám $^{\circ}$ cacöla」 xah, caanlca xah. 3P.in Ir.ID-arrive-Pl Aux-DCl totoabas Crd Gulf.grouper-Pl Crd 'Llegarán entre ellos - las totoabas y las bayas.' RMH_07-11-07_49e
They - totoabas and Gulf groupers - will arrive among them (other fish). (Fishing_26)
(175) ¿Toos?, Juan quih.

RL-sing? the.FL
‘¿Cantó Juan?'
Did Juan sing? RMH_09-28-07_128
Examples (176)-(178) have a right-dislocated subject as patient.

## Subject / Patient

(176) ¡Yoo! Yiim, miiquet $^{\circ}$ quih. $^{28}$
hey! Dt-sleep your.child the.FL
‘ $\begin{array}{r}\text { Yo! Tu hijo/a por fin se quedó dormido/a.' }\end{array}$
Hey! Your child finally fell asleep. (DS2010, quiim) RMH_07-11-07_49f
(177) Cmaax ox impacta ha, comcaac cmaa quiih $\lrcorner$ com.
now thus SN-N-be.in.appearance DCL person/Seri.PL new the.Hz
'Nos es así con ellos - la gente de hoy.'
They aren't like that nowadays - people alive today. (DS2010, quipeö) RMH_07-11-07_50a
(178) Án hac xaail, ziix ticom.

3P.interior the.Lc Em-spacious thing Md-Hz
'Su interior es grande - esa cosa [panga].'
Its interior is spacious - that thing [boat]. (ALIM 30) RMH_07-11-07_50b
Examples (179)-(180) have right-dislocated direct objects, one as patient and one as addressee.

[^63]
## Direct object

(179) Manuel quih itrooqui quij itacaatax, $\llcorner$ hehe hant haníp」 $z$ the.Fl 3P-vehicle the.Cm 3:3-RL-drive post
iti cöitcazx, coox $\llcorner$ an iyahojöz , trooqui quii. RMH_07-11-07_50c 3P-on 3IO-3:3-RL-tear all it.scraped.it.off vehicle the.См
'Manuel estaba manejando su camión, chocó con un poste y raspó el camión.' Manuel was driving his truck, hit a post and scraped it - the truck. (Ds2010, cacaatax)
(180) ..., comcaii zo toc cotom, old.woman a there 3IO-Rl-lie
ox itai, yoque, xiica tacoi: ... thus 3:3-Rl-tell DT-US-say thing.Pl Md-PL
‘... una anciana estaba allí, les dijo, se dice, a aquellas personas: ...'
...an old woman was there, she told them, it is said, those people: ...
(Dos_Hermanos_24.1)
The right-dislocated nominal may have a variety of other grammatical functions, as shown by examples (181)-(189).

## Oblique object

(181) Tiix Limoz he yaaitot, cöhihixt hac.

DDS s/he.reminded.me.about.it 3IO-1P-PON-small.PL the.LC
'Me hizo recordar sobre nuestra niñez.'
S/he reminded me about our childhood. (DS2010, caaitot) RMH_07-11-07_50f
(182) Cosi quih เiihax coha」 ha, cöiizquim hac.
thorn the.Fl resembling DCL 3IO-3P-PON-enter the.LC
'Era como una espina, en la manera en que entró.'
It was like a thorn, in the way in which it entered. (DS2010, iinax *ooha) RMH_11-19-07_112

## Simple adjunct

(183) Haptco mos caticpan iha, zaah hipcop. already also SN-work DCL sun/day Px-VT
'Ya están trabajando otra vez - hoy.'
They are already working again — today. RмH_07-11-07_50e
(184) Haapa quih inyaait, moxima.
northwest.wind the.Fl Twd-Dt-arrive yesterday
'El viento del noroeste llegó ayer.'
The northwest wind came up yesterday. (DS2010, imcooit) RMH_07-11-07_50h

## Object of P-element

(185) Meaacalca coi haptco áno hyooquim, trooqui quii.

2P-clothing the.PL already 3P.in 1 SGS.Tr-Dt-put.items vehicle the.Cm
'Ya metí tu ropa en el carro.'
I already put your clothes into the car. RMн_09-28-07_129
(186) ŁZixcám ${ }^{\circ}$ coospoj」 quih, caanlca quih, Łzixcám ${ }^{\circ}$ caacöl」 quih spotted.cabrilla the.FL Gulf.grouper-PL the.FL giant.sea.basses the.FL

| cötiih, | iti | moii, | xatj | quij. |
| :--- | :--- | :--- | :--- | :--- |
| 3IO-RL-be.FL | 3P-on | Px-be.Fl.PL | reef | the.CM |

'Cabrilla pinta, bayas y pescadas estaban en el tepetate.' RMH_-08-14-07_03d Spotted cabrilla, Gulf groupers and giant sea bass were in the fishing spot.
Possessor/subject of deverbal noun ${ }^{29}$
(187) Taax yacaalim iha, $\llcorner\underline{\text { zaxt quisil }}\lrcorner$ xepe iteel cöquiih quij. DDP 3P-ON-play.with DCL child sea 3P-edge 3IO-SN-be.Fl the.CM 'Ésos eran los juguetes del niño de la orilla del mar.'
Those were the toys of the seaside child. (ES2007 ool_tiac 04) RMH_08-13-07_48
(188) Haptco mocoht iha, me.
already 2P-ON-see-Pl DCL 2PRO
'Ustedes ya lo han visto.'
You (pl.) have already seen him. (NTt, Jn 14:7) RMH_07-11-07_51a
(189) It iihom oo quisil iha, satoj tacom. 3P-on 3P-PON-lie DL SN-small DcL mussel(s) Md-Hz
'El lugar donde están esos mejillones es pequeño.'
The place where those mussels are is small. (satoj hasaitaj 11) RMH_09-28-07_130
On rare occasions two nominals are right-dislocated. ${ }^{30}$
Two nominals (subject, direct object)
(190) ... ihiyaxi cötoii
x, imaaizi, comcaac coi,
? 3IO-Rl-be.Fl-Pl UT 3:3-Px-make-Pl Seri-Pl the.Pl
imám tacom.
3P-fruit MD-Hz
${ }^{29}$ These object or proposition/oblique-oriented deverbal nouns require a possessor/subject. See §§10.4.3-10.4.4.
${ }^{30}$ See also this example from the NTT.
(vi) ... ox iyoi, cmaam tahac iti caap cop, Jesús quij. thus 3:3-DT-tell woman MD.LC 3P-on SN-stand the.VT the.CM ‘... así le dijo, la mujer que estaba parada allí, a Jesús.'
... thus she said to him, the woman standing there, Jesus. (NTT, Mt 20:21) RMH_07-11-07_52b
'... hacen campamento allí y la recolectan, los seris, esa fruta.'
... they camp there and collect it - the Seris, that fruit. (ES2007, ool 02) RMH_08-04-07_189
Right dislocation is commonly used with direct and indirect quotes because the speech verb must immediately follow the quotation or indirect discourse (see $\S 12.4$ and $\S 12.7$ ). Therefore the subject of the speech verb follows that verb. See example (191).
(191) Himoz quij cohpseepit aha - ox mee, sziix coosyat」 quih. 1P-heart the.Cm 3IO-1SGS.In-Ir.Id-? Aux-Dcl thus Px-say giant the.FL 'Apostaré mi corazón —dijo el gigante.'
"I will bet my heart," said the giant. (DS2010, cöqqueepit) RMH_07-11-07_51b
Right dislocation is quite commonly used when comparing two items; the phrase iiqui cöihiin hac with respect to it, as far as it is concerned follows the postposed nominal that is the object to which the subject is compared, as in example (192).
(192) Cocazni ${ }^{\circ}$ com, tiix cacaatol iha, rattlesnake the.Hz DDS SN-dangerous DCL

'Una víbora de cascabel es más peligrosa que una lagartija.'
A rattlesnake is more dangerous than a lizard. (DS2010, iqqui coihiin hac) RMH_07-11-07_51c
An indefinite nominal with a determiner cannot occur sentence-finally. This is illustrated by examples (193)-(194).
(193) * Yoozcam, comcaac pac.

Dт-arrive.Pl Seri-Pl some
('Algunos seris llegaron.') / (Some Seris arrived.)
(194) * Yoofp, ctam zo.

Dt-arrive man a|
('Llegó un hombre.') / (A man arrived.)
In each of the preceding grammatical examples in this section, the sentence-final nominal could easily and simply have been included somewhere in the preceding sentence. Other examples (perhaps rare) show that this nominal may provide additional information about some nominal in the sentence but cannot be taken simply as a nominal that has been displaced from the clause. For example, in (195) the location nominal is already referred to by the location adverb haa there and cannot occur in the same clause with it. ${ }^{31}$

[^64](195) ... haa ntiya - Heeesam Yapóticol hapáh hac. there Aw-Dt-move seahorse 3P-PON-duck.a.blow-ImPF SN-Pv-say the.LC '... se fue allí - el lugar llamado Heeesam Yapóticol.
... he went there - the place called Heeesam Yapóticol. (Hipocampo_10.3)
The dislocated nominal in (196) is perhaps an appositional phrase to the subject.
(196) Ox impacta; taax iti Cöquimaxp hapáh quih
thus Px-be.in.appearance DDP 3P-on SN-PV-say the.FL

'Así era como el llamado Cöquimaxp murió - el pequeño.'
That's how the one named Cöquimaxp died - the little one. (Muerte_Cöquimaxp_55)
The dislocated nominal in (197) is related semantically to the direct object of the denominal verb (see $\S 19.3$ ), but it is not transparently any kind of appositional phrase that could be placed elsewhere in the sentence.
(197) Mos ihmaa quih ititaamt, yoque, eenim quih. ${ }^{33}$
also other the.FL 3:3-RL-HAVE-sandal(s) DT-US-say metal the.FL
'Se puso otros (como huaraches), se dice - de metal.'
He put on others (as sandals), it is said - of metal. (Apostador_35) RMH_07-11-07_50d

### 3.13 Situational construction

Sometime two clauses that are chained together seem to have a special semantic relationship. The subjects of the two clauses are coreferential. The first clause looks just like any ordinary dependent clause and contains the major information about what is actually happening. The second clause follows a formula, using one of the following phrases (although the verb may be in a mood other than that shown in these examples): toc cötiij (there 3IO-RL-sit), toc cötap (there 3IO-RL-stand), toc cotom (there 3IO-RL-lie), toc cötoii (there 3IO-RL-be.FL-PL). This construction is illustrated by examples (198)-(200).

$$
\begin{aligned}
& \text { (198) } \ldots \text { coleequi iteetol toc cötap, yoque. } \\
& \text { upwards 3:3-RL-push there 3IO-RL-stand DT-US-say } \\
& \text { '... estaba allí parado empujando hacia arriba [en el techo de la cueva], se dice.' } \\
& \text {... he was standing there pushing upwards [on the roof of the cave], it is said. } \\
& \text { (Conej_Coyote_17-18) }
\end{aligned}
$$

[^65]```
    (199) Listox theemloj toc cötoii ma, ...
```

        they.were.angry there 3IO-RL-be.FL-Pl DS
        'Estaban enojados, ...'
        They were angry, ... (Dos_Hermanos_4.1)
    (200) Hant z iti tiij, tooizi toc cötiij ma,
        place a 3P-on RL-sit RL-UO-grind there 3IO-RL-sit DS
        \(\perp\) ziix hast iizx ano coom \(\perp\) com mos emiique quih thaa \(x\)
        chuckwalla the.Hz also person the.Fl Rl-EQ UT
        toc cöquiij iha.
        there 3IO-SN-sit DCL
        'Ella estaba sentada en un lugar, estaba moliendo [fruta], la iguana también era
        una persona.'
        She was sitting in a place, she was grinding [fruit], the chuckwalla also was a
        person. (ES2007 acaam_ccaa 13)
    The two clauses are generally spoken in fairly quick succession with a lowered intonation contour on the second clause.

The second clause adds little to the propositional meaning. Notice that the information that the woman was sitting has already been expressed in the first clause of (200).

## 4. Null elements and fused heads

Overt nominals (including pronouns) do not occur in every place that the syntactic structures of the language might suggest they should or could appear. In fact, personal pronouns are only infrequently used in finite clauses, generally with a contrastive focus effect (see chapter 16); and demonstrative pronouns are used most commonly in a focal function (§16.2.4). As is made clear in $\S 17.3 .2$, the inflectional apparatus is quite expressive. When that apparatus is missing - as it is, for example, in the verbless predicate nominal construction with subject-oriented deverbal nouns - an overt pronoun is necessary if the subject is first or second person; see $\S 10.1$ and §10.4.

This chapter explores the situations in which a nominal may be completely non-overt. Null arguments are discussed in $\S 4.1$ and null possessors in $\S 4.2$. Nominals in which the head is expressed by one of the modifiers of the nominal phrase - the so-called fused heads - are discussed in $\S 4.3$. Cases of coreference between null arguments and overt nominals are discussed in $\S 4.4$, and between null arguments and other null arguments in $\S 4.5$.

### 4.1 Null arguments

In example (1), the verb form indicates that three nominals are in play in this clause, which is a complete sentence. The prefix i-tells us that the subject and direct object are both third person (§17.3.2.1), and the prefix cö- tells us that there is a third person indirect or oblique object (§17.3.2.4). The verb stem indicates that the subject is singular (see §17.3.3). Therefore the translation is as given. Obviously, considerable ambiguity arises in the absence of a context, but it is not unconstrained.
(1) Cöimaafc.

3IO-3:3-Px-pound
'Lo/la golpeó con él/ella.'
S/he pounded him/her/it with it. ${ }^{1}$ RMH_08-04-07_190a
The same is true for (2). The finite verb is inflected with the mood marker mi- (§17.3.1.7). The verb stem is plural, so we are sure that the subject is plural. (The singular stem is $\sqrt{\mathbf{a f p}}$.) Non-third person subjects determine overt morphology on a finite intransitive verb, and so the lack of a prefix for subject person means that the verb must be interpreted as having a third person subject.

[^66](2) Miizcam.

Px-arrive.PL
'Llegaron.'
They arrived. RMH_08-04-07_190b
Various nominals may be made explicit. They and the morphology, as well as the context, must be in agreement, although some special situations also arise (see §17.3.3). A plural subject generally requires a verb inflected for plural subject, and a singular subject requires a verb inflected for singular subject. This is shown by the examples in (3)-(6).
(3) Cmajiic coi miizcam. woman.PL the.PL Px-arrive.PL 'Las mujeres llegaron.'
The women arrived. RMH_08-04-07_191a
(5) Cmaam cop miifp.
woman the.Vt Px-arrive
'La mujer llegó.'
The woman arrived. RMH_10-15-07_10
(4) * Cmaam cop miizcam. woman the.VT Px-arrive.PL ('La mujer llegó.') (The woman arrived.)
(6) * Cmajiic coi miifp.
woman.Pl the.PL Px-arrive ('Las mujeres llegaron.') (The women arrived.)

The lack of any case marking on the nominals (since there is no case marking) allows for considerable ambiguity when the predicate subcategorizes for more than one nominal (including the oblique objects). This is shown by examples (7)-(10).
(7) José quij cöimaafc.
the.Cм 3IO-3:3-Px-pound
'José lo/la pegó con él/ella.' o 'Pegó a José con él/ella.'
José hit him/her/it with it. or S/he hit José with it. RMH_08-04-07_191b
(8) Hast zo cöimaafc.
stone a 3IO-3:3-Px-pound
'Pegó una piedra con él/ella.' o 'Lo/la pegó con una piedra.'
S/he hit a stone with it. or S/he hit it/him/her with a stone. RMH_08-04-07_191c
(9) José quij hast zo cöimaafc. the.См stone a 3IO-3:3-Px-pound
'José pegó una piedra con él/ella.' o 'José lo/la pegó con una piedra.' o 'Pegó a José con una piedra.'
José hit a stone with it. or José hit it/her/him with a stone. or S/he hit José with a
stone. RMH_08-04.07_191d
(10) Ctamcö coi cöimaafc.
man-PL the.PL 3IO-3:3-Px-pound
'Pegó a los hombres con él/ella.' (*'Los hombres lo/la pegó con él/ella.')
S/he hit the men with it. ${ }^{2}$ (*The men hit him/her/it/them with it.) RMH_08-04-07_191e
And, of course, all three nominals of a clause with a verb like cöimaafc may be present, although these begin to be more unnatural since typically one distributes the information through successive clauses in order to avoid such a heavy presentation of information. Example (28) from chapter 2 is repeated here as one grammatical example.


There is no way to present the information using only overt personal pronouns with the verb, since the only overt third personal pronoun (ee) is used only for humans (§16.1.4) and even then it is highly marked and rarely used. There is no personal pronoun for an inanimate object. The use of simple demonstrative pronouns for all of the participants of a verb like cöimaafc (s/he pounded him/her/it with it/them) is also very unnatural. The elicited sentences in (12) are attempts to do this using the demonstrative pronouns tiix (DDS) that one and hipiix (DPS) this one (§16.2). The results are judged grammatical, but the sentences are not what one finds in normal discourse at all.
(12) a. Tiix tiix tiix cöimaafc.

DDS DDS DDS 3IO-3:3-Px-pound
'Ése golpeó a ése con ése.'
That one pounded that one with that one.
b. Tiix hipiix hipiix cöimaafc.

DDS DPS DPS 3IO-3:3-Px-pound
'Ése golpeó a éste con éste.'
That one pounded this one with this one.

[^67]c. Hipiix tiix tiix cöimaafc.
DPS DDS DDS 3IO-3:3-Px-pound
'Éste golpeó a ése con ése.'
This one pounded that one with that one. RMH_08-04-07_192

It is quite common for all of the arguments of a verb to not be overtly expressed in the clause, or for only one to be expressed (as a nominal phrase or a pronoun). It is less common for more than one argument to be overtly expressed in a clause. A few examples of well-formed sentences with overt demonstrative pronouns in some functions are given in (13)-(16).


### 4.2 Null possessor

The possessor of a possessed noun may be expressed by an overt nominal, but the absence of an overt nominal does not make the phrase ambiguous for person since the person of the possessor is obligatorily marked on the possessed noun (see §13.1.1).

If the possessor is first or second person, the possessor is commonly not explicit as a separate pronoun unless it is included for contrastive focus (see the examples in §16.1.1 and §16.1.2). Example (17) is a sentence without contrastive focus on any nominal.
(17) Hicoome quih hicaamiz quih iyaasj.

1P-younger.sister.ME the.FL 1P-shirt the.FL 3:3-DT-spread.out.to.dry
'Mi hermana menor extendió mi camisa para que se seque.'
My younger sister spread out my shirt to dry. (DS2010, caas) RMH_08-04-07_194b

On the other hand, if the possessor is third person and the possessed noun is a body part or kinship term, the possessor is most commonly explicit as a nominal phrase unless it is very clear from the context. For that reason, simple phrases that refer to a leaf, a flower, or meat (flesh) parts of a whole - typically have something overt in the possessor position, as shown by examples (18)-(20).
(18) Hehe istj hipcom coosot iha.
plant 3P-leaf Px.Hz SN-narrow DCL
'Esta hoja es estrecha.'
This leaf (lit., this plant's leaf) is narrow. (ALIM 23) RMH_08-04-07_194c
(19) Hehe yapxöt hipquij hehe yapxöt quisil iha. plant 3P-PON-bloom Px-CM plant 3P-PON-bloom SN-small DcL
'Esta flor es una florecita.'
This flower (lit., this plant's blossom) is a small flower. (ALIM 18) RMH_08-04-07_194d
(20) Ziix ipxasi hipquih caaitic iha.
thing 3P-flesh Px-FL SN-soft DcL
'Esta carne es blanda.'
This meat (lit., this thing's flesh) is soft. (HE 52) RMH_08-04007_194e
One situation in which the possessor is not commonly (if ever) expressed is when the subject is coreferent with the possessor of the immediately following nominal phrase. Consider examples (21)-(22):
(21) [Juan quij] [ata quij] iihax caaitom iha.
the.Cm 3P-mother the.Cm 3P-with.SG SN-speak DCL
a. 'Juan está hablando con su madre.' Juan $_{i}$ is speaking with his ${ }_{i}$ mother. RMH_08-04-07_194f
b. (*Juan ${ }_{i}$ is speaking with his ${ }_{j} /$ her mother.)
c. (*S/he is speaking with Juan's mother.)
(22) [Quisiii ${ }^{\circ}$ เanxö haa」 cop ] [ai quij] cötafp, child injured the.VT 3P-father.ME the.CM 3IO-RL-arrive
a. 'El niño herido vino a su padre, ...'

The injured boy came to his $_{i}$ father, ... RMH_08-04-07_195a
b. (*The injured boy ${ }_{i}$ came to his ${ }_{j}$ father, ...)
c. (*S/he came to the injured boy's father, ...)

A priori, these sentences should be ambiguous. One would expect sentence (21) to also have the interpretation S/he is speaking with Juan's mother (with a null subject), and sentence (22)
should also have the interpretation $S /$ he came to the boy's father (with a null subject). But these interpretations are not possible. The structure corresponding to this unattested reading of (21) is represented structurally in (23).


In order to obtain this reading, a pronoun such as tiix that one must be put into the subject position, as in (24), or the article quih must be used after Juan instead of quij, as in (25), to demonstrate the fact that it is embedded as possessor. ${ }^{4}$
(24) Tiix Juan quij ata quij iihax caaitom iha. DDS the.CM 3P-mother the.CM 3P-with.SG SN-speak DCL 'Aquél/aquélla está hablando con la madre de Juan.'
That one is talking with Juan's mother. RMH_08-04-07_195b
(25) Juan quih ata quij iihax caaitom iha. the.FL 3P-mother the.Cm 3P-with.SG SN-speak DCL
'Está hablando con la madre de Juan.'
S/he is talking with Juan's mother. RMH_08-04-07_195c
The permitted interpretation of (21) is represented structurally in (26), where the subject and the (implicit) possessor are taken as coreferential.
(26) [Juan quij $]_{D P} \quad\left[[\varnothing]_{D P} \text { ata quij }\right]_{D P} \quad[$ iihax caaitom iha $]$

The subject and possessor are taken as coreferential even if the subject is right dislocated.
(27) Ata quij iihax caaitom iha, Juan quij.
3P-mother the.Cm 3P-with.SG SN-speak DCL the.CM
'Juan ${ }_{\mathrm{i}}$ está hablando con $\mathrm{su}_{\mathrm{i},{ }^{,} \mathrm{j}}$ madre.'
Juan $_{i}$ is talking with his ${ }_{i,{ }^{*},}$ mother. RMH_08-04-07_196a
In order to obtain the reading (21b), a pronoun such as tiix that one must appear in the possessor position.

| Juan quij | tiix | ata | quij | iihax | caaitom iha. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| the.Cm | DDS 3P-mother | the.CM | 3P-with.SG | SN-speak DCL |  |

If the possessed noun requires a feminine possessor, as is the case with iiquet her child (etymologically related to the verb $\sqrt{ }$ iiquet be pregnant with), the use of a noun with a masculine

[^68]referent as possessor is not possible, thus precluding certain interpretations. See example (29). (Even the allowed interpretation here is not easily obtained - and may in fact be impossible for some speakers - since the juxtaposition of a male-reference nominal followed by iiquet is so unusual. ${ }^{5}$ )
(29) Juan quij iiquet ${ }^{\circ}$ com $\llcorner$ hant cöquiiis $\lrcorner$ iha. the.Cm her.child the.Hz land 3IO-SN-Tr-? Dcl
a. 'Juan está cuidando al hijo / a la hija de ella.'

Juan is taking care of her daughter. RMH_08-04-07_196c
b. (*Juan está cuidando a su hijo/hija.) (*Juan is taking care of his child.)

This shows that there is a very strong disposition to interpret a sequence of DP $\mathrm{N}_{\text {Poss }}$ as possessor and possessed, suggesting that the structure with a non-overt possessor, as shown in (30), must have the intepretation shown except under very special conditions.
(30) $\mathrm{DP}_{\mathrm{a}} \quad\left[\left[\emptyset_{\mathrm{b}}\right] \mathrm{DP}_{\text {poss }}\right] \quad \mathrm{a}=\mathrm{b}$

These strong expectations or constraints may be overridden if other factors (not adequately explored as yet) come into play. In example (31), the expectation expressed in (30) is presumably overridden by the pragmatic consideration that one does not normally take hold of one's own hand.
(31) Pedro cop $\quad\left[\begin{array}{lll}\text { the.VT }\end{array} \quad \begin{array}{ll}\text { inol } & \text { cop }] \\ \text { 3P-hand }\end{array}\right.$ iyipjc.
'Pedró le tomó la mano.'
Pedro took his/her hand. RMH_08-04-07_197
The complement of a P-element, structurally a possessor, may also be explicit or implicit. An example with an implicit complement of the P-element iti (as well as with an implicit subject and an implicit direct object) is given in (32).
(32) Iti iyooquim.

3P-on 3:3-Dt-put.items
'Los puso en él/ella.'
S/he put them on it. RMH_08-13-07_07b
These facts are discussed in detail in chapter 22.

### 4.3 Nominals with fused heads

In addition to the simple cases above, such as (1), where no overt nominal appears in the clause

[^69]to correspond to the arguments of the verb, there are many cases of nominals in which the modifiers of the head appear but the head itself is not an overt noun. While these could be analyzed as simple null heads, the presentation here assumes that the head and one of the modifiers fuse together to form a fused head. ${ }^{6}$ This is illustrated graphically for two simple examples, described in detail below, in Figures 4.1-2.

Most of the different kinds of elements that occur in the noun phrase may fuse with the head: indefinite articles (§4.3.1), demonstrative adjectives (§4.3.2), adjectives (§4.3.3), deverbal nouns as heads of relative clauses (§4.3.4), and the intensifier hapi ( $\sim$ hipi) (§4.3.5). The definite articles do not fuse with the head, however, nor does the head noun of a modifying noun phrase (§8.2.1), as examples (33) and (34) illustrate.
(33) * [Quij ] ihscmexl aha.
the.Cm 1SGS.Tr-Ir.Id-N-buy Aux-Dcl
('No lo/la tomaré/compraré.) (I won't take/buy the one.)
Figure 4.1: Demonstrative adjective

as fused head, example (41) $\quad$| Figure 4.2: Adjective as fused head, |
| :---: |
| example (49) |

[^70]| (34) | * [ Hateeya ] | ano | hpsoosi |  |
| :---: | :---: | :---: | :---: | :---: |
|  | glass | 3P.in/from | 1SGS.In |  |

Furthermore, the direct equivalents to the one on the table and the ones in the sea do not exist. These lacunae do not seem to follow from any other fact since PPs do in fact modify nominals (see $\S 8.2 .1$ ). (The comparable grammatical expressions are the one that is sitting/standing/lying on the table and the ones living in the sea.)

### 4.3.1 Fusion of indefinite articles and head

The indefinite articles zo and pac (§21.1) may be both the determiner and the head of the nominal phrase, in a fused head construction. In a more traditional presentation they would be considered pronouns as well as indefinite articles. ${ }^{7}$

Examples of zo as a fused head are given in (35)-(38).
(35) $\underline{Z}$ _oc cotom ma, itipje, ... a/one there 3IO-RL-lie DS 3:3-RL-grab 'Capturó uno de ellos, ...' One of them was there, he grabbed him ... (Conejo_Puma_5.1)
(36) Zo cöitámlajc ma, ... a/one 3IO-3:3-RL-take/bring.PL DS
'Le trajeron uno ...'
They brought him one, ... (NTT, Mk 12:16) Op_2-2-07_115
(37) Zo hyonyaa.
a/one 1SGS.Tr-Dt-N-own 'No tengo ninguno.'
I don't have any. (Overheard) Op_2-2-07_116
(38) $\underline{Z} \quad$ iyonyaa.
a/one 3:3-DT-N-own
'No tiene ninguno.' op_2-2-07_117
S/he doesn't have any. (Overheard)

The article pac as fused head is ambiguous for plurality, just as it is in its use with overt heads (see §21.1). It may mean some (of a group of individuals), as in (39).


It may also mean some (of a mass entity), as in (40), where it could be referring to milk, for example.

[^71](40) Pac he camje.
some 1IO Im-take/bring
'Tráeme algunos / alguna porción.'
Bring some to me! [ambiguous] (overheard) RMH_08-04-07_198
See $\S 8.5$ for examples of the fused-head determiners in the partitive construction.

### 4.3.2 Fusion of demonstrative adjectives and heads

The demonstrative adjectives (§21.3) also may be fused with the head of the nominal phrase. In a more traditional presentation they would be considered pronouns as well as adjectives. The demonstratives as fused heads have primarily exophoric uses, as illustrated in(41)-(45).

¿¿Es éste? ¿O es aquél?’
Is it this one? Or is it that one? (DS2010,x) OP_2-2-07_109
(42) Ticom ihyoqueepe.
(43) Tiquii he hoyacj iha.

Md-Hz 1SGS.Tr-Dt-like Md-Cm 1Pro 1P-ON-call.sibling DCL
'Me gusta ése.' 'Ése es mi hermano/a.' op_2-2-07_113
I like that one. (DS2010, ticom) OP_2-2-07_110 That one is my brother/sister. (DS2010, tiqui)
(44) ijTicop haa -ya nsexl
tee?!
Md-Vt Aux QM 2SGS-Ir.Id-buy Rhet
‘ i poco vas a comprar ése!’
You aren't going to buy that one, are you?! (DS2010, tee) OP_2-2-07_112
(45) iMohat! $\quad$ Hizac iti cazcam!

Twd-Im-move-Pl Px-LC 3P-on Im-arrive.Pl
‘¡Vengan! ¡Vengan aquí!’
Come (pl.)! Come (pl.) here! RмH_07-11-07_35b
However, the medial set of demonstratives (those beginning with ti-, see Table 21.2 in chapter 21) are also sometimes used anaphorically, as in (46).

## Examples of anaphoric use

(46) Ticop $z \quad$ itaazi,

Md-Vt one 3:3-RL-carry

'Ésa llevó a uno (de los hermanos), y la otra llevó a uno, ...'
That one took one (of the brothers), the other took one, ... (Dos_Hermanos_50-51)

### 4.3.3 Fusion of adjective and head

The class of adjectives is quite small (see chapter 23) and only three adjectives may fuse with the head: cöhaisx injured (by hunting weapon), ihmaa other, and tazo one. Three examples are given in (47)-(49). (See also the discussion in chapter 23.)
(47) iCöhaisx tintica iiqui hpancojc! injured MD-Aw 3P-toward Im-run-PL
'iCorre tras el que está herido!'
Run after the injured one! (Offered) RMH_08-04-07_200a
(48) Ihmaa zo haa tiij ma,
other a there RL-sit DS
‘Otro estaba allí, ...'
Another one was there, ... (NTT, Mt 25:15) RMH_08-04-07_200b
(49) Tazo ipi haa poop,
one Intns there Ir.Dp-stand
'Ninguno está allí ...'
Not one is there, ... (NTT, Jn 8:11) RMH_08-04-07_200c

### 4.3.4 Fusion of deverbal noun with head

A deverbal noun, representing the verb of a relative clause, may fuse with the head of a nominal phrase. (For a general description of relative clauses modifying overt heads, see §8.4.) This is illustrated by examples (50)-(53).

| (50) | [ $\underline{\text { czaxö }}$ cop ] (51) | [ caacoi cop] |
| :---: | :---: | :---: |
|  | SN-Tr-discuss the. $\mathrm{VT}^{\text {d }}$ | SN-big the.Vт |
|  | 'el/la que le(s) habla/hablaba' | 'el/la que es/era grande' |
|  | the one who is/was talking to him/her/them | the big one |
| (52) |  | itamje x , |
|  | then SN-Tr.-look.for Md-Aw | 3:3-RL-take/bring UT |
|  | hax cop an itaquim $\mathbf{x}$, |  |
|  | water the.VT 3P.in 3:3-RL-put.items UT |  |
|  | 'Entonces el/la que lo busca lo trae, los mete en | n agua, ...' RMH_08-04-07_200d |
|  | Then the one who looks for it brings it, puts them | m in water, ... (ES2007 an_icooquim 02) |
| (53) | [ Cooil quij] insexl haa | -ya? |
|  | SN-blue/green the.Cm 2SGS-Ir.ID-buy Aux |  |
|  | '¿Comprarás el/la azul?' |  |
|  | Will you buy the blue one? RMH_07-11-07_11b |  |

In (54) the first nominal has a fused head that is an irregular form of the stative predicate
meaning 'mature' that is used instead of the regular deverbal noun.

$$
\begin{array}{clllll}
\text { (54) } & \ldots & {\left[\begin{array}{ll}
\text { caii } & \text { quij }]
\end{array}\left[\begin{array}{l}
\text { quixt }
\end{array} \quad \text { coi }\right]\right.} & \begin{array}{l}
\text { cöihooctam }
\end{array} \quad \text { hac }
\end{array} \ldots
$$

### 4.3.5 Fusion of intensifier hapi with head

Of the various adverbs that may modify a nominal phrase (see chapter 24), only the intensifier hapi (dialectal variant, hipi) may fuse with the head. The referent must be deduced from the context, of course; it may be first or second person only if the nominal with hapi is crossreferenced on a verb or noun with first or second person inflection. See examples (55)-(60).

| (55) | Hapi siitax caha. | (56) | ¡Hapi toc cösiij! |
| :---: | :---: | :---: | :---: |
|  | Intns Ir.Id-go Aux.SN-Dcl |  | Intns there 3IO-Ir.Id- |
|  | 'ÉL/ELLA irá.' (*Yo iré. *Tú irás.) |  | 'DÉJALO allí.' |
|  | S/HE will go. (*I/you will go.) |  | Leave it ALONE there! (DS |
| (57) | Hapi nsiitom aha. |  |  |
|  | Intns 2SGS-Ir.ID-speak Aux-Dcl |  |  |
|  | 'TÚ debes hablar.' |  |  |
|  | YOU should talk. RMH_08-04-07_201c |  |  |
| (58) | Hapi masooza aha. |  |  |
|  | Intns 2PlS-Ir.Id-speak.Pl Aux-Dcl 'Ustedes deben hablar.' |  |  |
|  | YOU (pl.) should talk! RMH_08-04-07_201d |  |  |
| (59) | hapi ito quij | (60) | hapi mito quij |
|  | Intns 3P-eye the.Cm |  | Intns 3P-eye the.Cm |
|  | 'SU ojo' |  | 'TU ojo' |
|  | HIS/HER eye RMH_08-04-07_201e |  | YOUR eye RMH_08-04-07_2017 |

### 4.4 Null pronouns and overt nominal coreference

An explicit nominal most typically appears early in a context, with coreferential pronouns including non-overt pronouns - following it. This is true for simple sentences (§4.4.1) as well as for multiclausal sentences (§4.4.2).

### 4.4.1 Monoclausal situations

A null pronoun may be coreferential with an overt nominal phrase in the same clause under certain conditions. The most common case of this is when the subject and a possessor in the clause are coreferential as in (61). (See the discussion above in $\S 4.2$ for additional details.) This
is possible whether or not the subject actually precedes the null possessor, as in (21)-(22) above and (61) below, or not, as in (62)-(64). (See $\S 3.12$ for discussion of right-dislocated nominals.)
(61) Juan quij [ $\emptyset$ itaamt coi] iyooho. the.CM 3P-sandal(s) the.PL 3:3-Dт-see
'Juan encontró sus huaraches.'
Juan $_{i}$ found his ${ }_{i}$ sandals. ${ }^{8}$ RMH_08-04-07_202a
(62) [ $\varnothing$ Itaamt coi $]$ iyooho, Juan quij. 3P-sandal(s) the.PL 3:3-DT-see the.CM
'Juan encontró sus huaraches.'
Juan $_{i}$ found his ${ }_{i}$ sandals. RMH_08-04-07_202b
(63) $\left[\begin{array}{lll}\varnothing & \text { Ata quij }] \text { hant } z \text { iiqui miin, Juan quij. }\end{array}\right.$ 3P-mother the.CM place a 3P-toward Px-go the.CM
'La madre de Juan fue a otro lugar.'
Juan's mother went somewhere. RMH_08-04-07_202C
(64) $\left[\begin{array}{lll}\varnothing & \text { Ata quij }] \quad \text { coop iha, Juan quij. }\end{array}\right.$ 3P-mother the.CM SN-UO-sew.basket DCL the.CM
'La madre de Juan está haciendo una canasta.'
Juan's mother is making a basket. RMH_08-04-07_202d
A null possessor cannot be otherwise coreferential with an overt, non-dislocated nominal phrase or pronoun, as shown in (65).
(65) $\quad\left[\begin{array}{lll}\varnothing & \text { Ata } \quad q u i j] ~ J u a n ~ q u i j ~ i y o o h o . ~\end{array}\right.$ 3P-mother the.Cм the.См 3:3-Dт-see
'Su madre vio a Juan.' (*La madre de Juan ${ }_{i} \mathrm{lo}_{i}$ vio.)
His/her mother saw John. (*John 's mother saw him $_{i}$.) RMH_08-04-07_202e
Subject-object coreference requires a reflexive construction. Since these are discussed in detail in §11.2), the facts are not presented here.

### 4.4.2 Multiclausal situations

The most natural presentation in a multiclausal sentence is for an overt nominal to appear earlier in the sentence than any coreferential null pronouns, as in (66). (In these examples, irrelevant null pronouns are not represented.)

[^72](66) Pedro $_{i}$ cop inol cop itipjc, $\emptyset_{i}$ imafitot. the.VT 3P-hand the.VT 3:3-RL-grab 3:3-PX-help.stand
'Pedro le tomó la mano, le ayudó ponerse de pie.'
Pedro took her hand, he helped her stand up. (NTT, Ac 9:41) RMH_08-04-07_203a
The question arises whether something analogous to the English sentence After she finished dinner, Mary went to the movies is possible, with a null pronoun in the first (dependent) clause and an overt, coreferential nominal in the second, independent clause. Such examples have not been found in common texts nor have they been overheard in conversation. ${ }^{9}$ Given the amount of textual material that has been examined, this is not an insignificant fact. Nevertheless, constructed example (67) was judged grammatical, albeit unnatural, by some speakers, but in fact the alternative readings make the positive judgments somewhat suspect for the intended reading (a).
(67) $?^{*} \emptyset_{i}$ Inol cop itipjc, Pedro $_{i}$ cop imafitot. 3P-hand the.VT 3:3-RL-grab the.VT 3:3-Px-help.stand
Problematic reading: ‘Tomándole la mano, Pedro le ayudó ponerse de pie.'
Taking his/her hand, Pedro helped him/her stand up.
More possible reading: 'Tomándole la mano, le ayudó a Pedro ponerse de pie.'
Taking his hand, s/he helped Pedro stand up. RMH_08-04-07_203b
Similar judgments were given for the pairs of sentences in (68)-(73). The examples are very natural when the antecedent precedes the null pronoun but very unnatural or ungrammatical when the antecedent follows the null pronoun.
(68) $\mathrm{Juan}_{\mathrm{i}}$ quih tafp, $\emptyset_{\mathrm{i}}$ zixcám $^{\circ} \mathbf{z}$ iyoohit. the.Fl RL-arrive fish a 3:3-Dт-eat
'Juan llegó y comió un pescado.'
John arrived and ate a fish. RMH_08-04-07_203C
(69) ?* $\emptyset_{\mathrm{i}}$ Tafp, Juan quih zixcám $^{\circ} \mathbf{z}$ iyoohit. RL-arrive the.FL fish a 3:3-DT-eat
'Después de llegar, Juan comió un pescado.'
After arriving, John ate a fish. RMH_08-04-07_203d
${ }^{9}$ However, one example is found in the explanation of basket-making text, a text that may have been adapted for use as this literacy booklet that had step-by-step explanations.

## (i) Itaxi, cmaam quij izquipót coi imazeee.

3:3-RL-finish woman the.CM inferior.material the.PL 3:3-PX-make.coil.filler
'Cuando termina, la mujer hace relleno del material inferior. RMH_08-13-07_38c
When she $e_{i}$ finishes it, the woman $n_{i}$ makes coil-filler from the inferior quality splint material. (Canasta 15)
A consultant in 2007 did not like this word order, in fact, and explicitly suggested moving the subject to the beginning of the sentence.
(70) Cói ${ }^{10}$ Juan quih thacx ipi tommiih」, $\emptyset_{i}$ oeen ${ }^{\circ}$ co

| yet | the.FL | s/he.had.not.died.yet | his.children the.PL |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |
| iquiisax | quih | quiipe | quih | oo | cöiyooh. |

'Antes de morir, Juan bendijo a sus hijos/hijas.'
Before dying, John blessed his children. Rмн_08-04-07_203е
(71) ? Cói $\varnothing_{i}$ เhacx ipi tommiih $\lrcorner$, Juan quih oeen ${ }^{\circ}$ coi yet s/he.had.not.died.yet the.Fl his.children the.PL iquiisax ${ }^{\circ}$ quih quiipe quih oo cöiyooh. spirit the.FL SN-good the.Fl DL 3IO-3:3-Dt-say/do

Problematic reading: ${ }^{11}$
'Antes de morir, Juan bendijo a sus hijos/hijas.'
Before dying, John blessed his children. RMH_08-04-07_205
(72) $\operatorname{Ctam}_{\mathrm{i}}$ ticop taaitom, $\emptyset_{\mathrm{i}}$ ox yee: man Md-Vt RL-speak thus Dt-say
'Ese hombre habló, y dijo: ...'
That man spoke and said: ... (NTt, мk 15:36) RMH_08-04-07_206a
(73) ? $\emptyset_{i}$ Taaitom, ctam $_{i}$ ticop ox yee: ${ }^{12}$

RL-speak man Md-Vt thus Dt-say
'Hablando, ese hombre dijo: ...'
Speaking, that man said: ... RMH_08-04-07_206b
In all of the examples in (68)-(73), the two clauses have been presented in the typical Dependent - Independent order (see chapter 3). The judgments become a bit sharper when the preceding patterns are examined with postposed clauses (§3.7). The options are ranked in the order of naturalness and acceptability in (74), from most acceptable to least acceptable. It is notable that when the antecedent follows the null pronoun and at the same time occurs in a dependent clause, the acceptability is much lower. ${ }^{13}$
${ }^{10}$ The adverb cói may also occur naturally after the phrase Juan quih. RMH_08-04-07_204
${ }^{11}$ René Montaño Herrera pointed out a very felicitous reading for this example that in fact avoids the syntactic problem: Before dying, s/he blessed John's children.
${ }^{12}$ If this example is grammatical, it is very unusual nonetheless. No example like it occurs in any text (so far as I know), although sentences beginning with the word taaitom are very common in the NTT.
${ }^{13}$ This is a familiar array of facts, of course, and not unlike English.


### 4.5 Coreference between null pronouns

In normal discourse, coreference commonly and naturally involves null pronouns. When the referent is not required to be first or second person because of cross-referencing morphology, considerable ambiguity may result. The ambiguity is diminished severely, of course, in the case of subjects in chained clauses because of Different Subject marking or the lack of it (see §3.6). For example, in a sentence like (75) the subject of toii they were is obligatorily the same as the subject of imiiitoj they ate it because there is no Different Subject marking at the end of the clause with toii. The subject of toii cannot be some other people nor even the "that stuff" that is the direct object of the clause with imiiitoj.


When the clause has an overt subordinator or coordinator, Different Subject marking is not possible (see $\S 3.6 .1$ and chapter 25 ). In such a situation, interpretation is guided by pragmatics and not by syntactic or mophological factors. Examples (76)-(77), with overt subordinator and coordinator (and hence no Different Subject marking), respectively, illustrate this. The subjects of the pairs of clauses are understood to be coreferential because of the context and not because of any grammatical constraint.

[^73](76) Ø Anxö toohit xox, $\quad$ xiteejöc. IntNS RL-UO-eat although Em-thin
'Aunque come mucho, es flaco/a.'
Although s/he eats a lot, s/he is thin. (DS2010, xox) RMH_08-04-07_207a
(77) $\quad$ Misil $\quad$ xo $\varnothing$ maziim. Px-small but Px-pleasant
'Es pequeño pero bonito.'
It is small but it is pretty. (DS2010, x0) RMH_07-11-07_36c
Pragmatics also guides the interpretation of null pronouns when they are non-subjects. In examples (78)-(80) the null pronoun is likely to be interpreted as coreferential with the underscored nominal in the preceding clause, but nothing in the grammar requires this.
(78) An iquitzil $\perp$ pac me hyaamx tax, cmaax Øihmiimjc.
pants some 2 IO 1SGS.Tr-Dt-say+IO Sbrd now 1SGS.Tr-Px-take/bring
'Te prometí pantalones y los he traído.'
I promised you pants and now I have brought them. (DS2010, tax) RMH_08-04-07_2076
(79) Juan quih poofp ta $x$, $\quad \varnothing$ hax cöhaas! the.Fl Ir.Dp-arrive DS UT water 3IO-Im-cause.drink
'Si Juan viene, dale agua a tomar.'
If Juan comes, give him/her water to drink! RMH_08-04-07_208a
(80) Ihptaalim, hamt ihtahojöz, [ Ø iti] hpyiij.

1SGS.In-Rl-play dirt 1SGS.Tr-RL-cause.mounded 3P-on 1SGS.In-Dt-sit
'Cuando yo jugaba, hice una loma en la arena y me senté en ella.'
When I was playing, I made a hill in the sand and sat on it. (DS2010, cahojoz) RMH_08-04-07_208b

## 5. Verb phrase

This chapter discusses the verb phrase, which is the phrase that dominated by a verb that follows the nominal phrases in the clause, whether those nominal phrases are adjuncts or arguments. Part of the goal of this chapter is to present details about this constituent. Evidence that the direct object phrase combines with the verb to form a phrase has not been found, but it seems clear that the verb is part of a phrase that includes several words that precede it and even some that follow it.

The verb phrase may consist of a simple inflected verb, as in examples (1)-(2).

| (1) | Subject | Verb Phrase |  |
| :---: | :---: | :---: | :---: |
|  | 3P-pensinsula the.FL RL-tall/long |  |  |
|  |  |  |  |
|  | The peninsula is long, ... (Muerte_Cöquimaxp_32.1) |  |  |
| (2) |  | Direct Object | Verb Phrase |
|  | \&Ox tpacta ma」, | xepe timoca | imaait. |
|  | then | sea Md-Twd | 3:3-Px-pass.by.PL |
|  | 'Entonces estaban cruzando el mar.' |  |  |
|  | Then they were cro | ssing the sea. (mu | C_Cöquimax_19) |

But in many cases, one, two or a few words may precede the verb after the last nominal phrase of the clause. These words include adverbs (§5.1), the reflexive pronouns (§5.2), the reciprocal marker (§5.3), a few simple nouns (§§5.4-5.5), locative pronouns and adverbs (§5.6), and all of the so-called P-elements (§5.7).

One simple example of a verb phrase is given in (3).


A more complicated verb phrase appears in (4); it includes four words in front of the inflected verb.

Verb

$$
\begin{aligned}
& \ldots, \frac{\text { hoox anxö toii }}{\text { InTNS INTNS elsewhere }} \frac{\text { hant cöhascomjcooil」 }}{\text { land } 1 \text { PLS-Ir.Id-N-fall-PL }} \text { AUX-DCL }
\end{aligned} \text { aha. }
$$

In the following sections, each type of word that may occur in the verb phrase before the verb is discussed separately, and then the interaction between them is presented.

While the most complicated issues center around the words preceding the verb, a few words may also follow it. Some of these words are adverbs; they are discussed in §24.5. In independent clauses, auxiliary and modal elements (chapter 20) follow the verb and are presumably part of the verb phrase. In dependent clauses the extremely important Different Subject markers (§3.6.1) and the ubiquitous $\mathbf{x}$ (§3.6.3) also follow the verb (in that order), at the very end of the clause. As these elements cliticize to whatever precedes them, which is commonly the verb, it is assumed that they are also part of the verb phrase. They are not separated from the verb when something is right-dislocated (§3.12).

### 5.1 Adverbs

The first optional position in the verb phrase is occupied by an adverb phrase, which most commonly consists of a simple adverb (see §24.4). The adverbs listed in Table 5.1 are typical of this position; that list is not exhaustive. Any other position for them in the verb phrase is either not possible or is highly marked. These adverbs all carry a moderate degree of stress and some may in fact be emphasized with stronger stress.

Some adverbs (not listed in Table 5.1) easily occur in other places as well as in this position; these include cói still, haptco already, mos also (see chapter 24).

The intensifying adverb anxö is a benchmark word in that it only occurs at the beginning of the VP (perhaps modified by an intensifier itself, as in (4) above). ${ }^{1}$ The position of this adverb and other adverbs of its class is important for much of the argumentation that follows in this chapter.

Examples (5)-(7) demonstrate that the adverb anxö intensifier can only appear in preverbal position.

[^74]| Table 5.1: |  | Adverbs in VP-initial position |
| :--- | :--- | :--- |
| anxö | INTENSIFIER | $\S 24.4 .1 .6$ |
| cooc | almost | $\S 24.4 .4$ |
| halx | just, ATTENUATOR | $\S 24.4 .1 .3$ |
| hax | INTENSIFIER | $\S 24.4 .1 .1$ |
| miizj | well | $\S 24.4 .4$ |
| mos áno | extremely, even more | $\S 24.4 .1 .5$ |
| ox | thus | $\S 24.4 .4$ |
| zó | how? | $\S 6.2 .1 .6$ |
|  |  |  |

$\qquad$
Cmaam tiquij cocazni ${ }^{\circ}$ quih anxö iyiixim. woman Md-CM rattlesnake the.Fl Intns 3:3-Dt-fear
'Esa mujer teme mucho a las víboras de cascabel.'
That woman is really afraid of rattlesnakes. RMH_11-27-07_03
b. * Anxö emaam tiquij cocazni quih iyiixim.
c. $\quad$ Cmaam tiquij anxö cocazni quih iyiixim.
d. * Cmaam tiquij cocazni quih iyiixim anxö.
(6) a. Cmoqueept com anxö itahiipet ma,... SN-sick-Pl the.Hz Intns 3:3-Rl-repair SR
b. * Anxö cmoqueept com itahiipet ma, ... ${ }^{2}$
c. * Cmoqueept com itahiipet anxö ma,...
'Porque había sanado a tantos enfermos, ...'
Because he had healed so many sick people, ... (NTT, мk 3:10) OP_2-07-07_43
(7) a. Hast quij anxö imaafc. stone the.CM InTNS 3:3-PX-pound
b. * Anxö hast quij imaafc.
c. * Hast quij imaafc anxö.
'Lo golpeó fuertemente con la piedra.' o 'Golpeó fuertemente a la piedra con él/ella.'
S/he hit it hard with the stone. or S/he hit the stone hard with it. RMH_08-04-07_211a
Examples (8)-(12) illustrate that the other adverbs in Table 5.1 are similarly restricted in

[^75]their position in the clause.
(8) a. ..., xiica tacoi halx imiiix; thing-Pl Md-Pl Atten 3:3-Px-go.away.from
b. * ..., halx xiica tacoi imiiix.
c. * ..., xiica tacoi imiiix halx.
‘..., se apartó de ellos un poco de tiempo; ...'
..., he went away from them a little while; ... (NTT, Lk 22:41) RMH_08-04-07_211c
(9) a. LIsax iizc」com hax mooxp oo. ${ }^{3}$
its.breast the.Hz Intns Px-white DL
b. * Hax iisax iizc com mooxp 00.
c. * Iisax iizc com mooxp oo hax.
d. * Iisax iizc com mooxp hax 00.
'Su pechuga es muy blanca.'
Its breast is very white. (ES2007, acaam_ccaa 03)
(10) a. ..., cocsar quih miizi hin yaaipot.

Mexican the.Fl well 1SGDO Dt-pay
b. * Cocsar quih hin yaaipot miizi.
c. * Miizi cocsar quih hin yaaipot.
'.. , el mexicano no indígena me pagó bien.'
..., the non-Indian Mexican paid me well. (DS2010, capo) RMH_08-13-07_49
(11) a. ..., цxiica quih quiistox $\lrcorner$ coi $\lfloor\underline{\text { mos áno }\lrcorner ~ t e e n z i l, ~ . . . ~}$ people the.Pl superior.degree RL-UO-yell.at-PL
b. *..., ᄂ mos áno $\perp$ xiica quih quiistox coi teenzil, ...
c. * ..., xiica quih quiistox coi teenzil $\llcorner\underline{\text { mos áno }}\lrcorner$, ...
‘..., las personas gritaban aún más, ...'
... the people shouted even more, ... (NTt, Mk 15:14) RMH_08-04-07_212
(12) a. Comcaac coi ox mooza. person/Seri-Pl the.PL thus Px-speak-PL
b. * Ox comcaac coi mooza.
c. ${ }^{\text {Comeaac coi mooza ox. }}$
'Así dicen los seris.'
Thus say the Seris. (Overheard) RMH_08-04-07_213

[^76]The adverb cooc almost of this group is typically in preverbal position, as shown in (13), although it may have a different location and a different scope, as shown in (14).
(13) a. Hap ticap cooc cohtatni hi. mule.deer Md-Vt almost 3IO-1SGS.Tr-RL-make.contact DCL
b. * Hap ticap cohtatni hi cooc.
c. * Hap ticap cohtatni cooc ihi.
'CASI le pegué al venado bura con mi tiro.'
I ALMOST got that mule deer with my shot. (DS2010, cooc) RMH_08-04-07_211b

## (14) Cooc hap ticap cohtatni hi.

almost mule.deer Md-Vt 3IO-1SGS.Tr-Rl-make.contact DCL 'Casi al VENADO BURA pegué con mi tiro.'
I almost shot the MULE DEER. [contrastive focus on the animal] RMH_11-27-07_04

### 5.2 Reflexive pronouns

The reflexive pronouns are obviously etymologically related to the possessed noun for body; see §11.2.1. Unlike the ordinary nominal phrases, including other pronouns, however, the reflexive pronouns obligatorily occur in the verb phrase. This fact is not immediately obvious since they occur between the subject and the verb where one would expect them to appear if their syntax were determined in the same way as arguments. They are ungrammatical in other positions, as shown in (15).
(15) a. Juan quih isoj iyamsisiin. the.FL 3P-self 3:3-Dт-love
b. * Isoj Juan quih iyamsisiin.
c. * Juan quih iyamsisiin isoj.
'Juan se ama.'
Juan loves himself. RMH_11-20-07_120
Evidence for the claim that the reflexive pronoun is in the verb phrase includes the fact that the reflexive pronoun must follow the intensifier anxö (§5.1), which is a VP-initial adverb. This is demonstrated by (16).
(16) a. Juan quih anxö isoi iyamsisiin.
the.FL Intns 3P-self 3:3-DT-love
b. * Juan quih isoi anxö iyamsisiin.
'Juan se ama mucho.'
Juan loves himself a lot. RMH_11-20-07_121

Like the location nouns discussed in $\S 5.4$ below, the reflexive pronouns do not occur with a determiner, despite their etymology; see $\S 11.2 .1$. They also do not have the option of appearing anywhere else in the sentence, unlike object nominal phrases (see $\S 3.12$ ). This is illustrated by (15) above and (17).
(17) a. Hisoi ihyaactim. 1P-self 1SGS.Tr-DT-cause.be.cut
b. * Ihyaactim, hisoj.
'Me corté.'
I cut myself. RMH_08-04-07_214a
The reflexive pronouns are not prefixes on the verb, unlike the object inflection morphemes. The reflexive pronouns do not simply occupy the direct object inflection position in the verb. At first glance it may seem that they do occupy that position. First, the reflexive pronouns in some sense displace the direct object inflection prefixes him (1SGDO), ma (2SGDO), hizi (1PLDO) and mazi (2PLDO) ( $\S 17.3 .2 .3$ ); they do not co-occur with them. ${ }^{4}$ Second, the reflexive pronouns occur before the subject inflection prefixes, just as do the direct object inflection prefixes, as shown in (18).
(18) ¿Anxö misoi intaactim?

IntNS 2P-self 2SGS-RL-cause.be.cut
‘¿Te cortaste mucho?’
Did you cut yourself a lot? LHс_2-05-07_135
However, while the direct object inflection prefixes never co-occur with the $3: 3$ prefix indicating third person acting on third person (§17.3.2.1), the third person reflexive does cooccur with it, as in (19).

```
..., isoj itahiix,
    3P-self 3:3-RL-cause.be.inflated
    `... se infló ...'
    ... it inflated itself ... (DS2010, cahiix) RMH_08-04-07_214b
```

The reflexive pronouns also occur before the indirect/oblique object inflection prefix co(§17.3.2.4), as shown in (20). This clearly distinguishes them from the direct object inflection prefixes since the latter always merge morphologically with the indirect/oblique object inflecttion (see §17.3.2.5).

[^77]| (20) | ¿Zixcám ${ }^{\circ}$ ticom | $\underline{\text { misoj }}$ | consaahal? | haa -ya? |
| :---: | :---: | :---: | :---: | :---: |
|  | fish Md-Hz | 2P-self | 3IO-2SGS-Ir.ID-bring/take | Aux QM |
|  | '¿Llevarás ese pescado contigo?' |  |  |  |
|  | Are you going to ta | ke that | sh with you? RMH_11-27-07_05 |  |

The adverb cói still, which typically occurs with the postpositional delimiting adverb ipi (see $\S 24.3 .11$ ), puts the delimiter ipi between the possessed noun and the verb, as in (21). This provides additional evidence for the non-prefix status of the reflexive pronouns.
(21) Cói เmisoj ipi mpomazt $\rfloor$ ta, .... while 2P-self DLM 2sSbj-Ir.Dp-N-tattoo DS
'Mientras todavía no te has tatuado, ....'
While you still haven't tattooed yourself, .... RRR XMH May72010
The reflexive pronouns thus do not occupy any known morphological position in the verb word per se. Furthermore, while in the majority of situations they occur immediately in front of the inflected verb, in some limited situations they may be separated from the verb by another word. This is shown in $\S 5.8 .2$ below. The examples in that section also show they display a somewhat variable order with certain ones, and this is perhaps the strongest evidence both that they are not part of the verb morphology but rather separate words in the verb phrase.

### 5.3 Reciprocal marker

The reciprocal marker pti (§11.5) also occurs in the verb phrase. As with the reflexive pronouns, it cannot occur postverbally, as shown in (22).
(22) a. Comcaac tacoi pti enooptoj iha. person/Seri-Pl Md-Pl RCP SN-Tr-hit-Pl Dcl
b. * Comcaac tacoi enooptoj iha, pti.
c. * Comcaac tacoi enooptoj pti ha.
'Esos seris estaban pegándose (de vez en cuando).'
Those Seris were hitting each other (once in a while). Lнс_2-8-07_74b
One might wonder if the morpheme pti is simply a prefix on the verb since it does not cooccur with the object inflection prefixes ( $\S 17.3 .2 .3$ ), and this seems plausible when pairs like (23)-(24) are considered. ${ }^{5}$ (23) has direct object inflection (underscored) and (24) has the

[^78]reciprocal prefix in what might be thought to be the same position. ${ }^{6}$
(23) Ctamcö tacoi hizi yonooptolca. [2ifijo'nooptołka] man-Pl Md-Pl 1PLDO Dt-hit-Pl-ImPF 'Esos hombres nos golpeaban.' Those men were hitting us. RMH_08-04-07__233a
(24) Ctamcö tacoi pti iyonooptolca. [ptijo'nooptołka] man-PL Md-PL RcP 3:3-DT-hit-PL-ImPF 'Esos hombres estaban golpeándose.' Those men were hitting each other. ${ }^{7}$ RMH_08-04-07_223b

The fact that pti merges with the third person indirect object prefix co- (3IO) to form the portmanteau pte, as discussed in $\S 11.5 .1$, makes this hypothesis even more attractive. One fact makes it clear that pti is a separate word, however, and not part of the verb word: the variability in word order that pti displays with the P's, as discussed in $\S 5.8$ below.

There is one additional fact to point out that is relevant for the analysis presented here. The postpositional delimiting adverb ipi (see §24.3.11) that occurs with the adverb cói still (see $\S 24.4 .3$ ) typically occurs specifically after a significant (if not always the first) word in the construction that it modifies. Note that, as shown in (25), this delimiting adverb may follow the verb itself but cannot follow the word pti.
(25) a. Cói pti iponnipatim ipi ta, .... while RCP 3:3-Ir.Dp-N-tattoo-ImpF DLM Ds
b. * Cói pti ipi iponnipatim ta, ....
'Mientras todavía no se han peleado, ....'
While they still haven't hit each other, ....

### 5.4 Location nouns

A limited set of nouns appears inside of the verb phrase; they are presented in Table 5.2. ${ }^{8}$ These

[^79]|  | Table 5.2: Location nouns in the VP |
| :--- | :---: |
| hant | land, ground, earth |
| hapx | place outside |
| haxoj | shore (as seen from the sea) |
| heme | home, camp |
| zaaj | cave [in idioms meaning 'descend'] |

nouns occur in nominal phrases with determiners elsewhere in the language. One example of each in such a phrase - outside of the verb phrase - is given in (26)-(29). ${ }^{9}$
(26) ..., hant com iti toom, ... land the.Hz 3P-on Rl-lie
‘..., estaba en la tierra, ...'
..., it was on the earth, ... (Conejo_Puma_1.3) RMH_08-04-07_215a
(27) Hapx hac ano miij.
outside the.LC 3P.in Px-sit
'Está sentado afuera.'
She is sitting outside. (DS2010, hapx) RMH_08-04-07_215b
(28) ..., haxoj com cömiizcam.
shore the.Hz 3IO-Px-arrive-PL
'..., llegaron a la playa.'
..., they arrived to the shore. (Dos_Hermanos_23)
(29) ..., heme ${ }^{\circ}$ hac an itamjc, ... camp the.Lc 3P.in 3:3-RL-take/bring
'.. , lo trajo al campamento, ...'
..., s/he brought it to the camp, ... RMH_08-04-07_215c
(30) Hoopatj timoca xepe ano zaaj hac ano
wave Md-Twd sea 3P.in cave the.Lc 3P.in cöitjeaatim ma, ...
3IO-3:3-RL-make.fall-ImpF DS
'Cuando la ola pegó en la cueva del mar, ...'
When the wave hit the sea cave, ... (DS2010 quiipoci) RMH_08-21-07_84
When these nouns occur in the verb phrase, they do not have determiners, they are not cross-referenced on the verb, and they do not affect the transitivity of the clause (for relevant tests, see Appendix C). Some of the combinations with verbs are transparent and productive;

[^80]others are very idiomatic (see chapter 7 for the latter). The noun hant is the most commonly used of these nouns, and it can be thought of as meaning down in many contexts. However one wishes to categorize these words (whether as nouns or as cognate adverbs), they are fixed in their position before the verb, as shown in (31).
(31) a. Cmaam tintica hant yahjiit.
woman MD-Aw land DT-fall
b. * Hant cmaam tintica yahjiit.
c. * Cmaam tintica yahjiit hant.
'Se cayó la mujer.'
The woman fell down. Rмн_08-04-07_216a
The nouns hapx place outside, haxoj shore (as seen from the sea), heme ${ }^{\circ}$ home, camp, and zaaj (as part of the idiom for enter into a gulch or dry lake bed) are used in combination with fewer verbs than hant, but they are relatively transparent in their meaning (with the exception of zaaj). They also must occur pre-verbally. See examples (32)-(35).
(32) a. Zixcám ${ }^{\circ}$ coi anxö hapx imiicmolca,
fish the.Pl Intns outside 3:3-Px-put.items-Pl-ImpF
'Habían sacado muchos peces, ...'
They had pulled out many fish, ... (NTT, Lk 5:9) RMH_08-04-07_216b
b. * Hapx zixcám ${ }^{\circ}$ coi anxö imiicmolca, ...
c. * Zixcám ${ }^{\circ}$ coi anxö imiicmolca hapx, ...
(33) a. ..., canoaataj coi haxoj itácmolca, ...
boat-Pl the.Pl shore 3:3-Rl-put.Hz-Pl-ImpF
b. * ..., haxoj canoaataj coi itácmolca, ...
c. * ..., canoaataj coi itácmolca haxoj, ...
'..., llevaron las barcas a tierra, ...'
..., they pulled the boats up on the beach, ... (NTT, LL5:11) RMH_08-04-07_216c
(34) a. Comcaac coi heme ${ }^{\circ}$ miizcam. person/Seri.PL the.Pl camp Px-arrive.PL
b. * Comcaac coi mizzam heme.
c. * Heme comcaac coi miizcam.
'Los seris llegaron a campamento.'
The Seris arrived at camp. RMH_08-04.07_216d
(35) a. Comcaac coi iiqui tzaai yopaailx. person/Seri.PL the.PL 3P-toward they.entered.it.[gulch]
b. * Comcaac coi iiqui yopaailx zaai.
c. $\quad$ Zaai comcaac coi iiqui yopaailx.
'Los seris entraron (al arroyo o playa).'
The Seris went in (to the gulch or dry lake bed). RMH_11-27-07_06
The adverb cói still, which typically occurs with the postpositional delimiting adverb ipi (see $\S 24.3 .11$ ), puts the delimiter ipi between the locative noun and the verb, as in (XX). This provides additional evidence for the non-prefix status of nouns like hant.
(36) Cói thant ipi pomahjiit」 ta, ...
while land DLM Ir.Dp-NEG-fall Ds
'Mientras todavía no se ha caído, ....'
While it still has not fallen, .... RRR 7May2010

### 5.5 Various other VP-internal nouns

Various other nouns are evidently in the verb phrase since, when tested, they follow a VP adverb. ${ }^{10}$ Three kinds of nouns are discussed in $\S \S 5.5 .1-5.5 .3$.

### 5.5.1 Cross-referenced nouns

Some VP-internal nouns are cross-referenced on the verb with indirect/oblique object morphology, and in some cases these are part of [Noun Verb] idioms (see chapter 7). Note that in examples (37)-(38), respectively, the nouns hitoj and misxeen follow the adverb miizj and do not have determiners. In both examples the verb is inflected for third person indirect/oblique object. (The use of misxeen in (38) is related to an idiom meaning something like consider or ponder but the use of hitoj in (37) does not related to a particular idiom.)
(37) He [hoox miizj hitoj cohmiiho, $]_{V P}$

1 Pro Intns well 1P-eye-Pl 3IO-1SGS.Tr-Px-see
'Lo vi con mis propios ojos, ...'
I saw it with my own eyes, ... (1 Pe 5:1) RMH_08-04-07_217a
(38) ;Miizj misxeen cohcaa」!
well 2P-abdomen 3IO-IM-look.for
‘¡Piénsalo bien!’
Think about it well! RMH_08-04-07_217b

### 5.5.2 Possessed nouns of idiomatic expressions

The possessed nouns (without determiners) of other idiomatic expressions are also evidently in

[^81]the verb phrase although they may function semantically as the subject of the construction．（For details on the multiple issues presented by these idioms，see chapter 7．）For example，in（39），the subject would appear to be hiistox（the root has no truly literal translation，although probably historically it meant breath or spirit）since it is a plural noun and the verb is inflected for third person plural subject；but this noun follows the VP－initial adverb anxö．
a．（He）anxö $\llcorner$ hiistox hant yopaailx $\lrcorner$ ．
1 Pro Intns 1P－？－Pl land Dt－arrive．Pl
b．＊Hiistox anxö hant yopaailx．
＇Estamos muy felices．＇
We are very happy．RмH＿08－04－07＿217c
The same is true of the nouns imoz his／her heart and himoz my heart in（40）and（41）， respectively，and hiihjoj my limbs in（42）．
（40）．．．，quihehe ${ }^{\circ}$ caacoj quij［anxö imoz yomeet．${ }^{\text {．}]_{V P}}$ ruler SN－big the．CM Intns 3P－heart Dт－？ ＇．．．，el rey se puso muy triste．＇
．．．the king became very sad．（NTT，Mk 6：26）RMH＿08－04－07＿217d
（41）．．．，taax iti［anxö $\llcorner$ himoz cöhismeet」 aha．］VP
DDP 3P－on Intns 1P－heart 3IO－1P－Ir．Id－？Aux－DCL
＇．．．，yo hubiera estado muy triste por eso．＇
．．．，I would have been very sad about that．（Php 2：27，improved）XMH＿61＿21810
（42）［Anxö เhiihjoj xöaxyat」．］VP
Intns 1P－limb－Pl Em－die－Pl
＇Me cansé mucho．＇
I got very tired．RMH＿08－04－07＿218b
The use of hant oozitoj in（43）is different in that this expression is not the subject although it appears to be a possessed noun that does not determine indirect／oblique object inflection on the verb，unlike those in §5．5．1．
（43）¡Ctam Pablo hapáh hipquij Łxiica quiistox」com pac man SN－Pv－say Px－CM people the．Hz some ［ anxö Lhant oozitoj $^{11}$ caiitim」 iha．］VP IntNS SN－do Dcl

[^82]'Este hombre llamado Pablo está molestando mucho a algunas de las personas.'
This man named Paul is really bothering some of the people. (Ac 24:5) RMH_08-04-07_219a
The adverb cói still, which typically occurs with the postpositional delimiting adverb ipi (see $\S 24.3 .11$ ), puts the delimiter ipi between the possessed noun and the verb, as in (XX). This provides additional evidence for the non-prefix status of these nouns.
(44) Cói iiistox ipi hant pompaailx $\lrcorner$ ta, ...
while ?-Dl Dlm land Ir.Dp-Neg-descend/Pl Ds
'Mientras todavía no están felices, ....'
While they are still not happy, .... RRR May72010

### 5.5.3 Other special nouns

The VP-internal words shown in this section are not cross-referenced on the verb, unlike those in $\S 5.5 .1$; and they are not possessed nouns in idioms, unlike those in §5.5.2. One might wonder whether some of them are nouns at all. Regardless of how they are categorized or glossed, however, they are in the verb phrase and need to be accounted for. See examples (45)-(47).
(45) Esaó quij [anxö $\left\llcorner\right.$ psaac tooxi ${ }^{\prime}$, ] VP toc cötiij, the.Cm Intns hunger RL-die there 3IO-RL-sit
'Esaú tenía mucho hambre, estaba allí, ...'
Esau was very hungry, he was there, ... (Hb 12:16) RMH_08-04-07_219b
(46) i[ Anxö ${\text { Lhamati ihpxöaxi」! }]_{V P}}^{\text {( }}$

Intns thirst (?) 1SGS.In-Em-die
‘¡Tengo mucha sed!’
I'm really thirsty! RMH_08-04-07_219c
(47) Pedro quih [anxö Yooz imatolec. ] VP the.FL InTNS God 3:3-PX-ask.for.help
'Pedro oró por largo tiempo.'
Peter prayed a long time. ${ }^{12}$ RMH_08-04-07_220a
The examples with the expression for pray, as in (47), are interesting because they include a transitive verb and an indisputable noun, Yooz God. Furthermore, this noun (without a determiner in this usage) is functioning as the direct object of the verb Vatolec ask for help. Evidence of this is provided by the fact that the first person subject inflection prefix ( $\S 17.3 .2 .1$ ) used in this expression must be the transitive one (h-); examples attempting to use the intransitive allomorph (hp-) were categorically rejected; see (48).

[^83](48) a. He anxö Yooz ihyatólejquim.

1Pro Intns God 1SGS.Tr-Dt-ask.for.help-ImpF
b. *He anxö Yooz ihpyatólejquim.

1SGS.In-DT-ask.for.help-ImpF
'Oro muchas veces.'
I pray many times. RMH_08-04-07_220c
In the expressions for teach and lack, the phrase ziix quih (thing the.FL) is not referential and sometimes occurs in the verb phrase since it follows anxö. ${ }^{13}$ See examples (49)-(50).
(49) Jesús quij $\quad$ xiica quih quiistox $\lrcorner$ com
the.Cm people the. Hz
anxö ziix quih cöimacoaat.
Intns thing the.Fl 3IO-3:3-Px-cause.know
'Jesús enseñó mucho a la gente.' o 'Jesús enseñó a mucha gente.'
Jesus taught the people many things. or Jesus taught many people. RMH_08-21-07_85a
(50) Anxö ziix quih iicp me sahcaail aha.

Intns thing the.FL toward 2IO-Ir.ID-remain/lacking AuX-DCL
'Faltarás mucho.'
You will lack a lot. RMH_08-21-07_85b
The noun hamác fire in the transitive expression hamác $\sqrt{ }$ itlim kindle fire is another noun of this type when it is used without a determiner. ${ }^{14}$ In example (51) it is relevant that it follows the P ano. (The importance of this fact is made clear in §5.8).

$$
\left.\begin{array}{l}
\text { (51) Haxoj hatazcam } \\
\text { shore } \quad \text { ma, hast } \\
\text { 1PLS-RL-arrive.PL }
\end{array} \text { ancoj } \begin{array}{l}
\text { stone } \\
\text { 3P-area-PL a }
\end{array}\right]
$$

[^84]'Fuimos a la playa, prendí una lumbre en las rocas, ...'
We went to the beach and made a fire on the rocks... (DS2010, csiptj) RMH_08-13-07_52a
Some combinations of noun (without a determiner), P , and verb have idiomatic meanings. These expressions keep these words together in the verb phrase (except that the delimiting adverb $\mathbf{0 0}$ may follow the noun); an adverb like anxö precedes the combination; neither the noun nor the P can be moved to another position. See examples (52)-(53).
(52) a. Anxö thax ano hmiiquim. Intns water 3P.in 1 SGS.Tr-Px-put.items
b. * Hax anxö ano hmiiquim.
c. * Hax ano anxö ihmiiquim.
d. * Anxö ano hmiiquim, hax.
'Lavé mucha ropa.'
I washed lots of items. RMH_09-28-07_148e
(53) a. ¿Me cói thax oo ano coaah」 -ya?

2Pro still water DL 3P.in SN-UO-put.FL QM
b. * ¿Me hax cói ano coaah oo -ya?
c. * ¿Me hax oo cói ano coaah -ya?
d. * ¿Me hax ano cói coaah oo -ya?
e. * ¿Me hax 00 ano cói coaah -ya?
f. * ¿Me cói ano coaah oo -ya, hax?
g. * ¿Me cói ano coaah -ya, hax oo?
'Estás todavía lavando ropa?'
Are you still washing clothes? RMH_09-28-07_148i

### 5.6 Locative pronouns and adverbs

Several locative words appear in the verb phrase; these are listed in Table 5.3. Two of these toc there and hiz here - determine indirect/oblique object inflection on the verb (see $\S 2.4$ ), as shown in (54)-(55); for that reason they are classified as pronouns. But all of these locative words are fixed in their position in the verb phrase.
(54) a. Cyaa quih hiz cötmiij iho. SN-Tr-own the.Fl here 3IO-Rl-N-sit Dcl
b. * Hiz cyaa quih cötmiij iho.
c. $\quad$ Cyaa quih cötmiij iho hiz.
d. * Cyaa quih cötmiij hiz iho.
'El dueño no está aquí.'
The owner isn 't here. (DS2010, quii) RMH_08-04-07_222b

| Table 5.3: Locative pronouns and adverbs in the VP |  |
| :---: | :--- |
| colx | high, far out (on sea) |
| haa | there |
| hacx | apart |
| haquix | somewhere |
| himo | elsewhere |
| hiz | here |
| toc | there |

(55) a. ..., $x$ xiica canaaotaj pac toc contitat, ...
thing.PL SN-meow-PL some there 3IO-Aw-Rl-move-PL
b. * ..., toc xiica canaaotaj pac contitat, ...
c. * ..., xiica canaaotaj pac contitat toc, ...
‘...unos gatos iban allí, ...'
... some cats were going there, ... (DS2010, cnaai) RMH_08-04-07_222c
Others of these locative words are perhaps adverbs; at least there is no clear evidence that they are nouns. They do not determine any cross-referencing morphology on the verb. See examples (56)-(58).
(56) a. Moxima ctam hiyal quih [colx maahit.] ${ }_{V P}$ yesterday man 1 P -spouse the.FL high Px-fish
b. * Moxima colx ctam hiyal quih maahit.
c. * Moxima ctam hiyal quih maahit colx.
'Ayer mi esposo fue a pescar lejos en el mar.'
Yesterday my husband went fishing far out on the sea. RMH_08-04-07_221a
a. Canoaa zo [haa moca ha. ] VP boat a there TwD-SN-move DcL
b. * Haa canoaa zo moca ha.
c. * Canoaa zo moca haa ha.
d. * Canoaa zo moca ha haa.
'Allí viene una panga.'
There comes a boat. (DS2010, haa) RMH_08-04-07_221b
a.

b. $\quad$..., haquix xiica quih quiistox com anxö poom, ...
c. $\quad$. ..., xiica quih quiistox com anxö poom haquix, ...
d. $\quad$...., xiica quih quiistox com haquix anxö poom, ...
'..., habrá mucha gente, ...'
..., there will be many people, ... (NTT, Lk 21:8) RMH_08-04-07_222a
In some cases these words form part of idioms or rather fixed expressions (see chapter 7), as in (59)-(62).
(59) a. ..., hasaaiti áno caap cop [anxö Łhimo tpazjc」ma. ] VP gasoline 3P.in SN-stand the.VT InTNS it.spilled.out DS
b. * ..., himo hasaaiti áno caap cop anxö tpazjc ma.
c. * ..., hasaaiti áno caap cop anxö tpazjc ma himo.
d. * ..., hasaaiti áno caap cop himo anxö tpazjc ma.
‘..., se había tirado mucha gasolina.'
..., a lot of gasoline had spilled out. (DS2010, cacaapis) RMH_09-28-07_131
(60) a. ¿Hapaspoj ${ }^{\circ}$ hipquih [ımiizj hacx cah」! ] VP paper Px-FL well apart Im-say/put.FL
b. * $\boldsymbol{i H a c x}$ hapaspoj hipquih miizj cah!
c. * ¡Hapaspoj hipquih miizj cah hacx!
'¡Guarda este libro!'
Put this book away (in a safe place)! RMH_08-04-07_221c
(61) [ Anxö $\quad$ colx yiisax $\lrcorner \cdot]_{V P}$

Intns high DT-have.life
'Respiró profundamente.'
S/he breathed deeply. RMH_08-04-07_227b
(62) [ Anxö Lhacx ixamiihitim $\left.{ }_{\text {. }}\right]_{\mathrm{VP}}$

Intns apart 3:3-Em-not.be.Fl-ImpF
'Mató muchos.'
S/he killed many. RMH_11-27-07_07
The adverb cói still, which typically occurs with the postpositional delimiting adverb ipi (see $\S 24.3 .11$ ), puts the delimiter ipi between the locative adverb and the verb, as in (63). This provides additional evidence for the non-prefix status of adverbs like hacx.


This position (the only one possible) contrasts sharply with the direct object cross-reference morphemes, for example. The delimiter ipi cannot occur inside of the verb word and so must appear after the verb in example (64).


### 5.7 P's

The class of words referred to as P's necessarily occur in the verb phrase in almost all situations (see chapter 22). They may appear to be part of a postpositional phrase, as in (65).

```
(65) ..., heme \({ }^{\circ}\) hac an itamjc, ...
        camp the.LC 3P.in 3:3-RL-take/bring
    '..., lo trajo al campamento, ...'
    ..., s/he brought it to the camp, ... (DS2010, cayeenot) RMH_08-04-07_223C
```

But the fact that the complement of the $P$ may easily occur earlier in the clause, separated from the P , as in (66), and the fact that the P cannot occur outside of the verb phrase, as shown in (66), make one fact clear: the P is a constituent of the verb phrase at least in the cases in which it is separated from its complement.
(66) $\qquad$
a. Hitrooqui quii Lhasaaiti coozlil」quih

1P-vehicle the.Cm lubricating.oil the.FL
$\longmapsto$ VP -
ano hsahaama aha.
3P.in 1SGS.Tr-Ir.ID-cause.trickle Aux-DCL
b. * Hitrooqui quij ano hasaaiti coozlil quih hsahaama ha.
'Voy a poner aceite en mi carro.'
I am going to put oil in my car. (DS2010, cahaama) RMH_08-04-07_224a

Figure 5.1: Order of preverbal elements in the VP


Furthermore, it is shown in $\S 5.8$ that the P's must follow adverbs like anxö. ${ }^{15}$ Therefore we come to the conclusion that the P is in the VP, regardless of the position of its complement. ${ }^{16}$ This analysis is consistent with the claim made in chapter 2 that basic clause structure is a series of nominal phrases followed by a verb phrase, as depicted in Figure 2.1 (p. 85).

### 5.8 Relative order

Now that the various types of words that occur in the VP have been presented, it is possible to consider how they co-occur. One finds a very limited amount of variability, and that variability is almost entirely restricted to the order of P 's with respect to the reflexive pronouns and the reciprocal marker. ${ }^{17}$ Therefore the combinations with P's are grouped together for discussion in §5.8.4. The facts are depicted in Figure 5.1 where the dotted circle indicates the part of the structure in which there is some variability.

[^85]
### 5.8.1 Adverbs with respect to other words in the VP

The intensifying adverb anxö occurs before all other words in the verb phrase (except an adverb that modifies it) and no alternative orders are possible. ${ }^{18}$ The fact that anxö follows direct object nominals (see $\S 5.1$ ) but precedes reflexive pronouns, as shown below, sharply distinguishes the syntax of ordinary nominal phrases from that of reflexive pronouns.

## Before reflexive pronouns

Examples (67)-(68) illustrate the relative order of VP-initial adverbs and reflexive pronouns.
(67) a. Hax anxö hisoj hihaactim cah, ... Intns Intns 1P-self 1P-PON-cause.be.cut the.Fl-Foc
b. * Hisoi hax anxö hihaactim cah, ...
'Cuando me corté demasiado, ...'
When I cut myself severely, ... (DS2010, hait xap) OP_2-07-07_42
(68) a. ¿Anxö misoi intaactim?

Intns 2P-self 2SGS-RL-cause.be.cut
b. * ¿Misoj anxö intaactim?
‘¿Te cortaste mucho?’
Did you cut yourself a lot? LHс_2-05-07_135

## Before the reciprocal pronoun

Examples (69) illustrates the relative order of VP-initial adverbs and the reciprocal pronoun.
(69) a. Anxö pti camsisiijc iha.

Intns RCP SN-love-Pl DCl
b. * Pti anxö camsisiijc iha.
'Se aman mucho.'
They love each other a lot. Op_2-07-07_63

## Before location nouns

Examples (70) illustrates the relative order of VP-initial adverbs and location nouns.
(70) a. $\quad \cdots$, anxö hant sahjiit haa hi.
Intns land Ir.ID-fall Aux DCL
b. * ..., hant anxö sahjiit haa hi.

[^86]'..., se caerá con fuerza.'
..., it will fall hard. (DS2010, anxö) RMH_08-04-07_224b

## Before other VP-internal nouns

Examples (71)-(75) illustrate the relative order of VP-initial adverbs and other VP-internal pronouns.
(71) a. He (xiica hizcoi) anxö hitoi cohmiiho.

1 Pro thing.Pl Px-Pl Intns 1P-eye-Pl 3IO-1SgS.Tr-Px-see
b. * He xiica hizcoi hitoj anxö cohmiiho.
c. * He anxö xiica hizcoi hitoj cohmiiho.
'He visto (estas cosas) mucho con mis propios ojos.'
I have seen (these things) a lot with my own eyes. RmH_08-04-07_225b
(72) a. $\boldsymbol{\text { Anxö }}$ Lhamati ihpxöaxi」!

Intns thirst 1SGS.In-Em-die
b. $\quad$; Hamati anxö ihpxöaxi!
‘Tengo mucha sed!’
I'm really thirsty! RMH_08-04-07_219c
(73) a. He anxö Yooz ihyatólejquim.

1Pro Intns God 1SgS.Tr-Dt-ask.for.help-ImpF
b. * He Yooz anxö ihyatólejquim.
'Oro muchas veces.'
I pray many times. RMH_08-13-07_53
(74) a. Anxö Listox hant tpaailx $\lrcorner$,

InTNS 3P-?-PL land RL-arrive.PL
b. * Iistox anxö hant tpaailx, ...
'Estaban muy felices, ...'
They were very happy, ... (NTT, LL 24:52) RMH_08-04-07_218c
(75) a. Me hipi anxö $\llcorner\underline{m i i s a x}$ hant paait」 $x$, 2Pro Intns Intns 2P-? land Ir.DP-arrive UT
toc consiij aha.
there 3IO-2SGS-Ir.Id-sit Aux-Dcl
b. * Me hipi miisax anxö hant paait $x, \ldots$
'Estarás muy contento.'
You will be very happy. (NTT, Lk 1:14) RMH_08-04-07_218a

## Before locative pronouns and adverbs

And finally, examples (76)-(77) illustrate the relative order of VP-initial adverbs and locative pronouns and adverbs.

$$
\begin{align*}
& \text { (76) } \\
& \text { b. * Xiica quih quiistox quih toc anxö cöcoii ha. } \\
& \text { 'Hay mucha gente allí.' } \\
& \text { There are many people there. Rмн_08-04-07_224c }  \tag{77}\\
& \text { b. * ..., xiica quih quiistox com haquix anxö poom, ... } \\
& \text { ' } . . \text {, habrá mucha gente, } \ldots \text {, } \\
& \text {..., there will be many people, ... (NTT, Lk 21:8) RMH_08-04-07_222a }
\end{align*}
$$

## Another fact about reflexive pronouns

The reflexive pronouns are distinguished from ordinary possessed nouns in another way that is now possible to demonstrate. If one wishes to intensify the person of the reflexive pronoun, which is the same as the subject, one may use the intensifier hapi (see §24.3.1). But since hapi is an adverb that follows the nominal phrase or pronoun that it modifies, or fuses with a null head (§4.3.5), and since the nominal phrase must be outside of the verb phrase (a key point in chapter 2), the word hapi must precede anxö; it cannot occur between anxö and the reflexive pronoun. See example (78).
(78) a. [Hapi ] anxö hisoj ihyaactim.
Intns Intns 1 -s-self 1 GGS.Tr-Dt-cause.be.cut
b. * Anxö [hapi] isoj ihyaactim.
'Me corté mucho.'
I cut myself a lot. RMH_08-04-07_226
These facts demonstrate that one or both of the following analyses is correct. First, it is possible that the intensifier hapi is in fact modifying the (null) subject nominal, and not the possessor at all. For that reason it must be external to the verb phrase. Second, it is possible that the intensifier is modifying the possessor of the reflexive pronoun, but this nominal must be expressed outside of the verb phrase. What is not possible is that the intensifier hapi be modifying the possessor of a simple noun phrase that is in direct object position.

### 5.8.2 Reflexive and reciprocal pronouns with respect to other words in the VP

It has been established in the preceding section that the reflexive and reciprocal pronouns follow the general adverbs in the verb phrase. This section presents data regarding the relative positions of the reflexive and reciprocal pronouns with respect to other elements in the verb phrase except P's (which are discussed in §5.8.4).

With respect to the location nouns and location adverbs (in those cases where it is possible to find combinations) the order is flexible. The expression for save, rescue is hapx hant $\sqrt{ }$ ácatx, and a reflexive situation appears in (79a), with the reflexive pronoun to the far left of the verb phrase. Nevertheless, two alternate word orders were presented (see (79b-c) and these were readily judged as acceptable and synonymous.
(79)
a. Misoi hapx hant cácatx $\lrcorner$, ... yourself outside land Im-release
b. Hapx misoj hant cácatx, ...
c. Hapx hant misoj cácatx, ...
'Sálvate a ti mismo, ...'
Save yourself, ... (NTT, LL 23:39) RMH_08-13-07_54

### 5.8.3 Locative nouns, pronouns and adverbs with respect to other words in the VP

Most of the location nouns, locative pronouns and locative adverbs do not co-occur, probably for semantic reasons. The location noun hant land, however, does co-occur with others, and some of the productive combinations are illustrated in (80)-(83). Generally, the location adverbs occur before hant.
(80) LHapx hant ihpsooca」 aha.
outside land 1 SGS.In-Ir.Id-UO-put.LQ Aux-Dcl
'Voy a sacar (objetos, como para mudar).'
I'm going to take out (objects, like to move). RMH_08-13-07_-55a
(81) a. LHapx hant tooit, outside land RL-arrive
b. * Hant hapx tooit, ...
'Salió, ...' o 'Escapó, ...'
S/he went outside, ... or S/he escaped, ... RMH_08-13-07_-56a
(82) a. Hacx hant yahjiit oo.
apart land DT-fall DL

## b. * Hant hacx yahjiit oo.

'Se cayó, se levantó, y se cayó varias veces.'
S/he fell down, got up, and fell down various times. (offered) RMH_08-13-07_55b
(83) a. Pyeest caacoj zo haquix hant tiij ma, ... party SN-big a somewhere land RL-sit DS
b. * ... hant haquix tiij ...
'Había una gran fiesta, ...'
There was a big party, ... RMH_-08-13.07_55c
The possessed noun iisax (plural iistox) also precedes the noun hant in the expression for happy which is $\sqrt{ }$ VVsax hant $\sqrt{ }$ ooit (? land arrive) (see $\S 7.2$ ), as illustrated in (84).
(84) a. Listox hant spaailx $\lrcorner$ caha.

3P-?-Pl land Ir.ID-arrive.Pl Aux.SN-DCL
b. * Hant iistox spaailx caha.
'Estarán felices.'
They will be happy. RмH_08-13-07_56b
Two location adverbs co-occur in example (85); the adverb himo elsewhere is regularly used with the verb $V^{\text {pazje }}$ to mean spill out. Perhaps it is not surprising that the order of these two adverbs is fixed.
(85) a. Hacx $\left\llcorner\frac{\text { himo }}{\text { yopazjc }\lrcorner \text { oo. }}\right.$
apart elsewhere DT-dispersed DL
b. * Himo hacx yopazjc oo.
'Se derrama en diferentes direcciones.'
It flows over in different directions. (Offered) RMH_08-13-07_55d

### 5.8.4 P's with respect to other words in the VP

While most of the items in the verb phrase occur in fixed positions relative to each other, the P's in the verb phrase display some flexibility of position while at the same time remaining in the verb phrase.

## With respect to adverbs

The adverb anxö precedes a P in the verb phrase; it is ungrammatical for it to follow the P , as shown in (86)-(89).
(86) a. Moxima hant quij anxö iti hpyootax xo ... yesterday land the.Cm Intns 3P-on 1SGS.In-Dt-go but

```
b. *Moxima hant quij iti anxö ihpyootax xo,...' 'Ayer yo anduve mucho, ...
I walked a lot yesterday, ... (DS2010, cooxi) RMH_08-04-07_228
```

(87) a. Anxö iti yazám.

InTNS 3P-on DT-UO-put.VT
b. * Iti anxö yazám. 'Pisó fuertemente (o mucho) en él/ella.'

S/he stepped on it hard (or a lot). RMH_11-19-07_101
(88) a. ..., haso quih zixcám ${ }^{\circ}$ com anxö ano toii ma $\mathbf{x}$, ... net the.FL fish the.Hz InTNS 3P.in RL-be.FL-PLDS UT
b. *... ano anxö toii ...
'..., había muchos peces en la red, ...'
..., there were many fish in the net, ... (NTT, Mt 13:48) RMH_08-13-07_57a
(89)
a. ... taax anxö siiqui catni」. DDP Intns 3P-toward IM-make.contact
b. *... taax iiqui anxö catni.
'Anímales mucho con respecto a eso...'
Urge them much about that... (Tit 2:6) RMH_08-13-07_57b
There is one major exception to this order - perhaps the only exception of this type - and that is when the idiom anxö $\sqrt{ }$ haa (IntNS $\mathrm{be}_{\text {Irreg }}$ ) injured or its related expression anxö $\sqrt{ }$ aai (Intns make) injure is involved. In expressions with these idioms the adverb anxö must be in immediate preverbal position, as shown in (90).
(90) a. ..., ilít quij it เanxö itaaizilca , 3P-head the.CM 3P-on Intns 3:3-RL-make-PL-ImpF
b. * ..., ilít quij anxö iti itaaizilca, ...
‘..., le hirieron en la cabeza, ...'
... they injured him on the head, ... (Nтт, мкк 12:4) RnH_00-0.4007-299b
With respect to reflexive pronouns and the reciprocal pronoun
Reflexive pronouns and P's are easily reversed in word order with no change in meaning. There seems to be a slight preference of the order in which the P appears first. See examples (91)-(94).
(91) a. Zaaj $z$ an(o) hisoj ihyisxö. ${ }^{19}$ cave a 3P.in 1P-self 1SgS.Tr-Dt-hide
b. Zaaj zo hisoi ano hyisxö.
'Me escondí en una cueva.'
I hid in a cave. (DS2010, isoj, quissö) (a) OP _2-07-07_46, LHC_2-8-07_-77 (b) LHC $2-8-00_{-} 78$
(92) a. ... yahipxat quih an isoj itisxö, hant z iiqui yiin. 3P-ink the.Fl 3P.in 3P-self 3:3-Rl-hide land a 3P-toward DT-go
b. ... yahipxat quih isoj an itisxö, hant $z$ iiqui yiin.
'..., se escondió en su tinta y escapó.'
..., it hid itself in its ink and escaped. (DS2010, yahipxat) (a) OP_2-07-07_47 (b) OP_2-07-07_49
(93) a. He penisiliina quih ano hisoj cohsiih aha.

1Pro penicillin the 3P.in 1P-self 3IO-1SGS.Tr-Ir.Id-put.Fl Aux-Dcl
b. He penisiliina quih hisoi ano cohsiih aha.
'Me inyectaré con penicilina.' (a) OP_2-07-07_34 (b) OP_2-07-07_33
I will inject myself with penicillin. (Lit., I will put the penicillin into myself.)
(94) a. Hapi ano pti hayooyolca.

Intns 3P.in RCP 1PlS-Dt-put.Fl-Pl-ImpF
b. Hapi pti ano hayooyolca.
'Nos inyectamos uno al otro.'
We injected each other. (a) OP_2-07-07_64a (b) OP_2-07-07_64b
With respect to location nouns, locational adverbs and other VP-internal nouns
The location nouns presented in $\S 5.4$ obligatorily follow the P's, as shown in (95)-(102).
(95) a. $\underline{A n}^{20}$ hant iyooxquim.

3P.in land 3:3-DT-put.Hz
b. * Hant an iyooxquim.

[^87]'Lo metió con cuidado.'
S/he put it down carefully. ${ }^{21}$ RMH_08-04-07_230
(96) a. iSatoj hipcom hax cmatj hizcap an hant caxquim! mussel Px.Hz water SN-hot Px-Vt 3P.in land Im-put.Hz
b. * ;Satoj hipcom hax ematj hizcap hant an caxquim!
‘¡Mete este mejillón en esta agua caliente con cuidado!’
Put this mussel into this hot water carefully! RMH_08-13-07_58a
(97) a. An hant mahjiit.

3P.in land Px-fall
b. * Hant an(o) mahjiit.
'Se cayó adentro.'
It fell down into it. RMH_08-13-07_58b
 mullets some 3P.in land 3IO-1PLS-Rl-connected-Pl-ImpF DS
'.. , nos topamos con un banco de lisa, ...'
..., we came across a school of mullet, ... (DS2010, hant cocóám) RMH_08-13-07_51a
(99) ..., it thant yaait, 3P.on land DT-arrive
‘..., se cayó en él, ...'
..., it landed on it ... (DS2010, cqueejc) RMH_11-27-07_08
(100) a. Hant tahac iti haxoi hayoozcam. land Md-LC 3P.on shore 1PLS-DT-arrive.PL
b. * Hant tahac haxoj iti hayoozcam.
'Atracamos en ese lugar.'
We beached at that place. RMH_08-13-07_59a
(101) a. ..., iiqui $\quad$ zaai hampaailx $\lrcorner$. 3P-toward cave 1PLS-Px-arrive.PL
b. *..., zaaj iiqui hampaailx.
'..., lo entramos [en el arroyo].'
..., we entered it [gulch]. (Topete_126) RMH_08-13-07_596

[^88]（102）Comcaac coi iiqui tzaai yopaailx．
person／Seri．Pl the．Pl 3P－toward cave DT－arrive．PL
＇Las personas entraron（al arroyo o playa）．＇
The people went in（to the gulch or dry lake bed）．RMH＿11－27－07＿06
The location adverbs presented in $\S 5.6$ also follow the P＇s．Examples（103）－（106）are not grammatical with the order of the P and adverb reversed．
（103）a．He thehe án $\lrcorner$ com ano thacx cpaailx $\lrcorner$ iha． 1Pro countryside the．Hz 3P．in apart SN－arrive．Pl Dcl
b．＊He hehe án com hacx ano cpaailx iha．
＇Nos perdimos en el monte．＇
We got lost in the countryside．（DS2010，hacx＊cooit）RMH＿08－13－07＿51c
（104）a．」Hasaaiti coozlil」 quih hicaamiz quih iti $\llcorner$ himo tpazjc」，．．． lubricating．oil the．FL 1P－shirt the．FL 3P－on elsewhere RL－dispersed
b．＊Hasaaiti coozlil quih hicaamiz quih himo iti tpazjc，．．．
＇Aceite para motor fue tirado en mi camisa，．．．＇
Motor oil got spilled on my shirt，．．．（DS2010，himo＊cpazic）RMH＿08－13－07＿51d
（105）a．．．．hapx hac an himo hyoocatx． outside the．LC 3P．in elsewhere 1SGS．TR－DT－release
b．＊．．．hapx hac himo ano hyoocatx．
＇．．．，lo tiré para afuera．＇
．．．，I threw it outside．（DS2010，iti＊cojast）RMH＿08－133－07＿51e
（106）a．i \Hasaaiti coozlil」 quitaj hizcop thant xnoois」 tiquij lubricating．oil SN－burn Px－VT garbage MD－CM ano himo cazjc！ 3P．in elsewhere Im－pile．up
b．＊；Hasaaiti coozlil quitaj hizcop hant xnoois tiquij himo ano cazjc！
‘¡Tira este aceite para motor usado en la basura！’
Throw this used motor oil into the garbage！（DS2010，himo＊quizic）RMH＿08－13－07＿51f
The nouns presented in $\S 5.5 .3$ ，so far as evidence can be found，also follow the P＇s and cannot precede them．See examples（107）－（108）．

b. *..., hast ancoj zo hamác ano htitlim ma, ... ${ }^{22}$
'..., prendí una lumbre en las rocas, ...'
..., I made a fire on the rocks, ... (DS2010, csiptj) RMH_08-13-07_52a
(108) a. Mahyaai himcac iti Lhamác cömootni」. opposite.coast DT-.LC 3P-on fire 3IO-Px-UO-make.contact
b. * Mahyaai himcac hamác iti cömootni.
'En la costa opuesta hizo una señal de humo.'
On the opposite coast s/he made a smoke signal. (DS2010, mahyaai) RMH_08-13-07_52b

[^89]
## 6. Questions

Questions typically require either (a) a verb inflected in interrogative mood or (b) the question modal -ya after the predicate nominal (which may be a deverbal noun, see chapter 14). ${ }^{1}$ In realis clauses with finite verbs, interrogative mood is indicated with the Realis prefix $\mathbf{t}$ - (§17.3.1.5). In irrealis clauses, interrogative mood is indicated by the choice of modal (§20.2.1.1 and $\S 20.2 .2 .1)$.

In this chapter, yes-no questions are presented first (§6.1), followed by content questions (§6.2), and then rhetorical questions (§6.3). The section on content questions is divided into two main parts (realis and irrealis), which then take up the question words in specific subsections.

### 6.1 Yes-no questions

A yes-no question of a typical sentence is never well-formed solely using intonation, as the unacceptable examples (1)-(7) illustrate by combining question intonation with non-interrogative forms.
(1) * ¿Hax quih iiqui mpam / yopám /xopám? water the.Fl 3P-toward/with Px-Pv-swallow / Dt-Pv-swallow / Em-Pv-swallow ('¿Se toma con agua?’) (It is swallowed with water?)
(2) $\quad{ }_{\text {¿ }}^{\boldsymbol{i}} \mathrm{Haxz}^{\circ}$ cop zixcám ${ }^{\circ}$-ya imiihit /iyoohit /ixoohit? dog the.Vt fish QM 3:3-Px-eat / 3:3-DT-eat / 3:3-Em-eat ('¿Está comiendo pescado el perro?') (The dog is/was eating fish?)
(3) $\quad$ ¿María quih Hezitmisoj quij contiya? the.Fl Hermosillo the.Cm 3IO-Aw-Dt-move (‘¿María fue a Hermosillo?) (María went to Hermosillo?)
(4) $\quad$ ¿María quih siitax caha? the.Fl Ir.Id-go Aux.SN-Dcl (‘¿María va a ir?) (María is going to go?)
(5) $\quad{ }_{¿}$ Hast iha? (6) $*_{i} \mathrm{He} ? \quad$ (7) $*_{i}$ Siitax caha?
stone DcL (¿Es una piedra?) (It's a stone?)
1PRO
(¿Yo?)
(Me?)

Ir.ID-go Aux.SN-DcL (¿Ira?)
(S/he will go?)

A yes-no question that is typically formed with the question modal -ya (see below and $\S 10.2$ ) cannot be expressed without the modal, as in (8)-(9).

[^90](8) a. ¿Me caticpan -ya? 2Pro SN-work QM
b. $\quad{ }_{i} \mathbf{M e}$ caticpan?
‘¿Estás trabajando?’
Are you working? RMH_05-17-08_102
(9) a. ¿Tiix hast -ya?
DDS stone QM
b. $\quad{ }^{*}$ iTiix hast?
‘¿Es eso piedra?’
Is that stone? RMH_05-17-08_103
It is possible, however, for a name or other nominal (without determiner) to be used - and in this case obligatorily without a question modal - with question intonation in order to inquire in a minimal way whether a certain person is present or not, or inquire regarding other information about him or her. See (10)-(12).
(10) ¿María Carmen? [Is she here?, etc.] RMH_05-17-08_104a
(11) iMata? [Is she here?, etc.]

2P-mother
'Tu madre?'
Your mother? RMH_05-17-08_104b
(12) $\quad$ iTrooqui cheel? $\quad$ [Is it here?, etc.] car SN-red
‘¿El carro rojo?’
The red car? RMH_05-17-08_104c
Apart from having the morphological characteristics of questions mentioned above, normal yes-no (or polar) questions based on finite verbs are characterized by a fall on the last stressed word of the predicate, which may be an auxiliary (which is present for reasons that have nothing to do with the fact that the sentence is a question). ${ }^{2}$ Yes-no questions are otherwise not distinguished syntactically from statements; no changes in word order are involved.

Examples (13)-(16) show finite clauses with verbs in the realis mood interrogative (prefix t-, §17.3.1.5).

[^91](13) ¿Hax chaa -ya iiqui tpam?
water SN-EQ QM 3P-toward/with RL-Pv-swallow
‘¿Se toma con agua?'
Is it swallowed with water? (DS2010, iqui) RMH_08-21-07_78
(14) ¿ $\mathbf{H a x z}^{\circ}$ cop zixcám ${ }^{\circ}$-ya itahit?
dog the.Vт fish QM 3:3-RL-eat
‘¿Está comiendo pescado el perro?'
Is/was the dog eating fish? RMH_09-28-07_132
(15) iJuan quih zixcám ${ }^{\circ}$ quih itahit $\mathbf{x}$, itcmahit $\mathbf{x}$ ? the.Fl fish the.Fl 3:3-Rl-eat or 3:3-Rl-N-eat or
‘¿Comío Juan el pescado o no lo comió?’
Did Juan eat the fish or didn't he eat it? (the fish isn't present) RMH_11-19-07_26
(16) Moxima Juan quih zixcám ${ }^{\circ}$-ya itahit? yesterday the.FL fish QM 3:3-RL-eat ¿¿Comió Juan pescado ayer?'
Did Juan eat fish yesterday? RMH_11-19-07_27
If the predicate is a predicate nominal rather than a verb, the question modal $\mathbf{- y a}$ is used rather than a declarative or other modal (§10.2), as in (17).
(17)

$\begin{array}{cl}i \text { Hast } & \text {-ya? } \\ \text { stone } & \text { QM }\end{array}$
‘¿Es/era una piedra?’
Is/was it a stone? RMH_08-21-07_79b
Likewise, yes-no questions of sentences headed by deverbal nouns simply use the question modal after the deverbal noun, as in (18)-(21). ${ }^{3}$

| (18) | ¿Ctam, tiix | hateiictim ${ }^{\circ}$ |  | ctaai | -ya? |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | man DDS | piece.of.cloth | a | SN-TR-wear.kilt | QM |
|  | '¿Lleva un tonelete ese hombre?' |  |  |  |  |
|  | Does that man wear a kilt? (DS2010, ctai) RMH_08-21-07_79C |  |  |  |  |
| (19) | ¿María quih | casiimet | -ya? |  |  |
|  |  | SN-make.brea | QM |  |  |
|  | ¿¿Está haciendo pan María?’ |  |  |  |  |
|  | Is María making bread? RMH_09-28-07_133a |  |  |  |  |

[^92](20) iJuan quih zixcám ${ }^{\circ}$ quih quihit -ya? the.FL fish the.FL SN-Tr-eat QM
¿¿Está comiendo pescado Juan?’
Is Juan eating fish? RMH_09-28-07_133c
(21) Juan quih zixcám ${ }^{\circ}$ com oohit -ya $\quad$ ? $\quad \underline{\text { ? mahit }}$-ya $\quad$ ? the.FL fish the.Hz 3P-ON-eat QM or 3P-ON-N-eat QM or
‘¿Comío Juan el pescado o no lo comió?’
Did Juan eat the fish or didn't he eat it? (a covered fish is there) RMH_11-19-07_28
Pronouns cannot be questioned directly as they are not predicates (§10.1.1). See examples (22)-(23).
(22) $\quad{ }_{\text {¿ }} \mathbf{M e}$-ya? 2Pro QM
('¿Eres tú?’) (Is it you?)
(23) $\quad{ }^{*}$ iTii -ya? DDS QM
('¿Es aquella/aquél?') (Is it that one?)
For a question they must be presented with a copula (see §10.3.2), as in (24)-(25).
(24) ¿Me haa -ya?

2Pro SN.EQ QM
'Eres tú?'
Is it you? (Overheard) LHC_2-06-07_191c
(25) iTii haa -ya?

DDS SN.EQ QM
‘¿Es aquella/aquél?'
Is it that one? RMH_05-17-08_105
The data in (26) show that such questions may have a right-dislocated subject nominal (as may declarative sentences, see $\S 3.12$ ), but otherwise word order follows the preferred word order (Subject-Object-Verb) shown in chapter 2. (The dislocated phrase is pronounced at a lower pitch, after the intonation fall of the question.)
(26) a. ¿Juan quih zixcám ${ }^{\circ}$ com quihit -ya? the.FL fish the.Hz $\overline{\mathrm{SN}-\mathrm{TR}-e a t} \mathrm{QM}$
b. ¿Zixcám ${ }^{\circ}$ com quihit -ya, Juan quih?
c. * Zixcám ${ }^{\circ}$ com Juan quih quihit -ya? (on intended reading)
d. * ¿Juan quih quihit -ya, zixcám ${ }^{\circ}$ com?

```
`¡Está comiendo el PESCADO Juan?`
Is Juan eating the FISH? (contrastive) (a) RMH_09-28-07_133b (b) RMH_09-28-07_133d
```

When the predicate is irrealis, an auxiliary is always required in the question, whether the irrealis is inflected for subject ( $\S 17.3 .1 .3$ ) or is of the deverbal noun type (§14.5). That auxiliary is always stressed and it is always followed by the question modal-ya (§10.2). See (27)-(29).

| ¿Hocö | hizcoi | nsaaco | haa -ya?  <br> wood PX-PL 2SGS-Ir.ID-build.house AUX | QM |
| :--- | :--- | :--- | :--- | :--- |

‘¿Vas a construir una casa con esta madera?'
Are you going to build a house with this wood? (DS2010, caaco) RMH_09-28-07_134a

| (28) | ¿Ihpsoos |  | -ya? | (29) | ¢Me siitax | quee | a? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1SGS.In-Ir.Id-sing | Aux | QM |  | 2Pro Ir.Id-go | Aux.SN | QM |
|  | '¿Canto?' |  |  |  | ‘¿Vas a ir?' RMH | 08-21-07_79a |  |

### 6.2 Content questions

The question words used in content questions are: quíih who(m)?, whose?, áz what?, háqui (hac) what place? (where?), háqui (com, quij, cop) which one?, zó which?, zó how?, ${ }^{4}$ and zímjöc when? ${ }^{5}$ These are also listed in Table 6.1. As indicated, the question word háqui usually occurs with a definite article (hac, com, quij, cop; §21.2). Sentences with these question words are discussed in groups, first in finite clauses (§6.2.1) and then in non-finite clauses (§6.2.2).

The question marker -ya sometimes occurs after the question words quíih who? (or whom? or whose?), áz what?, zímjöc when? and the nominal phrase containing zó which? as well,

| quíih | Table 6.1: Question words |
| :--- | :--- |
| who?, whom? whose? |  |
| áz | what? |
| háquic (hac) | what place? where? |
| háqui (com/quij/cop) | which one? |
| zó | which? |
| zó | how? |
| zímjöc | when? |

[^93]although only if the predicate is not marked with - ya; it is ungrammatical for more than one instance of -ya to appear in a single sentence. This is shown in (30).
(30) a. ¿Quíih Pedro quih siizt quee -ya? who? the.FL Ir.Id-tattoo Aux.SN QM
b. * Quíih -ya Pedro quih siizt quee - ya?
¿¿Quién tatuará a Pedro?'
Who will tattoo Pedro? RMH_11-19-07_69
The variation in the presence of the question modal is usually meaningful, as shown by the examples in the following sections. When -ya occurs directly on quíih it is implied that the person or thing in question is not present or is not from a particular known group; a question with -ya on quíih is therefore a more open kind of question. ${ }^{6}$ The absence of -ya in finite clauses typically indicates that the question is focusing on the selection of a person from a known group, such as the group of people in the presence of the speaker. Thus if one were addressing a group of people and were asking 'Which one of you did that?', one would use quíih without -ya. No personal pronoun is used. These facts are illustrated by various pairs of sentences in the following sections. In other cases the presence or absence of - ya has other interesting effects, as shown below.

The interrogative pronoun, noun, or adverb may vary in its position in the clause. Examples are presented below.

The intonation of a content question generally includes a higher pitch on the question word, a drop in pitch that begins after that word, and a continuing drop in pitch through the end of the clause (before any right-dislocated phrase).

### 6.2.1 Content questions in finite realis clauses

The following examples are simple illustrations using interrogative realis mood forms.

### 6.2.1.1 Questions with quíih who?

Examples (31)-(33) present the question word quíih who? with intransitive verbs and without -ya, the construction that indicates that the question is directed toward a known set of people that is commonly in the presence of the speaker.

[^94](31) ¿Quíih toos? (pyeest quij ano cömiizcam hac)
who? RL-sing party the.Cm 3P.in 3IO-Px-arrive.PL the.LC
¿¿Quién (de ustedes) cantó (habiendo llegado a la fiesta)?'
Who (of you) sang (having gone to the party)? RMH_09-28-07_134c, RMH_09-28-07_134cc
(32) iQuíih haquix intita, tatax?
who? somewhere Aw-Rl-move RL-go
‘¿Quién (de ustedes) se fue?'
Who (of you) went? RMH_09-28-07_134e
(33) ¿Quíih Caborca hac ano mota? who? the.Lc 3P.in Twd-RL-move
¿¿Quién (de ustedes) vino de Caborca?'
Who (of you) came from Caborca? RMH_08-21-07_88
The question word quíih may be followed directly by the question modal -ya to make the question pertinent to an open set and indicate that the person in question is not present. See (34)(39).
(34) iQuíih -ya tazcam?
who? QM RL-arrive.PL
‘¿Quiénes llegaron?’
Who arrived (pl.)? RMH_11-19-07_152
(35) iQuíih -ya haquix intita, tatax?
who? QM somewhere Aw-RL-move RL-go
¿¿Quién se fue?'
Who went? (more open question) RMH_09-28-07_134f
(36) ¿Quíih -ya toos? (Rosa xah Julia xah) who? QM RL-sing CRD CRD ‘¿Quién canta/cantó? (¿Rosa o Julia?)'
Who sang/is singing? (Rosa or Julia?) (not present) RMH_09-28-07_134d, RMH_09-28-07_134dd
(37) ¿Quíih -ya miicp cötap? who? QM 2P-place.next.to 3IO-RL-stand ‘¿Quién está a tu lado?'
Who is standing next to you? RMH_11-27-07_09
(38) iQuíih -ya $\quad$ miicp tap ${ }^{\prime}$ ? who? QM 2P-place.next.to RL-stand ¿¿Quién está a tu favor?’
Who is supporting (rooting for) you? RMH_11-27-07_10
(39) a. ¿Quíih -ya Caborca hac ano mota? who? QM the.Lc 3P.in Twd-RL-move
b. * ¿Caborca hac quíih -ya ano mota?
c. * ¿Caborca hac ano quíih -ya mota?
d. $\quad *$ ¿Quíih -ya ano mota, Caborca hac?
‘¿Quién vino de Caborca?’
Who came from Caborca? (more open question) RMH_11-19-07_30
The examples in (39) above also demonstrate the relative rigidity of word order in questions, a fact seen in various places in this chapter. The question word in these intransitive clause examples must be in initial position. With transitive verbs it is possible to see that the facts are a bit more complicated. The question word is not always in initial position, and some examples exhibit ambiguity. See (40)-(43).
(40) ¿Ouíih -ya ntaho? who? QM 2SGS-RL-see
‘‘A quién viste?’
Whom did you see? (typical open question) RMH_ $09-28-07 \_134 \mathrm{~g}$
(41) iQuíih intaho?
who? 2SGS-RL-see
'A cuál (de un grupo conocido) viste?'
Who (of a known group) did you see? RMH_09-28-07_134h
(42) ¿Quíih -ya itaho?
who? QM 3:3-RL-see
‘¿Quién lo(s)/la(s) vio?’ / ‘¿A quién vio?' RMH_09-28-07_135a,RMH_10-15-07_11c
Whom did s/he see? or Who saw him/her/it/them? (open question)
(43) iQuíih -ya ntacoxl?
who? QM 2SGS-Rl-tend
‘¿Con quién estás?'
Whom are you with? RMH_08-13-07_60e
When the clause contains a nominal phrase argument as well as the question word quíih, the use of -ya requires strict SOV word order (allowing for right-dislocated items, however). Since quíih may be questioning a non-subject as well as a subject, word order is significant.

## Subject questioned

Examples (44)-(52) show the use of the word quíih who? to question the subject of a finite clause. It is important to notice the lack of ambiguity.
(44) iQuíih -ya Pedro quih itaho?
‘¿Quién vio a Pedro?’ (* ¿A quién vio Pedro)
Who saw Pedro? (open question) (*Whom did Pedro see?) RMH_10-15-07_13a
(45) iQuíih -ya Pedro quih itazt?
who? QM the.FL 3:3-RL-tattoo
‘¿Quién tatuó a Pedro?’ (*‘A quién tatuó Pedro?’) RMH_09-28-07_137d, RMH_11-19-07_32
Who tattooed Pedro? (open question) (*Whom did Pedro tattoo?)
(46) ¿Quíih -ya \&ziix cxatlc」 miti itaaom?
who? QM thing SN-thin-Pl 2P-on 3:3-RL-beg
‘¿Quién te pidio tortillas?'
Who asked you for tortillas? RMH_05-17-08_106
(47) iQuíih -ya sahmees coi z itahit? who? QM orange(s) the.PL a/one 3:3-RL-eat ‘¿Quién comió una de las naranjas?'
Who ate one of the oranges? RMH_11-19-07_37
(48) ¿Quíih -ya quíih áz cöitacohot?
who? QM who? what? 3IO-3:3-RL-cause.see
‘¿Quién le mostró qué a quién?'
Who showed what to whom? RмH_11-19-07_77
(49) iQuíih -ya eenim caacoj quih itacoxl? who? QM knife SN-big the.FL 3:3-RL-tend ‘¿Quién tiene el machete?'
Who has the machete? (normal question) RMH_08-13-07_60f
(50) ¿Thamoc ma, quíih -ya ma tacoxaj? RL-be.night DS who? QM 2SGDO RL-tend-PL
¿¿Quiénes te visitaron anoche?’
Who (pl.) visited you last night? RMH_05-17-08_109
(51) ¿Ihamoc quih quíih -ya ma tacoxl? 3P-PON-be.night the.Fl who? QM 2SGSRl-tend
‘¿Quién te visitaba anoche?'
Who was visiting you last night? RMH_05-17-08_111
(52)
a. ¿Quíih -ya canoaa com itaai? who QM boat the.Hz 3:3-Rl-make
b. * ¿Canoaa com quíih -ya itaai?
‘¿Quién está haciendo la panga?’
Who is making the boat? (open question) RMH_09-28-07_137a
Example (53) demonstrates the use of the word quíih who? to question the subject of a finite as well as a non-finite clause that has the question modal after the deverbal noun.
(53) ¿Mai quih quíih itacoxaj haa coii -ya?

2P-father.ME the.Fl who? 3:3-Rl-tend-Pl there SN-be.Fl.PL QM
‘¿Quiénes están allí visitando a tu padre?'
Who are there visiting your father? RMH_05-17-08_107

## Direct object questioned

Examples (54)-(58) show the use of the word quíih who? to question the direct object of a finite clause. It is again important to notice the lack of ambiguity.
(54) ¿Juan quih quíih -ya itacoxl? the.FL who? QM 3:3-RL-tend
‘Con quién estaba Juan?’ (*‘¿Quién estaba con Juan?’)
Who was Juan tending? (*Who was tending Juan?) RMH_08-13-07_60d
(55) ¿Pedro quih quíih -ya itaho? the.FL who? QM 3:3-RL-see
‘¿A quién vio Pedro?’ (*‘¿Quién vio a Pedro?’) RMH_10-15-07_13b, RMH_09-28-07_137c Whom did Pedro see? (open question) (*Who saw Pedro?)
(56) ¿Pedro quih quíih -ya itazt? the.FL who? QM 3:3-RL-tattoo
'A quién tatuó Pedro?' (*‘ ¿Quién tatuó a Pedro?') RMH_08-13-07_62n, RMH_11-19-07_33 Whom did Pedro tattoo? (open question) (*Who tattooed Pedro?)
¿Ihamoc quih quíih -ya ntacoxl? 3P-PON-be.night the.FL who? QM 2SGS-RL-tend
‘¿A quién visitabas anoche?’
Who were you visiting last night? RMH_05-17-08_110
(58) \# Eenim caacoj quih ¿quíih -ya itacoxl? knife SN-big the.FL who? QM 3:3-RL-tend
Significaría: ‘¿A quién cuida el machete?’ (*‘Quién cuida el machete?’)
Would mean: Who is the machete tending? (*Who is tending the machete?)
Example (59) demonstrates the use of the word quíih who? to question the direct object of a finite clause that is also the subject of a non-finite clause that has the question modal after the deverbal noun.
(59) ¿Mai quih quíih itacoxl, haa quiij -ya?

2P-father.ME the.FL who? 3:3-RL-tend there SN-sit QM
'Con quién está tu padre?' (*¿Quién está con tu padre?)
Who is your father with? (*Who is with your father?) RMH_05-17-08_108

## Indirect object questioned

Examples (60)-(61) show the use of the word quíih who? to question the indirect object of a
finite clause.
(60) ¿Juan quih quíih -ya cöitacohot, zixcám ${ }^{\circ}$ com? RMH_11-19-07_38 the.FL who? QM 3IO-3:3-RL-cause.see fish the.Hz
‘¿A quién Juan mostró el pescado?’ (*¿Quién mostró el pescado a Juan?) To whom did Juan show the fish? (open question) (*Who showed the fish to Juan?)
(61) ¿Quíih -ya cöitacohot, $\quad$ zixcám ${ }^{\circ}$ com? who? QM 3IO-3:3-Rl-cause.see fish the.Hz
‘¿A quién se lo mostró el pescado?'
To whom did s/he show the fish? or Who showed the fish to him/her? (open question) RMH_09-28-07_136cc
(62) ¿Quíih cöitacohot, zixcám ${ }^{\circ}$ com?
who? 3IO-3:3-RL-cause.see fish the.Hz
‘¿A quién se lo mostró el pescado?' RмH_09-28-07_136c
To which did s/he show the fish? or Which showed the fish to him/her?
General issues with quiih
The interpretation of quíih - as subject, direct object or indirect object - may vary depending on the available readings from the context and morphology when word order is not a factor. Of course, overt inflection on the verb for a non-third person restricts the set of interpretations. Thus notice the ambiguity of (63) as well as some of the ambiguities indicated for earlier examples.
(63) iQuíih itaho?
who? 3:3-RL-see
‘¿A cuál (de un grupo conocido) vio?’ o ‘¿Cuál lo vio?' RMH_11-19-07_31
Which (of a known group) did s/he see? or Which one saw him/her/it/them?
A nominal may appear early in the sentence as the possessor/subject of a nominalized clause that sets the stage for the question. This stage-setting does not reduce the ambiguity of the question that may follow, as shown in (64)-(65).
(64) Ziix hapx coom」 com hapx cöiihom hac thing outside SN-lie the.Hz outside 3IO-3P-PON-lie the.LC

$$
\begin{array}{rll}
\text { ¿quíih } & (-y a) & \text { itaho? } \\
\text { who? } & \text { QM } & \text { 3:3-RL-see }
\end{array}
$$

'Quién vio la ballena salir? o '¿A quién vio la ballena cuando salió?'
Who saw the whale surface? or Whom did the whale see when it surfaced?
(open question with -ya) RMH_10-15-07_11b, (restricted set without -ya) RMH_10-15-07_11a
(65) Pedro quih Hezitmisoj quij ano cöiifp hac
the.FL Hermosillo the.CM 3P.in 3IO-3P-PON-arrive the.LC

```
quíih (-ya) itaho?
who? QM 3:3-RL-see
```

‘¿A quién vio Pedro cuando estaba en Hermosillo?’ o ‘¿Quién vio a Pedro cuando estaba en Hermosillo?'
Whom did Pedro see when he was in Hermosillo? or Who saw Pedro when he was in Hermosillo?
(open question with -ya) RMH_10-15-07_12b (restricted set without -ya) RMH_10-15-07_12a
In sentence-initial position preceding a nominal phrase, quíih is interpreted as the subject. See (66)-(69).
(66) ¿Quíih Rosa quih itaho?
who? the.FL 3:3-RL-see
‘¿Cuál (de un grupo conocido) vio a Rosa?’ (*‘‘A cuál vio Rosa?)
Which (of a known group) saw Rosa? (*Which did Rosa see?) Rмн_11-19-07_151

| ¿Quíih | Pedro quih | itazt? |
| :---: | :---: | :--- |
| who? | the.FL | $3: 3-$ RL-tattoo |

‘¿Quién tatuó a Pedro?’ (*‘A quién tatuó Pedro?’) RMH_09-28-07_137e, RMH_11-19-07_34
Which (of a known group) tattooed Pedro? (*Which did Pedro tattoo?)
(68) iQuíih eenim caacoj quih itacoxl?
who? knife SN-big the.FL 3:3-RL-tend
¿¿Quién (de un grupo conocido) tiene el machete?'
Who (of a known group) has the machete? RMH_08-13-07_60f
(69) ¿Quíih canoaa com itaai?
who? boat the.Hz 3:3-RL-make
‘¿Quién (de grupo conocido) está haciendo la panga?’
Who (of known group) is making the boat? RMH_09-28-07_137b
When the word quíih (without -ya) follows a DP, there are actually two options that correlate with the intonation. If the intonation is simple interrogative sentence intonation, the quíih is taken as referring to the object, as expected by the word order; see example (70).

```
¿Rosa quih quíih itaho?
    the.Fl who? 3:3-Rl-see
    `¿A cuál vio Rosa?` (*`Cuál (de un grupo conocido) vio a Rosa?`)
    Which one did Rosa see? (*Which one (of a known group) saw Rosa?) RMH_11-19-07_75
```

If the DP preceding quíih (without -ya) is set off with a slight pause, resulting in a higher intonation on quíih than in the preceding examples, quíih is interpreted as referring to the subject. This construction is appropriate for non-agentive verbs like $\sqrt{ }$ aho see and $\sqrt{ }$ acoxl tend. See (71)-(72).
(71) ¿Rosa quih, quíih itaho? the.Fl who? 3:3-RL-see
‘¿Cuál (de un grupo conocido) vio a Rosa?’
Which one (of a known group) saw Rosa? RMH_11-19-07_74
(72) Eenim caacoj quih, iquíih itacoxl? knife SN-big the.FL who? 3:3-RL-tend ‘¿Cuál tiene el machete?’
Which one has the machete? (ALIM 90) RMH_08-13-07_60a
With a more agentive verb such as the one for tattoo a more "insistent" rising intonation on the verb is required, as in (73). ${ }^{7}$
(73) ¿Pedro quih, quíih itazt? the.FL who? 3:3-RL-tattoo
‘¿Cuál tatuó a Pedro? (*¿'A cuál tatuó Pedro?')
Which one tattooed Pedro? (*Which one did Pedro tattoo?)
(rising intonation on itazt) RMH_11-19-07_35

## Possessor questioned

The word quíih may also question the possessor of a nominal in a finite clause; the use of -ya in these examples is a bit different than in the examples discussed so far. It may appear after the question word itself, as in (74a), or after the possessed noun, as in (74b). (74b) is considered a marked construction compared to (74a).

```
(74) a. (normal)
iOuníh ata \(\quad \underset{\text { who? }}{\text { 3P-mother }} \underset{\text { QM }}{\text {-ya }} \quad\)\begin{tabular}{l} 
tmoqueepe? \\
RL-sick
\end{tabular}
```

b. (more direct, with more "intensity")
¿Ouíih -ya ata quih tmoqueepe?
who? QM 3P-mother the.FL RL-sick
‘¿La madre de quién está enferma?’
Whose mother is sick? (a) RMH_09-28-07_138a (b) RMH_09-28-07_138b

## The question word quiih with an auxiliary

The word quíih may be supported by the auxiliary haa or the intensifier haxehe in a cleft-like construction, as in examples (75)-(79).

[^95]```
(75) ¿Quíih haa -ya tmoqueepe?
        who? AUX QM RL-sick
    `¿Quién es que está enfermo?'
    Who is it that is sick? RMH_11-19-07_40
(76) ¿Quíih haxehe -ya xepe iteel tintica itaao?
    who? Intns QM sea 3P-edge Md-Aw 3:3-Rl-pass.by
    `¿Quién será que está caminando por la orilla del mar?'
    Who on earth is that walking along the shore? RMH_11-19-07_81
(77) ¿Ihamoc quih quíih haa -ya ma tacoxl?
    3P-PON-be.night the.Fl who? AuX QM 2SGDO Rl-tend
    `¿Quién te visitó anoche?'
    Last night who visited you? RMH_05-17-08_112
(78) iIhamoc quih quíih haa -ya ntacoxl?
    3P-PON-be.night the.FL who? AUX QM 2SGS-Rl-tend
    `¿A quién visitaste anoche?'
    Whom did you visit last night? RMH_05-17-08_113
\begin{tabular}{llllll} 
(79) & ¿Ihamoc & quih & quíih & haa & -ya \\
& 3P-PON-be.night & the.FL & who \(?\) & AUX & QM \\
& 3:3-RL-tend
\end{tabular}
        'A quién visitó anoche?' o '¿Quién le visitó anoche?'
    Whom did s/he visit last night? or Who visited him/her last night? RMH_05-17-08_114
```


### 6.2.1.2 Questions with áz what?

The question word áz is used for nonhuman entities, whether inanimate or animate, subject or non-subject, as in (80)-(83).


The question modal is typically used with this question word. Sometimes, under conditions that have not been studied adequately, it cannot be omitted. This is shown in (84), where the question word appears sentence-initially as an interrogative subject.
(84) a. íÁz -ya Luis quih itacö? ${ }^{8}$
what? QM the.FL 3:3-RL-kill
b. * íÁz Luis quih itacö?
‘¿Qué mató a Luis? (*‘Qué mató Luis?’)
What killed Luis? (* What did Luis kill?) RMH_05-17-08_115
The absence of the question modal is adds a special rhetorical effect that is different than that found with quíih who?, as the translations of (85)-(86) show.
(85)
a. ¿Luis quih áz -ya itacö? the.FL what? QM 3:3-RL-kill
‘¿Qué mató Luis? (*‘¿Qué mató a Luis?’)
What did Luis kill? (*What killed Luis?) (typical question) RMH_09-28-07_138c
b. ¿Luis quih áz itacö? the.FL what? 3:3-RL-kill
‘¿Qué mató Luis?'
What did Luis kill? (it is presumed that the answer is 'nothing') RMH_09-28-07_138d
(86) a. ¿Luis quih áz -ya itamjc? the.FL what? QM 3:3-RL-take/bring
‘¿Qué trajo Luis?’
What did Luis bring? (typical question) RMH_09-28-07_138e
b. ¿Luis quih áz itamjc? the what? 3:3-RL-take/bring
‘¿Qué trajo Luis?’
What did Luis bring? (it is presumed that the answer is 'nothing') RMH_09-28-07_138f
c. * ¿Áz -ya Luis quih itamjc?
(* ‘Qué trajo Luis?') (*What did Luis bring?)
The word order in sentences with this question word is preferentially Subject-Object-Verb word order, but variation is acceptable, as the examples in (87) illustrate.
(87) a. ¿Pedro quih María quih áz -ya cöitacohot?
the.FL the.FL what QM 3IO-3:3-RL-cause.see
b. ¿Pedro quih áz -ya María quih cöitacohot?

[^96]c. íÁz -ya Pedro quih María quih cöitacohot?
¿¿Qué mostró Pedro a María?’
What did Pedro show María? (a) RMH_09-28-07_136d (b) RMH_09-28-07_136e (c) RMH_09-28-07_136f
The word áz may be supported by the auxiliary haa ${ }^{9}$ or the intensifier haxehe in a cleft-like construction, as shown in (88)-(90).


### 6.2.1.3 Questions with háqui which one?

The question word háqui varies in its potential referent depending on the article that occurs with it. With the locative article hac (§21.2.5) or with no article (in a clause with a positional verb), it refers to a place. Despite being a location adjunct, it is not typically cross-referenced on the verb with oblique/indirect object inflection (§2.7), as shown in (91)-(95). ${ }^{10}$

| (91) a. | ¿Cmaax | Juan quih | háqui |
| :---: | :---: | :---: | :--- |
| the.FL | tiih? |  |  |
|  |  | which.one? | RL-be.FL |

[^97]```
            b. * ¿Cmaax Juan quih háqui hac tiih?
                the.LC
            c. * ¿Cmaax Juan quih háqui hac cötiih?
                                    3IO-Rl-be.Fl
d. * ¿Cmaax háqui Juan quih tiih?
e. * ¿Cmaax háqui hac Juan quih tiih?
f. * ¿Cmaax háqui hac Juan quih cötiih?
g. ¿Juan quih emaax háqui xah tiih?
`¿Dónde está Juan ahora?`
Where is Juan now? RMH_11-27-07_13
(92) a. ¿Me háqui ntiih?
            2Pro which.one? 2SGS-Rl-be.Fl
    b. * ¿Me háqui contiih?
            3IO-2SGS-RL-be.FL
            c. * ¿Háqui me ntiih?
            `¿Dónde estabas/estás?'
            Where were/are you? RMH_116
(93) a. ¿Zaah quij háqui hac ano tiij?
            sun the.Cm which.one? the.Lc 3P.in Rl-sit
b. iHáqui hac zaah quij ano tiij?
c. * ¿Háqui hac zaah quij ano cötiij?
                                    3IO-RL-sit
    d. * ¿Háqui zaah quij ano tiij?
    e. * Zaah quij háqui ano tiij?
    `¿Dónde está el sol?`
    Where is the sun? (a) RMH_08-13-07_62k, RMH_08-21-07_87a (b) RMH_08-21-07_87b
```



```
The presence or absence of the article hac is governed by a couple of principles. While the article hac is commonly omitted, it is required when the expression is the complement of a P (chapter 22), as in example (93) and (95) above, or when the verb in the expression is one of
```

movement (perhaps only particular ones), as in examples (96)-(100).
(96) ¿Mai háqui hac contita, án cöcazquim -ya?

2P-father.ME which.one? the.Lc 3IO-Aw-Rl-move 3P.interior 3IO-SN-enter QM
‘¿Por dónde entró tu padre?’
Where did your father come in? RMH_05-17-08_119
(97) ¿Mai háqui hac contita, hapx cöcaap -ya? 2P-father.ME which.one? the.Lc 3IO-Aw-RL-move outside 3IO-SN-stand QM 'Por dónde salió tu padre?'
Where did your father come out? RмH_05-17-08_120
(98) ¿Me háqui hac ano ntafp?

2Pro which.one? the.Lc 3P.in 2SGS-RL-arrive
‘¿A qué lugar llegaste?’
Where did you go to? RмH_-05-17-08_123
(99) ¿Me háqui hac ano mmita, ntafp? ${ }^{11}$ 2Pro which.one? the.Lc 3P.in/from Twd-2SGS-Rl-move 2SGS-RL-arrive '¿De donde llegaste?'
Where did you come from? Rмн_05-17-08_121
(100) ¿Me háqui hac an icaafp intamzo? 2Pro which.one? the.Lc 3P.in Inf.In-arrive 2SGS-RL-want ‘¿A dónde quieres ir?’
Where do you want to go? RMH_-05-17-08_122
The $P$, in turn, is required if the predicate is anything other than a positional verb or a placement verb. ${ }^{12}$ Therefore an example such as (101a) is ungrammatical but (101b) and (102) are grammatical. ${ }^{13}$


[^98]b. ¿Me háqui hac ano soos quee -ya? 2Pro which.one? the. LC 3P.in Ir.ID-sing Aux.SN QM
¿¿Dónde cantarás?’
Where will you sing? RMH_05-17-08_124
(102) ¿Me háqui hac ano saahit quee -ya?

2Pro which.one? the.Lc 3P.in Ir.ID-fish Aux QM
‘¿Dónde vas a pescar?’
Where are you going to go fishing? Rмн_05-17-08_125
The question phrase with háqui most commonly occurs just before the verb phrase (see chapter 5), but if the article is present, it may also appear at the beginning of the clause; see examples (93a-b). Other examples with háqui are given in (103)-(109).
(103) Hast zo toc cötiih, ¿háqui tiih?
rock a there 3IO-Rl-be.Fl which.one? Rl-be.Fl
‘¿Dónde está la piedra que estaba allí?'
Where is the rock that was there? RMH_05-17-08_126
(104) ¿Moxima Juan quih háqui tiih?
yesterday the.FL which.one? RL-be.FL
¿¿Dónde estaba Juan ayer?’
Where was Juan yesterday? Rмн_05-17-08_127
(105) ¿Háqui htah?
which.one? 1SGS.Tr-Rl-put.FL
¿¿Dónde lo/la puse?’
Where did I put it? RMH_05-17-08_128
(106) i เZiix hapámasoj caacöl」 quih Juan quih háqui hac rope the.Fl the.Fl which.one? the.LC

## an itáh?

3P.in 3:3-Rl-put.FL
‘¿Dónde puso la soga Juan?’
Where did Juan put the rope? Rмн_05-17-08_129
(107) a. ¿Hamcanoiin quih háqui tiih?
pan the.FL which.one? RL-be.FL
b. * ¿Háqui hamcanoiin quih tiih?
¿Dónde está la olla?
Where is the cooking pot? RMH_05-17-08_130
(108) a. ¿Iime hac háqui hac ano tahca? 3P-home the.Lc which.one? the.Lc 3P.in RL-be.located
b. * $i$ Háqui hac iime hac ano tahca?
‘¿Dónde está su hogar?’
Where is his/her/its home? RMH_05-17-08_131
(109) ¿Zixquisiil ${ }^{\circ}$ ctam quih háqui hac ano tiij, hant tiij? child male the.FL which.one? the.LC 3P.in RL-sit land RL-sit
‘¿Dónde está sentado el muchacho?’
Where is the boy sitting? RMH_05-17-08_132
This question word with hac may be used in a cleft-like construction, as in (110)-(111).
(110) iHáqui hac haa -ya, Juan quih hap $z$ an itacö? which.one? the.Lc Aux QM the.FL mule.deer a 3P.in 3:3-RL-kill
‘¿Dónde era que Juan mató a un venado bura?’
Where was it that Juan killed a mule deer? RMH_08-13-07_62j
(111) $i \underline{\text { Háqui hac haa -ya ano hptap ma, hin ntaho? }}$ which.one? the.Lc Aux QM 3P.in 1SGS.In-Rl-stand DS 1SGDO 2SGS-Rl-see '¿Dónde era que yo estaba y me viste?'
Where was it that I was and you saw me? Rмн_11-27-07_14
The word háqui is also used to refer to people and things rather than a location when it occurs with one of the various positional articles (§21.2), as shown in (112)-(115).
(112) a. ¿Háqui cop tooha? which.one? the.Vt Rl-cry
b. iHáqui cop haa -ya tooha? which.one? the.VT Aux QM Rl-cry
¿¿Cuál está llorando?’
Which one is crying? RMH_11-19-07_154 RNH_05-17-08_133
(113) ¿Háqui quii เhant xnoois」 coi scaaix quee -ya? which.one? the.Cm trash the.Pl Ir.Id-put.CM Aux.SN QM
¿¿Cuál va a llevar la basura?’
Which (person) is going to take the trash? RMH_05-17-08_134

| (114) | ¿Háqui com | saazi | quee | -ya? ${ }^{14}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | which.one? the.Hz | IR.ID-carry | Aux.SN | QM |  |
|  | ¿¿Cuál (p.ej., de los rifles) va a llevar?' |  |  |  |  |
|  | Which one (e.g. of the rifles) is s/he going to take? RmH_05-17-08_135 |  |  |  |  |
| (115) | ¿Háqui tintica | cohsiitni |  |  | haa -ya? |
|  | which.one? MD-Aw | 3IO-1SGS | R-Ir.ID | ke.contact | Aux QM |
|  | ¿¿Cuál (p.ej. de los ca | ballos) deb | tirar? |  |  |
|  | Which one (e.g. of the horses) shall I shoot? RMH_05-17-08_136 |  |  |  |  |

### 6.2.1.4 Questions with zímjöc when?

The question word zímjöc when? sometimes occurs with question modal -ya and sometimes without, with no obvious difference in meaning, although sometimes it is more natural or common for it to be present. See examples (116)-(117).
(116) ¿Zímjöc (-ya) mizaah cötafp? when? QM 2P-sun/day 3IO-RL-arrive ‘¿Cuándo era tu cumpleaños?'
When was your birthday? (DS2010, izaah) RMH_05-17-08_137
(117) ¿ZZímjöc (-ya) cosi $z$ iti hant tiij ma, ntaho?
when? QM thorn a 3P-on land RL-sit DS 2SGS-RL-see
'Cuándo lo/la viste sentar en una espina?'
When did you see him/her sit on a thorn? RMH_05-17-08_138
The preceding examples notwithstanding, it is very hard to find or elicit questions using the word zímjöc with a finite verb. Examples (118)-(123), all completely unacceptable or marginal questions, illustrate this point. (For full acceptable ways to ask these questions, always involving a deverbal noun, see $\S \S 6.2 .2 .2-6.2 .2 .3$.)
(118) (compare grammatical (172) below)
$\begin{array}{ccl}\text { a. ?* } \underset{\text { when }}{\text { Zímjöc }} & \text {-ya Juan quih zixcám } & \text { z itacö? } \\ & \text { QM } & \text { the.Fl fish }\end{array}$
b. ?* ¿Juan quih, zímjöc -ya zixcám ${ }^{\circ} \mathrm{z}$ itacö?
c. * ¿Juan quih zixcám ${ }^{\circ}$ zo zímjöc -ya itacö?

[^99]('¿Cuándo fue que pescó un pescado Juan?')
(When did Juan catch a fish?) (a) RMH_09-28-07_140a (b) RMH_09-28-07_140b
(119) (compare grammatical (173) below)
a. ?* Zímjöc -ya Juan quih zixcám ${ }^{\circ}$ hipcom itacö? when? QM the.FL fish Px.Hz 3:3-RL-kill
b. ?* ¿Juan quih, zímjöc -ya zixcám ${ }^{\circ}$ hipcom itacö?
c. * ¿Juan quih zixcám ${ }^{\circ}$ hipcom zímjöc -ya itacö?
(‘¿Cuándo mató Juan este pescado?')
(When did Juan catch this fish?) (a) RMH_09-28-07_140C (b) RMH_09-28-07_140d
(120) (compare grammatical (171) below)
a. ?* ¿Zímjöc -ya Juan quih inol cop itaafc? when? QM the.FL 3P-finger the.VT 3:3-RL-pound
b. ?* ¿Juan quih, zímjöc -ya inol cop itaafc?
c. * ¿Juan quih inol cop zímjöc -ya itaafc?
(‘¿Cuándo golpeó Juan su dedo?’)
(When did Juan hit his finger?) (a) RMH_08-13-07_62h RMH_08-21-07_89a (b) RMH_08-13-07_ya?
(121) * ¿ZŹmjöc (-ya) cosi z iti tiij? when? QM thorn a 3P-on RL-sit
('¿Cuándo se sentó en una espina?')
(When did s/he sit on a thorn?)
(122) (compare grammatical (178) below)

* ¿Zímjöc -ya íti tiij?
when? QM 3P-on RL-sit
(‘¿Cuándo se sentó en él/ella?’)
(When did s/he sit on it?)
(123) (compare grammatical (177) below)
a. ?* ¿ZŹmjöc -ya $\quad$ ziix paaij ano coom」 $\operatorname{com} \quad$ iti tiij? when? QM scorpion the.Hz 3P-on RL-sit
b. ?* ¿Ziix paaij ano coom $\lrcorner$ com, izímjöc -ya iti tiij?
‘¿Cuándo se sentó en el alacrán?’
When did s/he sit on the scorpion? (a) RMH_88-13-07_61e (b) RMH_11-19-07_78


### 6.2.1.5 Questions with zó which?

The interrogative determiner zó which? heads a determiner phrase with a lexical head that is being questioned. This determiner is unusual syntactically in that it occurs phrase-initially rather
than finally like other determiners (chapter 21). See examples (124)-(127).


Such questions may be abbreviated and presented without a verb, as shown in (128)-(129).

| (128) | ¿Zó | ctam | -ya? | (129) | iZó | comcaac | -ya? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | which? | man | QM |  | which? | person.PL | QM |
|  | '¿Cuál ho | mbre? |  |  | '¿Qué pe | rsonas?' |  |
|  | Which m | an? RмН | 9-28-07_143j |  | Which pe | ople? RмН_11 | -27-07 18 |

### 6.2.1.6 Questions with zó how?

The question word zó how? has a rather wide usage since it is the expression that is most commonly used to question the adjunct of an intransitive clause containing a verb of speaking, as in (130); thinking, as in (131); or costing, as in (132), among others; and whether that clause is inherently intransitive (as with certain speech and thought verbs, including those in (130) and (131) as well as the verb for cost, as in (132)) or whether it is intransitive because of the passive voice, as in (133).

[^100](130) iZZó ntee? how? 2SGS-RL-say
‘¿Qué dijiste?'
What did you say? RMH_09-28-07_141c
(132) iZZó tyaai? how? RL-cost
‘¿Cuánto vale/cuesta?’
How much does it cost? RMH_09-28-07_141b
(133) ¿ZZó tpai?
how? RL-Pv-tell
‘¿Cómo se llama?'
What is it called? RMH_09-28-07_141a
This question word occurs immediately before the verb phrase (see chapter 5 for discussion of the verb phrase), as shown in (134)-(136).
(134) a. ¿Me zó matooza? 2Pro how? 2PLS-RL-speak.PL
b. * ¿Zó me matooza?
‘¿Qué están diciendo Uds.?’
What are you (pl.) saying? (NTT, Mt. 16:15) OP_2-2-07_065 LHC_2-05-07_140
(135) a. ¿Ctamcö himcoi zó tooza? man-Pl Dt-Pl how? RL-speak.PL
b. * ¿Zó ctamcö himcoi tooza?
'¿Qué están diciendo esos hombres?'
What are those men saying? RмH_-09-28-07_141e
(136) a. ¿Caamiz himquih zó tyaai? shirt DT-Fl how? Rl-cost
b. * ¿Zó caamiz himquih tyaai?
‘¿Cuánto cuesta esa camisa?
How much does that shirt cost? Rмн_05-17-08_139
This adverb (unlike the interrogative determiner) has the form zá when it precedes any word that begins with $\mathbf{i}$ (but not with a word that begins with $\mathbf{y}$ ), regardless of its meaning. ${ }^{16}$ See (137)-(140).

[^101]| (137) | ¿Rosa quih xiica ipxasi coi zá itapacta? <br> the.FL thing-Pl 3P-flesh the.PL how? 3:3-RL-cause.be.in.appearance |
| :---: | :---: |
|  | '¡En que manera hizo (p.ej. cortó) Rosa la carne?' |
|  | How did Rosa do (e.g. cut) the meat? RмH_11-19-07_48 |
| (138) | ¿Zá ipacta ntamzo? |
|  | how? 3P-PON-be.in.appearance 2SGS-RL-want |
|  | ‘¿Cómo quieres que sea?' |
|  | How do you want it to be? RMH_05-17-08_140 |
| (139) | ¿Zá icoos intamzo? |
|  | how? Inf.In-sing 2SGS-RL-want |
|  | `Cómo quieres cantar?’ |
|  | How do you want to sing? RMH_05-17-08_141 |
| (140) | ¿Zó yas intamzo? |
|  | how? 3P-PON-sing 2SGS-RL-want |
|  | ‘¿Cómo quieres que cante?’ |
|  | How do you want him/her to sing? (e.g. high or low) RMH_05-17-08_142 |

### 6.2.2 Content questions in non-finite realis clauses

Content questions are commonly made with deverbal nouns as the head of the clause. In some cases these are not only possible, but preferred or required. The examples in this section present a range of facts. Since the question modal is required with the deverbal noun, it is not possible for it to occur directly following the question word. Word order strictly follows the default order mentioned in chapter 2, where Simple Adjunct $>$ Subject $>$ Indirect/Oblique Object $>$ Direct Object $>$ Other Adjuncts except for the possibility of fronting (§3.10) and right dislocation (§3.12).

### 6.2.2.1 Questions with subject-oriented deverbal nouns

Questions made with subject-oriented deverbal nouns (§10.4.1) may inquire about the absolutive (subject of intransitive or direct object) argument, as in (141)-(143).

## Subject (of intransitive) is questioned

| (141) |  | cahcaail | -ya? | (142) | ¿Quíih | coos |  | a? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | what? | SN-remain/lacking | QM |  | who? | SN-sing |  |  |
|  | 'Qué ha | ce falta?' |  |  | '¿Cuál | stá canta |  | do? |
|  | What is | lacking? RMH_11-19-07_15 |  |  | Which i | singin |  |  |

[^102]
## Direct object is questioned

## (143) a. ¿Me áz casiijim -ya? 2Pro what? SN-TR-do QM

b. * $\underline{A ́ z}$ me casiijim -ya? ${ }^{18}$
‘¿Qué estás haciendo?'
What are you doing? RMH_-09-28-07_141f
It may also inquire about an adjunct or oblique object, as in (144)-(152).
Time
(144) a. ¿(Canoaa com) zímjöc xepe iti coom -ya? boat the.Hz when? sea 3P-on SN-lie QM
b. * (Canoaa com) xepe zímjöc iti coom-ya?
‘¿Cuándo fue puesta en el mar esa panga?’
When was that boat launched? гмн_09-28-07_1419
(145) Ctam, tiix izímjöc isoj caafc -ya? man DDS when? 3P-self SN-Tr-pound QM ‘¿Cuándo se golpéo ese hombre?’ (como con martillo) When did that man hit himself? (as with hammer) RмH_08-13-07_62a
(146) a. ¿Ctam, tiix zímjöc inol cop caafc -ya? man DDS when? 3P-finger the.VT SN-Tr-pound QM
b. * Zímjöc ctam, tiix inol cop caafc -ya?
‘¿Cuándo se golpeó el dedo ese hombre?’
When did that man hit his finger? RMH_08-13-07_62b
(147) a. ¿Zímjöc Juan quih inol cop caafc -ya? when? the.FL 3P-finger the.VT SN-Tr-pound QM
b. ¿Juan quih zímjöc inol cop caafc -ya?
c. * ¿Juan quih inol cop zímjöc caafc -ya?
‘¿Cuándo se golpeó Juan el dedo?’
When did Juan hit his finger? (a) RMH_08-13-07_62d (b) RMH_08-13-07_62e

[^103](148) ¿Ziix quih cöcacoaat」, ¿me zímjöc hant hizac iti caafp -ya? teacher 2Pro when? land Px-LC 3P-on SN-arrive QM
'Maestro, ¿cuándo llegaste a este lugar?'
Teacher, when did you arrive to this place? (NTT, Jn $6: 25$ ) RMH_05-17-08_143

## Measurement of quantity

(149) a. ¿Me zó hant cayaxi ${ }^{19}$-ya?

2Pro how? year SN-measure QM
b. ¿Me hant zó cayaxi -ya?
‘¿Cuántos años tienes?’
How old are you? RMH_10-15-07_19
(150) Ísolca quih izó cyaxi -ya?

3P-body-PL the.Fl how? SN-? QM
‘¿Cuántas personas estaban allí?’
How many people were there? (DS2010, isoj) RMH_08-21-07_79e
(151) Háxaca quih izِó cyaxi -ya ntyaa?

Abs-pet-Pl the.Fl how? SN-? QM 2SGS-Rl-own
‘¿Cuántos perros tienes?’
How many dogs do you own? RMH_11-27-07_16

## Location

(152) iZZó hant ano quiih -ya?
which? land/place 3P.in SN-be.FL QM
‘¿Dónde vive?’
Where does s/he live? RMH_09-28-07_143k
What is not possible is for an ergative (subject of transitive) to be questioned when the deverbal noun is of the subject-oriented type (see $\S 6.2 .2 .2$ for a different construction in which it can be questioned). This is illustrated by (153)-(154).

## Ergative cannot be questioned <br>  <br> b. ${ }^{*}$ ¿Siimet quih quíih quihit -ya?

(‘¿Quién come/comió el pan?’) (Who is eating / ate the bread?)

[^104]```
(154) * &\underline{Áz him quip -ya?}
    what? 1SGDO SN-Tr-bite QM
    ('¿Qué me está picando?) (What (e.g. insect) is biting me?)
```


### 6.2.2.2 Questions with direct object-oriented deverbal nouns

With direct object-oriented deverbal nouns (§10.4.3), the question word quíih must directly precede the deverbal noun (if not presented in an earlier clause, as in (167)), because it always interpreted as the subject/possessor of the deverbal noun. This construction is a common way to question an ergative subject and often the only way to felicitously question the time of a transitive clause. The direct object is not questioned with this construction, and of course the absolutive subject cannot be questioned with this construction since the object-oriented deverbal noun is possible only with transitive verbs. See examples (155)-(170).

## Questions with ergative 'who?' and explicit object

(155) a. Canoaa com, ¿quíih yaai -ya? boat the.Hz who? 3P-ON-make QM
b. ¿Quíih yaai -ya?, canoaa com.
c. * Quíih canoaa com yaai -ya?
‘¿Quién está haciendo la panga?’
Who is making the boat? (a) (DS2010, caai)
(156) Juan quih quíih ocoho -ya? the.FL who? 3P-ON-see QM
‘¿Quién encontró a Juan?’ (* ¿A quién encontró Juan?) Who found Juan? (*Whom did Juan find?) RMH_11-19-07_53b
$\begin{array}{lllllll}\text { (157) a. } & \text { Canoaa } & \text { com } & \text { iquíih } & \text { ocoho } & \text {-ya? } \\ & & \text { boat } & \text { the. } \mathrm{Hz} & \text { who? } & \text { 3P-ON-see } & \mathrm{QM}\end{array}$
b. ¿Quíih ocoho -ya?, canoaa com.
c. * ¿Quíih canoaa com ocoho -ya?
‘¿Quién vio/encontró la panga?'
Who saw/found the boat? (a) RMH_09-28-07_142a, (b) RMH_09-28-07_142b
(158) a. ¿Ziix hacacj hipquij, ¿quíih ooxi -ya? carving Px-CM who? 3P-ON-finish QM
b. ¿Quíih ooxi -ya?, ziix hacacj hipquij.
‘¿Quién hizo esta figura?’
Who made this carving? (a) RMH_09-28-07_142c, (b) RMH_08-13-07_61d
(159) a. Siimet coaatjö, tiix ¿quíih oohit -ya? bread SN-sweet DDS who? 3P-ON-eat QM
b. ¿Quíih oohit -ya?, siimet coaatjö, tiix.
‘¿Quién comió ese pan dulce?’
Who ate that sweet bread? (a) RMH_09-28-07_142d, (b) RMH_09-28-07_142e
(160) Pedro quih iquíih oozt -ya? the.FL who? 3P-ON-tattoo QM
¿¿Quién tatuó a Pedro?’ (*A quién tatuó pedro?)
Who tattooed Pedro? (*Whom did Pedro tattoo?) RMH_09-28-07_143a
(161) Zixcám ${ }^{\circ}$ com, iquíih cöiyacohot -ya?
fish the.Hz who? 3IO-3P-ON-cause.see QM
¿¿Quién le mostró el pescado?’
Who showed him/her the fish? RMH_09-28-07_143d
(162) ¿Pedro quih quíih ocoho -ya? the.Fl who? 3P-ON-see QM
(Contexto: Estamos buscando a Pedro.) ¿¿Quién vio a Pedro?'
(Context: We are looking for Pedro.) Who saw Pedro? RMH_09-28-07_144b
(163) iSiimet quih quíih oohit -ya?
bread the.FL who? 3P-ON-eat QM
‘¿Quién comió el pan?'
Who ate the bread? RMH_09-28-07_144c
(164) ¿Eenim caacoj quih quíih yacoxl -ya?
knife SN-big the.FL who? 3P-ON-tend QM
‘¿Quién tiene el machete?'
Who has the machete? RMH_11-19-07_54
Questions with ergative 'who?' and implicit object
(165) ¿Quíih ocoho -ya?
who? 3P-ON-see QM
‘¿Quién lo vio/encontró?' (*‘ ¿A quién encontró?')
Who saw/found it/him/her? (*Whom did s/he find?) RMH_11-19-07_53a
(166) iQuiíh oaah -ya?
who? 3P-ON-do/say QM
¿¿Quién lo hizo?'
Who did it? RMH_11-27-07_17

Questions with ergative 'who?' presented in an earlier clause
(167) ¿Quíih toc cötiih, yaai -ya? who? there 3IO-RL-be.Fl 3P-ON-make QM
'Quién lo/la está haciendo?'
Who is making it? (more doubt). RмН_11-19-07_52
(168) ¿Áz/Quíih toc cötiih, ocoho -ya? what? who? there 3IO-RL-be.Fl 3P-ON-see QM ‘¿Quién lo/la encontró?’
Who found it/him/her? (more doubt) RMH_11-19-07_59
(169) i $\underline{\underline{A ́ z}}$ toc cötiih, hoox tomcmiiquet, oaah -ya? what? there 3IO-RL-be.FL Intns RL-N-be.person 3P-ON-do/say QM ‘¿Quién hizo esa cosa terrible?’
Who did that terrible thing? [taken as referring to a person as agent] RMH_11-19-07_60
Questions with ergative 'what?'

‘¿Qué le picó?'
What bit him/her? RMH_11-19-07_156

## Questions with 'when?'

This construction is used to question adjuncts of transitive clauses, as in (171)-(176). Compare the following examples with the ungrammatical or very marginal examples shown in (118)-(120) above.

b. *? ¿Juan quih zímjöc inol cop yaafc -ya?
c. * ¿Zímjöc Juan quih inol cop yaafc -ya?
d. ¿Juan quih zímjöc yaafc-ya, inol cop?
¿¿Cuándo se golpeó Juan el dedo?’
When did Juan hit his finger? (a) RMH_08-13-07_62f (b)RMH_11-19-07_61 (d) XMH_73_22510 QQcheck b with Ren again
a. ¿Juan quih zixcám ${ }^{\circ}$ quih $\frac{\text { zímjöc ooicö }}{\text {-ya? }}$ the.Fl fish the.FL when? 3P-ON-kill QM
b. * ¿Juan quih, zímjöc zixcám ${ }^{\circ}$ quih ooicö -ya?
c. ${ }^{*}$ ¿Zímjöc Juan quih zixcám ${ }^{\circ}$ quih ooicö -ya?
d. ¿Juan quih zímjöc ooicö -ya, zixcám quih?
‘¿Cuándo fue que pescó un pescado Juan?’
When did Juan catch a fish? (a) XMH_71_22510 (d) XMH_-72_22510
(173) a. ¿Juan quih zímiöc ooicö -ya? zixcám ${ }^{\circ}$ hipcom. the.Fl when 3P-ON-kill QM fish Px-Hz
b. ¿Juan quih zixcám ${ }^{\circ}$ hipcom zímjöc ooicö -ya?
c. * ¿Zímiöc Juan quih zixcám ${ }^{\circ}$ hipcom ooicö -ya?
‘¿Cuándo mató este pescado Juan?’
When did Juan catch this fish? (a) RMH_09-28-07_143b (b) RMH_09-28-07_143c
(174) ¿Luis quih mosnipol quij zímjöc ooicö -ya?
the.FL leatherback the.CM when? 3P-ON-kill QM
‘¿Cuándo mató Luis la caguama de siete filos?’
When did Luis kill the leatherback turtle? Rмн_09-28-07_143g
(175) a. "\&Azoj canoj」 tiquij, ¿zímjöc hamiime com iti tiij ma, star MD-CM when? sky the.Hz 3P-on RL-sit DS mocoht -ya?" ox imii. 2P-ON-see-PL QM thus 3:3-Px-tell
b. * "Azoj canoj tiquij, ¿hamiime com zímjöc iti tiij ma, mocohtya?" ox imii.
c. * "Azoj canoj tiquij, \& hamiime com iti zímjöc tiij ma, mocohtya?" ox imii.
‘¿Cuándo vieron la estrella en el cielo?- les preguntó.'
"When did they see the star in the sky," he asked them. (Nit, мt 2:77) RмH_08-13-07_-62c
(176) a. ¿Juan quih hap quih háqui hac an ooicö -ya?
the.FL mule.deer the.FL which.one? the.LC 3P.in 3P-ON-kill QM
b. * Háqui hac Juan quih hap quih an ooicö -ya?
‘¿Dónde mató el venado bura Juan?’
Where did John kill the deer? RMH__08-13-07_621

### 6.2.2.3 Questions formed with proposition/oblique oriented deverbal nouns

The proposition/oblique-oriented deverbal noun (§10.4.4) is used when questioning the time of a realis intransitive clause. Compare (177)-(178) with the ungrammatical or very marginal examples shown in (121)-(123) above.
(177) ¿Ziix paaij ano coom」 com, ¿zímjöc iti ihiij -ya?
scorpion the.Hz when? 3P-on 3P-PON-sit QM
‘¿Cuándo se sentó en el alacrán?’
When did s/he sit on the scorpion? RMH_08-13-07_61h
(178) ¿Zímjcö it ihiij -ya?
when? 3P-on 3P-PON-sit QM
‘¿Cuándo se sentó en él/ella?'
When did s/he sit on it? RMH_08-13-07_61g

### 6.2.2.4 Other realis content questions

The word quíih who? may question a possessor, as in (179)-(180).
(179) ¿Quíih icaamiz -ya?
who? 3P-shirt QM
‘¿De quién es la camisa?’
Whose shirt is it? RMH_11-19-07_57
(180) ¿Quíih inol -ya contiin?
who? 3P-hand QM 3IO-2SGS-Rl-touch
¿¿Cuya mano tocaste?'
Whose hand did you touch? RMH_11-19-07_58
When quíih who? precedes the possessive pronoun yaa, (§16.1.6) it is following the pattern expected for questioning ergative subjects (§6.2.2.2) using an object-oriented deverbal noun, the etymological source of yaa. This is shown in (181)-(183).
(181) ¿Trooqui tiquij quíih yaa ${ }^{\circ}$-ya?
vehicle MD-CM who? his/hers QM
‘¿De quién es ese carro?’
Whose car is that? RMH_11-19-07_55
(182) ¿Trooqui ziix quih isoj cocjiit quih quíih yaa ${ }^{\circ}$-ya?
vehicle thing the.Fl 3P-self 3IO-SN-Tr-hit the.Fl who? his/hers QM
'De quién es el carro que se chocó?'
Whose car was it that crashed? (Whose was the car that crashed?) RMH_11-19-07_56
(183) a. ¿Haat hanoohcö $\lrcorner$, tiix ¿quíih yaa ${ }^{\circ}$-ya? concave.basket DDS who? his/hers QM
b. * ¿Quíih haat hanoohcö yaa -ya?
c. ${ }^{*}$ ¿Quíih haat hanoohcö, tiix yaa -ya?
d. ¿Quíih yaa -ya, haat hanoohcö, tiix?
'Esa canasta [no presente], ¿de quién es?'
That basket [not present], whose is it? (a) (ALLM) RMH_08-13-07_60b, (d) RMH_08-13-07_60c
The meaning why? is expressed by the clause zó tpacta ma (how? RL-be.in.appearance DS) or something similar adjusted for mood and person for other contexts. See (184).
(184) i เZó tpacta ma」 zixcám ${ }^{\circ}$ com intahit?
how? Rl.be.in.appearance DS fish the.Hz 2SGS-Rl-eat
‘¿Porqué comiste el pescado?’
Why did you eat the fish? RMH_11-19-07_62
The meaning how? (in what manner?) is expressed by the clause zó $\sqrt{ }$ apacta literally, how did s/he do it? (conjugated for the appropriate person and mood). See examples (185)-(186).
¿Zixcám ${ }^{\circ}$ com zó ntapacta ntahit?
fish the.Hz how? 2SGS-RL-cause.be.in.appearance 2SGS-RL-eat
‘¿Cómo preparaste el pescado que comiste?'
How did you prepare the fish that you ate? RMH_11-19-07_65
(186) ¿Zixcám ${ }^{\circ}$ com zó mpapacta nsiihit haa -ya? fish the.Hzhow? 2SGS-Ir.Dp-cause.be.in.appearance 2SGS-Ir.Id-eat Aux QM
‘¿Cómo preparás el pescado que comerás?’
How will you prepare the fish that you will eat? Rмн_11-19-07_64
The equivalent of the expressions how many? and how much? - ¿zó cyaxi -ya? - is embedded in the noun phrase. It can be modified with the attenuator xah (§24.7.1). See the examples in (187)-(188).
(187) ¿Comcaac quih zó cyaxi -ya pyeest quij ano tazcam? person/Seri-PL the.Fl how? SN-? QM party the.Cm 3P.in RL-arrive-PL
‘¿Cuántas personas llegaron a la fiesta?’
How many people went to the party? RMH_11-19-07_79 [exact number expected] ${ }^{20}$
(188) Comcaac quih zó xah cyaxi -ya pyeest quij
person/Seri-Pl the.Fl how? Atten $\mathrm{SN}-$ ? QM party the.CM
ano tazcam?
3P.in RL-arrive-PL
‘¿Más o menos cuántas personas llegaron a la fiesta?’
Approximately how many people went to the party? RMH_11-19-07_80

[^105]
### 6.2.3 Content questions in irrealis clauses

Irrealis clauses distinguish between finite and deverbal forms (see $\S 17.3 .1$ and $\S 14.5$ for details of the morphology, respectively). A major correlation - and the significant one for intransitive examples with third person subjects - is the choice of auxiliary in these questions: haa for finite verbs and quee for deverbal nouns. The examples in this section are organized by the grammatical role of the questioned element and then the finiteness of the verb of the clause in which it occurs.

Absolutive subject (finite verb)
(189) ¿Quíih saticpan haa -ya?
who? Ir.Id-work Aux QM
‘¿Quién va a trabajar?’
Who is going to work? RMH_11-27-07_19

## Ergative (finite verb)


b. ¿Quíih Pedro quih isizt haa -ya?
‘¿Quién tatuará a Pedro?’ (*‘¿A quién tatuará Pedro?')
Who will tattoo Pedro? (*Whom will Pedro tattoo?) (a) RмH_09-28-07_143h (b) RMH_11-19-07_68
(191) Hap hipcom ¿quíih inaail quih cöisacópoxot haa -ya? mule.deer Px.Hz who? 3P-skin the.Fl 3IO-3:3-Ir.Id-remove.skin Aux QM
¿¿Quién va a quitarle la piel a ese venado bura?’
Who is going to remove the skin of this mule deer? RMH_11-27-07_20

b. ¿Quíih siimet hipquij isiihit haa -ya?
‘¿Quién comerá este pan?’
Who will eat this bread? (a) RMH_11-19-07_73a (b) RMH_11-19-07_73b

## Ergative (deverbal noun)

| (193) | ¿Quíih Pedro | quih | siizt | quee | -ya? |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | who? | the.Fl | IR.ID-tattoo | Aux.SN | QM |
|  | ¿¿Quién tatuará a Pedro?’ (*‘‘A quién tatuará Pedro?’) RNH_11-19-07-70 (more insister <br> Who will tattoo Pedro? (*Whom will Pedro tattoo?) RNH 11-19-07-69 qaodifF? |  |  |  |  |
|  |  |  |  |  |  |

## Direct object (finite verb)

(194) ¿ ¿Áz insiihit haa -ya? what? 2SGS-Ir.ID-eat Aux QM
‘¿Qué vas a comer?’
What will you eat? RMH_05-17-08_144
Direct object (deverbal noun)
(195) ¿Pedro quih quíih siizt quee -ya? the.Fl who? Ir.Id-tattoo Aux.SN QM ‘¿A quién tatuará Pedro?’ (*‘Quién tatuará a Pedro?’) Whom will Pedro tattoo? (*Who will tattoo Pedro?) Rмн_09-28-07_143i

## Determiner of direct object (finite verb)

(196) i $\underline{\text { Zó }} \quad$ zixcám ${ }^{\circ}$ insiihit haa -ya? which? fish 2SGS-Ir.ID-eat Aux QM ‘¿Qué pescado comerás?' Which fish will you eat? RMH_11-19-07_71

## Determiner of direct object (deverbal noun)

(197) ¿Me zó zixcám ${ }^{\circ}$ siihit quee -ya?

2Pro which? fish Ir.ID-eat Aux.SN QM
¿¿Qué pescado comerás?’
What fish will you eat? RMH_11-19-07_66
(198) Me zó ziix hapahit siihit quee -ya?

2Pro what? thing SN-Pv-eat Ir.Id-eat Aux.SN QM '¿Qué comida vas a comer?'
What food are you going to eat? RMH_05-17-08_145
Time adjunct (finite verb)
(199) a. ¿Hasaj quih zímjöc insahiti haa -ya? basket the.Fl when? 2SGS-Ir.Id-begin Aux QM
b. ¿Zímjöc hasaj quih insahiti haa -ya?
‘¿Cuándo vas a empezar a hacer la canasta?'
When are you going to begin the basket? (DS2010, cahiti) (a) RMH_08-13-07_621 (b) RMH_11-19-07_65
(200) ¿Zímjöc impanaaaij, insiifp haa -ya?
when? 2SGS-Ir.Dp-return 2SGS-Ir.Id-arrive Aux QM
‘¿Cuándo vas a regresar?’
When are you going to come back? RMH_11-27-07_21

Time adjunct (deverbal noun)
(201) a. ¿Zímjöc me siifp quee -ya? ${ }^{21}$ when? 2Pro Ir.Id-arrive AUX.SN QM
b. ¿Me zímjöc siifp quee -ya?
¿¿Cuándo vas a llegar?’
When will you arrive? (a) RMH_05-17-08_147a (b) RMH_05-17-08_147b
(202) a. ¿Me zímjöc hasaj quih sahiti quee -ya?

2Pro when? basket the.Fl Ir.Id-begin Aux.SN QM
b. ¿Zímjöc me hasaj quih sahiti quee -ya?
c. $\quad$ ¿ $\mathbf{~ M e ~ h a s a j ~ q u i h ~ z i ́ m j o ̈ c ~ s a h i t i ~ q u e e ~ - y a ? ~}$
‘¿Cuándo vas a empezar a hacer una canasta?’
When are you going to begin to make a basket? (a) RMH_11-19-07_72a (b) RMH_11-19-07_72b
(203) ¿Cmaacoj quih zímjöc siifp quee -ya?
old.man the.Fl when? Ir.Id-arrive Aux.SN QM
¿¿Cuándo va a venir mi viejo (padre o esposo)?’
When is my old man (father or husband) going to come? (DS2010, cmaacoi) RMH_08-13-07_62m
(204) ¿Me zímjöc seeten quih cösaticpan quee -ya?
you when? pen.shell the.FL 3IO-Ir.ID-work AUX.SN QM?
‘¿Cuándo vas a trabajar con callo de hacha?’
When will you go to get pen shells? RмH_09-28-07_143f

## Quantity of absolutive subject (deverbal noun)

(205) ¿Comcaac quih ¿zó cyaxi saaitoj quee -ya? person/Seri-Pl the.Fl how many? Ir.Id-fish.Pl Aux.SN QM
‘¿Cuántas personas van a ir a pescar?’
How many people will go fishing? RмН_09-28-07_144a
(206) ¿Me zó zixcám ${ }^{\circ}$ siihit quee -ya?

2Pro what? fish Ir.Id-eat Aux.SN QM
¿¿Qué pescado comerás?’
Which fish will you eat? RMн_05-17-08_146

### 6.3 Rhetorical questions

Rhetorical questions have not been explored in depth. Those that have been observed do not have the normal intonation of questions, although question words or the question modal is

[^106]present. Typically there is a sharp drop in intonation on the auxiliary or the main verb. They are transcribed here with ?! punctuation.

The most common kind of rhetorical question observed is used to express sarcasm. The translations, of course, could vary considerably. See examples (207)-(210).


The rhetorical word a may occur with a nominal and the question marker to indicate a contradictory assertion on a specific nominal. Example (211) follows up with a rhetorical question that indicates the context for this contradictory assertion, and then a statement that makes a postive assertion. ${ }^{22}$

'No es el perro que se acostumbra a robar sino el gato.'
Dogs aren't the ones that typically steal but rather cats. RMH_05-20-08_02 isten to rob

### 6.4 A special kind of indirect question

While there do not appear to be any ordinary indirect questions of the type $I$ asked who would

[^107]sing, a special type of sentence appears to be in essence a kind of indirect question embedded under an unexpressed verb of wondering.

These indirect questions use a question word, but the intonation is that of an incomplete sentence. Oddly enough, the morphology of the verb in these indirect questions is of a realis verb (using t- §17.3.1.5), rather than an irrealis verb, although the sentences indicate a kind of musing about what will happen in the very near future. The intonation therefore is crucial for interpreting these sentences correctly and in not mistaking them as simple realis questions. For that reason, examples (212)-(217) are punctuated as statements with a missing main verb (indicated by the em-dash).
(212) Quíih sahmees coi z itahit, -. who? orange(s) the.PL a/one 3:3-RL-eat
'A ver quién (de los presentes) se anima a comer una de las naranjas.'
I wonder who (of those present) is going to eat one of the oranges. RMH_11-19-07_36
(213) Pedro quih quíih itazt, the.FL who? 3:3-RL-tattoo RMH_10-15-07_15
'A ver cuál va a tatuar a Pedro. o 'A ver a quién va a tatuar Pedro.'
I wonder who (present) will tattoo Pedro. or I wonder whom Pedro will tattoo.
(214) a. Canoaa com quíih itaai,
boat the.Hz who? 3:3-RL-make
b. Quíih canoaa com itaai, -.
'A ver cuál se anima a hacer la panga.'
I wonder who will make the boat. (a) RMH_11-19-07_39 (b) RMH_11-19.07_157
(215) Quíih -ya canoaa com itaai, -. who? QM boat the.Hz 3:3-RL-make
'A ver quién va a terminar de hacer la panga.'
I wonder who is going to finish making the boat. RMH_88-13-07_61c
(216) Ouíih hant itásaquim, -.
who? land 3:3-RL-brush
'A ver quién va a barrer.'
I wonder who will sweep. RMH_11-19-07_158
(217) Siimet quih quíih itahit, -. bread the.Fl who? 3:3-RL-eat
'A ver cuál se anima a comer el pan.'
I wonder who will be the one who will eat the bread. Rмн_09-28-07_144d

## 7. Verbal idioms

Verbal idioms are numerous, and varied in type. An assortment of them is presented here by structural type. It is not claimed that this inventory is complete, but the chapter gives a general idea of the kinds of structures that are very commonly found.

### 7.1 Noun in the VP

Some verbal idioms are formed by including a noun in the VP. This noun is invariant in its form although it may be morphologically complex (e.g. imiipla in (12), imoz in (14) and ixtamt in (15)). The noun usually does not obviously correlate with any inflection on the verb and does not appear to be an argument of the verb. The verb may be transitive or intransitive.

In a subset of these idioms (see examples (8) and (9)) invariant third person oblique/indirect object marking (which may be related to the presence of the noun in the VP) occurs on the verb. At the end of this subsection a slightly more complicated case is discussed.


[^108](5) $\quad$| hánt $\sqrt{ }$ fii $^{2}$ |
| :--- |
|  |
| land ? |
|  |
| $=$ next morning |

(6) hant co- Vaheectim
land 3IO ?
= transport

LHánt pofiii
la, $\quad$ Ia
land IR.DP-? DS
'Mañana por la mañana, ...'
Tomorrow morning, ... RMH_05-17-08_154
Imám coi 」hant cohsaheectim」 aha.
3P-fruit the.Pl land 3IO-1SGS.Tr-Ir.Id-? Aux-Dcl
'Voy a transportar las frutas del cacto.'
I'm going to transport the cactus fruit. RMH_05-17-08_155
(7) hant co- Vaiis
©Miizj thant cöitaiis $\lrcorner$ ?
well land 3IO-3:3-RL-?
'¿Lo/a está vigilando?'
Is s/he watching over it/him/her? гмн_05-17-08_156
(8) hant co- $\sqrt{\text { iij }} / V_{\text {oom }} / \sqrt{ }$ ap
land 3IO sit lie stand
$=$ have form of (choice of verb depends on profile of item)

| Zixcám ${ }^{\circ}$ caanj | hapáh com | Lhant cocom | iha. |
| :---: | :---: | :---: | :---: |
| fish Gulf.grouper | SN-Pv-say the.Hz | land 3IO-SN-lie | DCL |
| 'Tiene la forma del pez llamado "caanj" (baya).' RмH_08-04-07_184e |  |  |  |
| It has the shape of the fis | $h$ called "caanj" | Gulf grouper). (ES20 | (2) |

hant co- $\quad \downarrow$ pam
land 3IO connected
= come across

$$
\begin{align*}
& \ldots \text { เziix coaafp }\lrcorner \text { pac ano } \stackrel{\text { hant cöhatpamlcam }}{\quad \text { mullet }} \text { some 3P.in land 3IO-1PLS-RL-connected-PL-IMPF }
\end{align*} \text { ma } \ldots \text {... }
$$

| ihít Vactim | tihít tactims, yoque. |
| :---: | :---: |
| 3P-place.behind be.cut <br> $=$ be all gone; end | 3P-place.behind RL-be.cut DT-US-say ‘..., terminó, se dice.' |
|  | ... it was all gone, it is said. (Hombre_Bari_32-33) |
| $\begin{aligned} & \text { iiha }^{3} \text { ل} \text { apii } \\ & \text { ? have. flavor.of } \\ & =\text { be fat } \end{aligned}$ | ¿Me zímjöc tiiha capii ${ }_{\text {¢ }}$ - -ya? |
|  | 2Pro when? ? SN-have.flavor.of QM |
|  | ¿¿Cuándo te pusiste gordo/a? |
|  | When did you get fat? RMH_05-17-08_157 |

[^109]

Various expressions of learning and teaching (in a formal schooling sense) are also built on this model, with the derived noun hapaspoj ${ }^{\circ}$ paper ( $\mathrm{SN}-\mathrm{Pv}$-write) and the verb meaning teach. These expressions contain three nominals in the active voice: the teacher as subject, the learner as direct object (which may be omitted, making the construction intransitive), and the word

[^110]hapaspoj as cross-referenced oblique object. This situation results in the type of object morphology conflict that is discussed in detail in §17.3.2.5.

```
(17) hapaspoj \({ }^{\circ}\) co- Vacoaat
    paper 3IO cause.know
    = teach (as in formal schooling)
    \& เHapaspoj \({ }^{\circ}\) me tacoaat」?
        paper 3IO+2SGDO RL-cause.know
    ‘¿Te está enseñando (p.ej., en la escuela)?'
    Is s/he teaching you (e.g., in school)? RMH_05-17-08_160
    (18) i LHapaspoj \(^{\circ}\) cötacoaat \(\rfloor\) ?
        paper 3IO-RL-cause.know
        ‘¿Está enseñando (p.ej., en la escuela)?'
        Is s/he teaching (e.g., in school)? Rмн_05-20-08_4
    (19) i เHapaspoj \(^{\circ}\) cötahcoaat \(\lrcorner\) ?
        paper 3IO-Rl-Pv-cause.know
        '¿Está estudiando (siendo enseñado) en la escuela?’
        Is s/he studying (lit., being taught) in school? RмH_05-17-08_161
```


### 7.2 Possessed noun in the VP

Some idioms have a possessed noun in the VP (see §5.5.2). The subject of the possessor in these idioms is often the relevant nominal for the Different Subject marking (see §3.6.1), but not for raising (see §9.1.2) or subject person inflection on the verb (§17.3.2.1), although the plurality of the possessor of the possessed noun determines (or agrees with) the number inflection on the verb.

| (20) | $\begin{aligned} & V_{\mathbf{s x e e n}} \quad \sqrt{\mathbf{a C a}} \\ & \text { abdomen } \\ & =\text { know intelligent, wise } \end{aligned}$ | Tiix isxeen itcmaa $\lrcorner$ ho. DDS 3P-abdomen 3:3-RL-N-know DCL 'No era sabio.' <br> He wasn't wise. (Hombre_Baril_6) RMH_05-17-08_163 |
| :---: | :---: | :---: |
| (21) | $\begin{array}{ll} \text { لVVcp } & \sqrt{ } \text { ap } \\ \text { place.next.to stand } \\ =\text { support, root for } \end{array}$ | ¿Quíih -ya $\llcorner$ miicp tap $\lrcorner$ ? <br> who? QM 2P-place.next.to RL-stand <br> ‘¿Quién está a tu favor?’ <br> Who is supporting (rooting for) you? RMH_11-27-07_10 |
| (22) | $\begin{aligned} & \text { لVVhioj Vooxyat } \\ & \text { limb-Pl die-Pl } \\ & =\text { get tired from walking } \end{aligned}$ | ... xo hiihjoi yomooxyat. <br> but 1P.limb-Pl Dt-N-die-PL <br> ' . . . pero no me cansé.' RMH_05-17-08_164 <br> ... but I didn't get tired. (DS2010, inijoj cooxyat < cooxi) |

(23) $\sqrt{ }$ VVsax hant $\sqrt{\text { ooit }}$ (plural $\sqrt{ }$ paailx)
? land arrive
= be happy
(He) $\llcorner$ hiistox hant yopaailx $\lrcorner$.
1Pro 1P-?-PL land DT-arrive.PL
(*hayopaailx)
'Estamos muy felices.'
We are very happy. RMH_08-21-07_90

| VVVsax | $\sqrt{ }$ heemt |
| :---: | :---: |
| $?$ | stink |

LIIstox theemloj toc cötoii,
3P-?-PL RL-stink-PL there 3IO-RL-be.FL.PL
'Estaban allí enojados, ...'
They were there angry, ... (Dos_Hermanos_4.1)
$\sqrt{ }$ Vmoz co- ${ }^{\text {Vooit }}$ heart 3IO- arrive
= remember
(26)

| $\sqrt{ }$ Vmoz | $\sqrt{ }$ aaj |
| :---: | :---: |
| heart |  |
| $=$ |  |

= worry
(27)
$\sqrt{ }$ Vmoz
heart $\quad{ }^{\text {meet }}$
$=$ be sad
(28)

| $\sqrt{ }$ Vmoz | $\sqrt{ }$ eepit |
| :---: | :---: |
| heart $?$ |  |

$=$ be stingy
... $\frac{\text { mimoz cöyomooit. }}{}$.
2P-heart 3IO-DT-N-arrive
'.. no te acuerdas.' RMH_05-17-08_165
...you don't remember. (DS2010, imoz *cölcooit)
-Mimoz smaaj aha.
2P-heart Ir.Id-N-? Aux-Dcl
'No desesperes.'
Don't worry. (DS2010, imoz *caj) RMH_05-17-08_166
; LMimoz tmeet ?
2P-heart RL-?
¿¿Estás triste?'
Are you sad? (DS2010, imoz *cmeet) RMH_05-17-08_167
; LMimoz teepit ?
2P-heart RL-?
‘¿Eres tacaño?'
Are you stingy? RMH_05-17-08_168
(29) $\sqrt{ }$ Vpos co- pazlax
throat 3IO ?-ImpF
= choke on (something
liquid or powdery)
Cafee hoosi cop เhipos cöyopazlax」.
coffee 1P-ON-drink the.VT 1P-throat 3IO-Dt-?-ImpF
'Me atraganté con el café que había tomado.'
I choked on the coffee that that I had drunk. Rмн_05-17-08_169
(30) VVsoj co- Vapxazl body 3IO- put.on.top.of = embrace, hug

${ }_{\llcorner }$Misoj me yapxazl」.<br>2P-body 3IO+2SGDO DT-put.on.top.of<br>'Te abrazó.' Rмн_05-17-08_170<br>S/he hugged you. (DS2010, isoj *colcapxaz)

## 7.3 $\mathbf{P}$ in the VP

P's commonly figure in verbal idioms and they are relatively fixed in their position in the VP (see §5.7). Some of the idioms are quite transparent and others are not.

Some of the idioms formed with P's in the VP have invariant P's; the P is always inflected in the third person and does not have a complement. With one exception, the P's of the first group of idioms are always stressed and for that reason carry an acute accent in the following examples.

(36) íti Vahca

3P-on be.located
= be possible
Ctam ticop Líti imahca $_{\perp}$ ha, haa cöisiifp hac.
man Md-Vt 3P-on SN-N-be.located Dcl there 3IO-3P-Ir.ID-arrive the.LC
'No hay ninguna posibilidad de que ese hombre llegará allá.'
There's not a chance that that man will arrive there. RMH_08-13-07_32b
(37) áno Vooit

3P.in arrive
= be afternoon
LÁno paait $\quad$ ta, $\ldots$
3P.in IR.DP-arrive DS
'En la tarde, ...'
In the afternoon, ... RMH_05-17-08_173
(38) áno Vazquim

Zaah quij Láno siizquim」 taa ...
sun the.CM 3P.in Ir.ID-enter Aux.Rl
3P.in enter
'Estaba por ponerse el sol, ...' RMH_08-13-07_33a
The sun was about to set, ... (DS2010, hamác cönaisx)
(39) íiqui Vaaitom
i LÍiqui caaitom !
3P-toward Im-speak
3P-toward speak
= go to the authorities
‘¡Ve a las autoridades!’
to present a problem Go to the authorities! RMH_05-17-08_174
(40) íiqui Vojoz
... Líiqui tojoz $\lrcorner$ itexl,
3P-toward flee
3P-toward RL-flee 3:3-RL-take
= suddenly
' $\ldots$. de repente lo agarró, ...'
... suddenly he grabbed him, ...(Dos_Hermanos_66)
(41) íti he/me/co- Vacócamot

3P-on $1 \mathrm{IO} / 2 \mathrm{IO} / 3 \mathrm{IO}$ - help.put.things
$=$ dress (someone)
Eaacalca cpaaisx coi líti cöiyacócamot.
3P-clothing SN-clean the.Pl 3P-on 3IO-3:3-DT-help.put.things
'Le vistió con ropa limpia.'
S/he dressed him/her with clean clothes. RMH_08-13-07_33b
(42) Meaacalca cpaaisx coi líti meiyacócamot.

2P-clothing SN-clean the.PL 3P-on 2IO 3:3-DT-help.put.things
'Te vistió con ropa limpia.'
S/he dressed you with clean clothes. RMH_08-13-07_33c
(43) íti co- Vahojoz

3P-on 3IO- cause.flee
$=$ do excessively with respect to

Hamazaj zo htaai，ihtamihj，
Abs－clay．pot a 1 SGS．Tr－Rl－make 1 SGS．Tr－Rl－cause．smooth

## ihyatápolquim，

1SGS．Tr－Dt－cause．broken

| cöixatcaj | hac | Líti | cohtahojoz． |
| :--- | :--- | :--- | :--- |
| 3IO－3P－PON－thin | the．LC | 3P－on | 3IO－1SGS．TR－cause．flee |

＇Estaba puliendo la olla que hice y la quebré porque le hice demasiado delgada．＇
I was polishing the pot that I made and broke it，because I overdid it in making it thin．RMH＿08－13－07＿320
（44）Cömiihit hac Líti conyahojoz．
3IO－2P－PON－eat the．Lc 3P－on 3IO－2SGS－DT－cause．flee
＇Has comido demasiado．＇
You have eaten too much．RMH＿05－17－08＿177
Other PP－VP idioms have inflected P＇s that vary in person according to the person of the complement of the construction．
（45）$\sqrt{ }$ VVhax $\sqrt{ }{ }^{\text {a }}$ Irreg
with．SG be
＝be like
Cosi quih ciihax coha」 ha，cöiizquim hac．
thorn the．Fl 3P．with．SG 3IO－SN－be Irreg DCL 3IO－3P－PON－enter the．LC
＇Era como una espina，en la manera en que entró．＇
It was like a thorn，in the way in which it entered．（DS2010，ilhax＊coha）RMH＿11－19－07＿112
（46）$\sqrt{ } V V h a x / \sqrt{ } V V \cot \sqrt{\text { aai }}$
with．SG with．PL make ＝help
i thiihax haai」！
1P－with．SG Im－make
‘‘Ayúdame！’
Help me！RMH＿05－17－08＿175a

## （47）

i LHiicot haai ！ 1P－with．PL Im－make
‘¡Ayúdanos！’
Help us！RMH＿05－17－08＿175b
（48）VVVqui Vaa
toward ？
＝harm（food，to a person）
．．．，เhiiqui saa」 aha．
1P－toward Ir．ID－？Aux－DcL
＇．．．，me hará daño．＇
．．．，it will harm me．（DS2010，caa）RMH＿07－11－07＿45d
(49) VVVqui Vaai

3P-toward make
= sprinkle
Hantíp quih ziix ipxasi quih iiqui iyaai..
salt the.FL thing 3P-flesh the.FL 3P-toward 3:3-DT-make
'Echó sal en la carne.'
S/he sprinkled salt on the meat. (DS2010, caai) RMH_05-17-08_176
VVVqui Vatolec
toward ask.for.help
(construction is intransitive)

ᄂMíiqui yatolec. ${ }^{\text {. }}$
(construction is intransitive)
2P-toward DT-ask.for.help
'Te maldijo.'
S/he cursed you. RMH_08-13-07_32d

'Le maldeciré.'
I will curse him/her. RMH_08-13-07_32e

### 7.4 Adverb in the VP

Some verbal idioms are formed using an adverb in the VP (see chapter 5) plus a verb. Some of these are more transparent than others.

| (52) | anxö $\sqrt{ } \mathrm{haa}^{5}$ <br> InTNS be ${ }_{\text {Irreg }}$ <br> $=$ be injured | Juan quih Lanxö haa」 ha. the.FL Intns SN.be ${ }_{\text {Irreg }}$ Dcl 'Juan está herido.' Juan is injured. RMH_09-28-07_145a |
| :---: | :---: | :---: |
| (53) | anxö $\sqrt{ }$ aai <br> IntNs make = injure | Caay cop Juan quih tanxö iyaai」. horse the.VT the.Fl Intns 3:3-DT-make 'El caballo hirió a Juan.' <br> The horse injured Juan. RMH_09-28-07_145b |
| (54) | $\begin{aligned} & \text { caaha } \quad \sqrt{ } \mathbf{a C a} \\ & ? \\ & \text { ? gnow } \\ & =\text { get ready; be alert } \end{aligned}$ | LCaaha masiyaj  <br> $?$ 2PLS-Ir.ID-know-PL Aux-DcL <br> 'Estén alerta, ...' <br> Be alert, ... (DS2010, quiya) XMH_62_21810 |

[^111]

[^112]| (61) | $\begin{array}{ll} \text { hacx } & V_{\text {miih }} \\ \text { apart } & \text { not.be.FL } \\ =\text { die } \end{array}$ | Hacx yomiih ${ }_{\text {. }}$ <br> apart DT-not.be.FL <br> 'Murió.' <br> S/he died. RMH_05-17-08_182 |
| :---: | :---: | :---: |
| (62) | ```hacx Vamiihit apart cause.not.be.FL = kill``` | Anxö $\llcorner$ hacx ixamiihitim. <br> Intns apart 3:3-Em-not.be.Fl-ImpF 'Mató muchos.' <br> S/he killed many. RMH_11-27-07_07 |
| (63) | ```hacx Vooit apart arrive = get lost [person]; spent [money``` |  |
| (64) | $\begin{aligned} & \text { hantx } \quad \text { mo- } \\ & \text { at.base } \\ & \text { TwD move } \\ & =\text { be from the ancestral past } \end{aligned}$ | ```Lhantx cömiiha」 hac at base 3IO-Twd-3P-PON-move the.LC 'en tiempos antiguos' in the old days RмH_05-17-08_183``` |
| (65) | $\begin{array}{ll} \text { hapx } & \text { Vaailx } \\ \text { outside } & \text { release.IMPF } \\ =\text { demonstrate magical powers } \end{array}$ | (see example (35) in chapter 3) |
| (66) | $\begin{array}{ll} \text { hapx } & \text { لap } \\ \text { outside } & \text { stand } \\ =\text { be born; defecate } \end{array}$ | zixquisiil cmaa thapx caap」 child now outside SN-stand 'niño recién nacido' newborn baby RNH_-05-17-08_184 |
| (67) | $\begin{array}{ll} \text { himo } & V^{\text {pazje }}{ }^{10} \\ \text { elsewhere } & \text { dispersed } \\ =\text { spill out } \end{array}$ | Hasaaiti cop himo vopazic. gasoline the.VT elsewhere Dt-dispersed 'La gasolina se tiró.' <br> The gasoline spilled out. RMH_05-17-08_185 |
| (68) | hoo xah $\sqrt{ }$ eme ? Atten depleted <br> = shortly later, soon |  ? Atten Rl-depleted DS land Dt-fall 'Dentro de poco tiempo cayó.' <br> Shortly later before s/he/it fell down. RMH_07-11-07_45a |

[^113](69) iicp co- Viipe Eenim hipcop Liicp cöquiipe」 ha. toward 3 IO good
$=$ useful knife Px-Vt toward 3IO-SN-good DcL 'Este cuchillo es útil.'
This knife is useful. RRMH_05-17-08_186
(70) iicp he/me/co- Vaaitom toward $1 \mathrm{IO} / 2 \mathrm{IO} / 3 \mathrm{IO}-$ speak $=$ defend (verbally)
(71) iicp Vaanim toward cause.covered = forget
(72) miizj Vaai well make $=$ take care of
(73) miizj Voocta well look.at = be careful, pay attention

He iiicp me hpyooitom. 1Pro toward 2IO 1SGS.In-Dt-speak 'Yo te defendí.'
I defended you. RMH_05-20-08_5
; licp intaanim $^{\text {? }}$ ? toward 2SGS-RL-cause.covered
‘¿Se te olvidó?’
Did you forget? RMH_05-17-08_188
$\triangle$ Miizi insaai $\quad$ aha. well 2SGS-Ir.Id-make Aux-Dcl 'Debes cuidarlo.'
You should take care of it. RMH_05-17-08_189
i-Miizi hoocta ! well Im-look.at
‘¡Cuidado!’ o ‘¡Presta atención!’ Be careful! or Pay attention! RMH_05-17-08_190

### 7.5 Reflexive pronoun in the VP

Some verbal idioms utilize a reflexive pronoun.

| (74) | $\begin{aligned} & \sqrt{ } \text { Vsoj } \\ & \text { laxi } \\ & \text { self finish } \\ & =\text { get oneself ready } \end{aligned}$ | LHísolca hayoox . <br> 1P-self-PL 1PLS-DT-finish-PL <br> 'Nos preparamos.' <br> We got ready. op_2-07-07_19a |
| :---: | :---: | :---: |
| (75) | $\sqrt{ }$ Vsoj $\sqrt{\text { anzaait }}$ self careful.with = be patient, calm, not impulsive | LHísolca hayanzaaiti.. <br> 1P-self-PL 1PLS-DT-careful.with-PL <br> 'Éramos pacientes.' <br> We were patient. OP_2-07-07_19b |
|  | (76) Misoi insanzaait <br> 2P-self 2SGS-Ir.ID-careful.with <br> 'Ten paciencia.' <br> Be patient. RMH_09-28-07_165h | aha. AUX-DCL |

(77) LQuisoj sahnzaait aha.

US-3P-self Ir.ID-Pv-careful.with Aux-Dcl
'Uno debe tener paciencia.'
One should be patient. RMH_09-28-07_165i
(78) ox $\sqrt{ }$ Vsoj $\sqrt{ }$ ah
${ }^{\llcorner }$Ox hísolca hamii.
thus self put.FL
thus 1P-self-PL 1PLS-Px-put.Fl.PL
= have custom
(79) $\sqrt{ }$ Vsoj $\sqrt{ }$ queepe

We had that custom. op_2-07-07_19c
LHísolca hatqueept, hamiilx.
self like
$=$ be proud of oneself
1P-self-PL 1PLS-RL-like.PL 1PLS-Px-go.PL
'Éramos orgullosos y fuimos.'
We were proud and went. (Offered) LHC $\_2-8-07_{-} 74 \mathrm{a}$
(80) miizj $\sqrt{ }$ Vsoj $\sqrt{ }$ oocta
well self look.at
$\sim \sqrt{ }$ Vsoj miizj Voocta
self well look.at
$=$ behave
a. $L$ Miizj misoj insoocta ${ }_{\lrcorner}$aha. well 2P-self 2SGS-Ir.Id-look.at AUX-DCL
b. LMisoj miizi insoocta $\lrcorner$ aha. 2P-self well 2SGS-Ir.ID-look.at Aux-DCL
‘Compórtate bien.' (b) RMH_09-28-07_165e
You should behave. (a) RMH_09-28-07_165d
(81) a. Quisoj miizi spacta ${ }^{\text {Qua }}$ aha. US-3P-self well Ir.ID-Pv-look.at Aux-DcL
b. $L$ Miizi quisoj spacta $\lrcorner$
aha.
well US-3P-self Ir.Id-PV-look.at Aux-DcL
'Uno debe comportarse.'
One should behave. (a) RMH_09-28-07_165f (b) RMH_09-28-07_165g
(82) $\sqrt{ }$ Vsoj hacx co- $\sqrt{\text { aaitim }}$
self outside 3IO make-ImpF
$=$ challenge with a brag
Ctam ticop taaixaj, teete, isoj hacx cöiyaaitim $_{\lrcorner}$.
man Md-Vt Rl-strong RL-say 3P-self outside 3IO-3:3-DT-make-ImpF
'Ese hombre se jactaba de que era fuerte (y de esa manera retaba).'
That man bragged that he was strong (and so was inviting a fight).
Other idioms of this type, which are numerous, include:
(83) a. $\sqrt{ }$ Vsoj $\sqrt{ } \mathbf{a a z j}$ self string.up/tow buy on time, buy on credit
b. $\sqrt{ }$ Vsoj $\sqrt{ } \mathbf{a m i z j}$ self clean.by.removing have too much pride in oneself
c. $\sqrt{ }$ Vsoj $\sqrt{c o o z}$ self rob do secretly
d. $\sqrt{ }$ Vsoj $\sqrt{ }$ Cimoz self think pretend
e. $\sqrt{ }$ Vsoj co- $\sqrt{\text { iixim }}$ self 3IO- fear avoid (contact with someone)

### 7.6 Idioms with pleonastic co- 310

Some lexicalized meanings are indicated by the inclusion of the third person oblique/indirect object prefix on the verb without any obvious link between this prefix and any particular nominal in the clause. That is, the presence of co- 3IO in these expressions does not appear to be simple inflection as agreement with an oblique or indirect object that the clause expresses directly. The expression without the prefix co- means something quite different or slightly different than the expression with it. In some cases, the verb without the pleonastic co- does not have a clear meaning since it may always occur in construction with other words to form idioms. ${ }^{11}$ These expressions with pleonastic co- are listed as subentries in the 2005 dictionary unlike the plethora of examples with compositional semantics using the same morphology. (All subentries with co- are not of this type, however.)
(84) co- Vatni

3 IO make.pointed.contact.with
$=$ shoot, spear, sting (as stingray)
Tosni zo cöitatni,
pelican a 3IO-3:3-RL-make.contact
'Tiró y mató un pelícano, ...'
S/he shot and killed a pelican, ...(DS2010, quisni) RMH_05-17-08_191
(85) co- $V_{\text {iij }}$ Inol cap cöquiij iha. 3 IO sit 3P-arm/hand/finger the.VT 3IO-SN-sit DCL $=$ shrivel up, shrink, be lame 'Su brazo está encogido.' RMH_05-17-08_192 His/her/its arm is shriveled up. (DS2010, cö|quii)
(86) co- Vooxalca 3 IO sit.PL.[things]
$=$ have the bends (from diving) (see DS2010, cö|cooxalca under quiii)
(87) co- $V_{\text {iimj }}$

3IO translucent
$=$ have an abrupt termination (like cliff at sea)
Ctooml com ¿yeen iicp」 quij hax cöyiimj ${ }^{\circ}$ oo. roosterfish the.Hz its.front.end the.CM Intns 3IO-Dt-translucent DL 'La parte delantera del pez gallo tiene un ángulo agudo.' The front end of the roosterfish ends in a sharp angle. RMH_05-17-08_193

[^114]（88）co－Vactim
3IO be．cut
＝come to an end（wind，rain，activity）
Hai quih cösiictim caha．
wind the．Fl 3IO－Ir．Id－be．cut Aux．SN－DcL
＇Va a pararse el viento．＇
The wind is going to stop．（DS2010，cölcactim）RMH＿05－17－08＿194
（89）co－Vaactim
3IO cause．be．cut
＝（a）shut off（faucet，electricity，electronic device）
（b）calculate or guess in game of chance
〔Ziix an icoos」 quij cohsaactim haa hi．
tape．recorder the．Cm 3IO－1SGS．TR－Ir．ID－cause．be．cut AUX DCL
＇Voy a apagar la grabadora．＇
I am going to turn off the tape recorder．（DS2010，cö｜caacim）RMH＿05－17－08＿195
（90）เHapaspoj iquiimot」 quih cohsaactim aha． playing．card the．FL 3IO－1SGS．．Tr－Ir．ID－cause．be．cut Aux－DCL
＇Voy a adivinar el naipe．＇
I am going to guess the card．（DS2010，cö｜caactim）RMH＿05－17－08＿196
（91）co－$V$－oohcö
3IO vertical．and．right．side．up
＝go to sea，ascend
Moxima cöhatoohjoj，¿ziix hapx coom」zo hayooht．
yesterday 3IO－1PLS－RL－vertical whale a 1PLS－DT－see－PL
＇Ayer fuimos al mar y vimos una ballena．＇
Yesterday we went out on the sea and saw a whale．（DS2010，cö｜coohcö）RMH＿05－17－08＿197

## 7．7 Other verbal idioms

The preceding sections have not given a complete survey of verbal idioms in the language．Some others are simply listed here to round out the picture．
（92）X VVVsax Vacapat
？make．fly
$=$ kill $X$［uncommonly used now］
Moxhamt cmiique，tiix siquiisax $z$ imacapat．．
last．year person／Seri DDS one＇s．spirit a 3：3－Px－cause．fly
＇El año pasado esa persona mató a otra．＇
Last year that person killed someone．（DS2010，cacácapat）RMH＿05－17－08＿198
（93）hant com co－Vinej
land the．Hz 3 IO empty
$=$ wiped out，destroyed，exterminated
ŁZixcám ${ }^{\circ}$ cacöla」caacöl quih $\llcorner$ hant com cöminej」．
totoabas SN－big－Pl the．Fl land the．Hz 3IO－Px－empty
＇Las totoabas grandes han desaparecido．＇
The large totoabas（fish，Totoaba macdonaldi）have disappeared．RMH＿05－17－08＿199
（94）$X$ hant com co－Vahinej
land the．Hz 3IO cause．be．empty
$=$ wipe out（destroy）$X$ ，exterminate $X$
（95）oot cola X Vcaai
coyote high hang．up
$=X$ be detained［archaic］
${ }_{\llcorner\text {Oot cola hin tcaai」 ma，hant } z \text { iqqui hptcmin iho．}}^{\text {in }}$ coyote high 1SGDO RL－hang．up DS land a 3P－toward 1PLS．In－Rl－N－go DCL ＇Debido a que fui detenido，no me fui．＇
Since I was detained，I didn＇t go．RMH＿05－17－08＿200
（96）$X$ hax ano $\sqrt{ }$ ah
water 3P．in put．FL
$=$ wash X ，where $\mathrm{X}=$ clothing
Hoficj ${ }^{\circ}$ quih thax ano htah」 ma，．．．
my．shirt the．FL water 3P．in 1SGS．Tr－RL－put．FL DS
＇Lavé mi camisa／blusa，．．．＇
I washed my shirt／blouse，．．．（DS2010，caanpx）RMH＿05－17－08＿201
（97）hax ano Vaalim
water 3P．in play
$=$ bathe，take a bath
${ }_{\llcorner }$Hax ano hpyaalim ${ }_{\lrcorner}$．
water 3P．in 1SGS．In－DT－play
＇Me bañé．＇
I took a bath．RMH＿05－17－08＿202
（98）$\sqrt{ }$ VVsax com iij hant $\sqrt{ }$ oom
？the．Hz differently land lie
＝sad
（see example（18）in chapter 1）

## 8. Nominal phrase

This chapter examines the structure of what has traditionally been called the noun phrase. A distinction is made, however, between a simple noun phrase (NP) - typically a noun and various kinds of modifiers - and a determiner phrase (DP). The latter is an NP that is followed by a determiner in a particular configuration. ${ }^{1}$ Perhaps the distinction between the two is not necessarily exactly as formalized here, but it is convenient in various places in this grammar to refer to the distinction between a nominal phrase without a determiner (whether definite or indefinite) and a nominal phrase with one. The labels NP and DP, and the analysis that incorporates them, serve well in this respect.

DPs have a wide distribution in the language, of course. They are the typical referring expressions and as such occur as subjects, direct objects, indirect objects, and adjuncts of various sorts, including complements of postpositions. As shown in chapter 10, however, they do not occur as predicate nominals unless there is a copula verb. DPs are not used in vocatives (see $\S 15.7$ ), and they are not used as complements of the verb meaning call (see §15.1). A DP may not refer to anything at all, however, as the combination of certain DPs with a negative verb yields the interpretations of nobody and nothing.
(1) Cmiique zo ${ }^{\circ}$ hacx immiih $^{\circ}$ iha. person/Seri a apart SN-N-not.be.Fl DCL
'Nadie había muerto.'
Nobody had died. (Gigante_Comelon_363) RMH_05-17-08_203
(2)

```
..., ziix z itcmahit, ...
    thing a 3:3-RL-N-eat
` ..., no había comido nada, ...'
... she hadn't eaten anything, ... (Hombre_Bariil_45) RMH_05-17-08_204
```

In other contexts these particular expressions cmiique zo and ziix zo ${ }^{2}$ mean non-referential someone and something, respectively, as well as referential someone and something and specific a (Seri) person and a thing.

Replacing the head noun with haxz $\operatorname{dog}$ gives the non-referential expressions a dog, any dog (with a negative verb), and so on.

[^115](3) Haxz zo hyonyáa.
dog a 1SGS.Tr-Dt-N-own
'No tengo perro.'
I don't own a dog. (ALIM_21) RMH_05-17-08_205
A brief comparison of the uses of DPs and NPs is included here as they relate to referentiality.
(4) DP using a definite article:
(a) A referential nominal with a specific definite interpretation.
(b) A nonreferential nominal (typically singular) with a generic interpretation.
(c) A nonreferential nominal with a non-specific interpretation.
(d) A nonreferential nominal used predicatively.

The following examples illustrate these four uses, respectively. The first two uses are the most common. (See also $\S 8.1 .2$ for more examples of generic interpretations, and $\S 10.3$ for more examples of predicative uses.)
(5) ${ }^{\circ}$ Ziix coosyat ${ }^{\circ}$ heeque quij ctam, yoque. giant juvenile the.Cm man/male Dt-US-say
'El gigante joven era un varón, se dice.'
The young giant was a male, it is said. (Gigante__uerano_01) RMH_05-16-08_24
(6) Xapoo quih imiiitoj. Cocazni quih imiiitoj. sea.lion the.Fl 3:3-Px-eat-Pl rattlesnake the.Fl 3:3-Px-eat-Pl ' 'Comieron lobos marinos. Comieron víboras de cascabel.'
They ate sea lions. They ate rattlesnakes. (Hast_Quita 27-28) RMH_05-17-08_206

```
... hascám com iti cöiihca hac, Tahejöc quij
    AbS-reed.boat the.Hz 3P-on 3IO-3P-PON-sit.Pl the.Lc Tiburon.Island the.Cm
    itaaaxoj,
    3:3-Rl-go.away.from-PL
    `... abandonaron la isla Tiburón en una balsa, ...'
    ... seated on a reed boat, they left Tiburon Island, ... (Dos_Hermanos_9.3)
```

(8) Alberto Suárez quih he oiti hmiiha ${ }^{\circ}$ ctam quih chaa ha. the.Fl 1Pro my.parent male the.Fl SN-EQ DCL
'Alberto Suárez es mi padre.'
Alberto Suárez is my father. LHс_2-06-07_188
(9) DP using an indefinite article:
(a) A referential nominal with a specific indefinite interpretation (that is, expressing quantitative indefinitness).
(b) A nonreferential nominal with a nonspecific indefinite interpretation (that is, expressing non-quantitative indefiniteness).
(c) A nonreferential nominal used predicatively.

The following examples illustrate these three uses, respectively.
(10) Cmiique ctam zo toc cötiih, person/Seri man a there 3IO-Rl-be.FL
'Había un hombre seri, ...'
There was a Seri man, ... (Consejos_perro) RMH_05-16-08_73 (referring to a specific person)
(11) Caasquim zo popaho $\mathbf{x}$, ... flounder a Ir.Dp-Pv-see UT
'Si se encuentra un lenguado, ...'
If a flounder is found, ... (ES2007, caasquim) RRR
(12) Tiix cmiique ha xo cmiique áa $z$ imhaa ha. DDS person/Seri DCL but person/Seri true a SN-N-EQ DCL 'Era una persona, pero no era una verdadera persona.'
He was a person, but he wasn't a real person. (Hipocampo_24)
(13) NP without an article:
(a) A nonreferential nominal (typically when not a subject or direct object).
(c) A nonreferential nominal used predicatively.

The following examples illustrate these two uses, respectively. The predicative use of a nominal without a determiner is discussed in detail in §10.1.
(14) ${ }^{\circ}$ Eenm haacni ${ }^{\circ}$ h oo cöitáh, imiicö. rifle FoC DL 3IO-3:3-RL-do 3:3-Px-kill
'Lo hizo con un rifle, lo mató.'
S/he did it with a rifle, s/he killed it. RMH_07-11-07_16g
(15) Hipiix staci iha.

DPS rock.oyster DCL
'Éste es un ostión.'
This is a rock oyster. LHс_2-06-07_163c

| Table 8.1: Miniguide to the common articles |  |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  | Indefinite |  |  | Definite |  |  |
|  |  | Vertical | Horizontal | Compact | Soft / Out of Sight | Area |
| Singular | zo | cop | com | quij | quih | hac |
| Plural | pac | coi | coi | coi | coi |  |

Certain motion-based demonstratives (§21.3) are also used without stress as articles.

Nominal phrases may include an adverb and sometimes more than one. See §24.1-2 for discussion and examples of adverbs in the DP and NP. Coordinated phrases are discussed in chapter 25.

### 8.1 Determiner phrase

A determiner phrase may be a pronoun (see chapter 16) or it may be a determiner preceded by a noun phrase, as depicted in Figure 8.1. It is assumed here that the NP is the complement of the determiner. ${ }^{3}$


Nouns of all types very commonly occur with a determiner, whether they are common nouns, body part nouns, kinship terms, or personal items (all discussed in §13.1); locational nouns (§13.4), deverbal nouns (chapter 14), or names (chapter 15). Numerous examples are included in this chapter, but at least two examples of each is given in (16)-(31). The determiners are numerous; discussion of the choice of determiner is presented in §21.2. A miniguide for the most common articles is given in Table 8.1.

## Common noun

```
(16) hast quij
stone the.Cm
'la piedra', the stone
```


## Name

$$
\begin{array}{ll}
\text { (18) } & \text { Cöquimaxp quij } \\
\text { 3IO-SN-light.pink the.CM } \\
\text { (a person's nickname) }
\end{array}
$$

xepe com sea the. Hz 'el mar', the sea

## Pedro quij

the.Cm
Pedro (a person's first name)

[^116](20) Tahejöc quij

Tiburon.Island the.Cm
'isla Tiburón', Tiburon Island

## Body part noun

(22)
minol com
2P-arm the. Hz
'tu brazo', your arm

## Kinship term

(24) | mata quij |  |
| :--- | :--- |
|  | 2P-mother the.CM |
|  | 'tu madre' |
|  | your mother |

## Other possessed noun

(26) miionam quij

2P-hat the.Cm
'tu sombrero', your hat
mipazaatoj coi
2P-shoe-Pl the.PL 'tus zapatos', your shoes

## Locational noun

(28) | mitacl $\quad$ hac |
| :--- |
|  |
| 2P-place.above the.LC |
| 'el lugar sobre ti', |
|  |
| the place above you |

$$
\begin{align*}
& \text { hiicp hac }  \tag{29}\\
& \text { 1P-place.next.to the.LC } \\
& \text { 'el lugar a mi lado', } \\
& \text { the place next to me }
\end{align*}
$$

## Deverbal noun

(30)
cöhihiim hac
'mi dormir, donde duermo, etc.',
my sleeping, where I sleep, etc.

```
Saps hac
    the.LC
(un topónimo), (a place name)
```

istj com
3P-leaf the.Hz 'su hoja', its leaf
hiict
1P-maternal.grandmother the.CM 'mi abuela materna' my maternal grandmother
quij

The examples of determiner phrases given in this section are taken from different contexts in complete sentences. None of these DPs may be used in response to a question such 'What (or who?) did you see?' as the attempted responses in (36)-(37) show. Appropriate responses must include a verb, or occasionally they may present an NP rather than a DP.

* Moosni zo.
sea.turtle a
('Una caguama.') (A sea turtle.)
* Quihehe ${ }^{\circ}$ quij.
ruler the.Cm
('El gobernador.') (The governor.)
* Háxaca pac.

Abs-pet-Pl some
(‘Algunos perros.') (Some dogs.)

* Quihehe ${ }^{\circ}$ quij.
('El gobernador.') (The governor.)
Likewise, a DP cannot be a complete explanation for an exclamation such as appears in (39). (The exclamation itself is well-formed.)

```
¡Cameepit iha! * Ziic cooil zo.
    SN-strange/marvelous DCL bird SN-blue/green a
¡Qué extraño! (Un pájaro azul.)
How strange! (A blue bird!)
```

These examples should not be taken to mean that a DP cannot occur sentence-finally, however. Examples of right-dislocated DPs, always definite, are given in §3.12.

### 8.1.1 Phrase-internal determiners

A definite DP often has more than one article. In some cases, the reason for this is simply because the DP has another DP embedded in it, as in the case of possession (see §8.3). Example (40) would be diagrammed as in Figure 8.2. ${ }^{4}$
(40) ziic tiquij iiselca quih itacl tintica ${ }^{5}$
bird Md-Cm 3P-wing-Pl the.Fl 3P-surface Md-Aw
'la superficie de las alas de ese pájaro'
the top of that bird's wings (ES2007, acaam_ccaa 2a)

| Pedro | guih | yaaco | cop |
| :--- | :--- | :--- | :--- |
| Pedro the.FL | 3P-house the.VT |  |  |
| 'la casa de Pedro', Pedro's house | RMH_08-04-07_232 |  |  |

[^117]quihehe ${ }^{\circ}$ quih iitom hac
ruler the.FL 3P-PON-speak the.LC
'el mensaje del gobernador', the governor's message RMH_08-13-07_64
quisíil ${ }^{\circ}$ cop ata quih
child the.VT 3P-mother the.FL
'la madre del niño', the child's mother RMH_08-04-07_231

But there are many other cases of articles inside of DPs that are not due to embedded possessors. In these cases, a semantically robust determiner - definite article or demonstrative - occurs at the end of the DP. The phrase-internal determiner must be quih (often very weakly articulated and barely noticeable); quih is typically a more semantically bleached determiner. The following examples illustrate this with adjectival modifiers (which are few, see chapter 23) and the phrase-internal articles are underlined. See $\S 8.4 .5$ for an analysis of these articles in the context of relative clauses.
(44) hant quih tazo cop
year the.Fl one the.VT
'un año', one year RMH_08-04-07_233a
[Zaah quih ihmaa quih ] cötafp ma x, ... sun/day the.FL other the.FL 3IO-RL-arrive DS UT
'Día tras día, ...'
Day after day, ... (Gigante_Comelon_89) RMH_11-27-07_23

(46) ... zaah quih coox cah ... sun/day the.FL all the.Fl-Foc
‘... todos los días ...'
... every day ... (DS2005, cocáai) RMH_09-28-07_145c

### 8.1.2 Generic interpretation

Both plural DPs and singular DPs with definite articles permit a generic interpretation, although the use of the singular article seems far more common.

An example with a plural DP with generic interpretation:
(47) Xazlc coi, taax xiica ccamotam cacaatol iha. puma-Pl the.PL DDP thing.Pl SN-alive-Pl SN-dangerous DcL
'LOS PUMAS son animales peligrosos.'
PUMAS are dangerous animals. RMH_08-14-07_65
Examples with singular DPs with generic interpretation:
¿Xazoj cop ziix imiipla caiitim-ya? puma the.VT thing 3P-PON-bad SN -do QM
‘¿Es peligroso el puma?’
Are pumas dangerous? (offered) RMH_08-04-07_236b
${ }^{\circ} \underline{\text { Ziix hapx coom }}{ }^{\circ} \frac{\text { com }}{\text { whale }}$ yamác quih colx $\quad$ ixanaaaij.
'La ballena hace subir su soplo muy alto.'
A whale makes its spout go very high. (DS2005, yamác) RMH_09-28-07_145d
Ctam cneeen quij haquejöc coi cöisiimjc hac, man SN-hunchbacked the.Cm Abs-firewood the.Pl 3IO-3P-Ir.Id-bring the.LC

| $\boldsymbol{t a a x}$ | ${ }^{\circ}$ haai cmipi | ha. |
| :--- | :--- | :--- |
| DDP | difficult | DCL |

'Es difícil para un hombre jorobado traer leña.'
It's difficult for a hunchbacked man to bring firewood. (DS2005, cmipi) RMH_09-28-07_145t
(51) Moosni quih cöhisiicö hac ${ }^{\circ}$ iiqui he ihiin ${ }^{\circ}$ hac sea.turtle the.FL 3IO-3P-Ir.Id-kill the.LC with.respect.to.me the.LC

## ${ }^{\circ}$ haai xommipi ${ }^{\circ}$.

it.isn't.difficult
'No me es difícil cazar caguamas.'
It is not hard for me to kill sea turtles. (DS2005, cmipi) RMH_09-28-07_145g RMH_10-15-07_22

## taax cacaatol iha.

DDP SN-dangerous DCL
'Es peligroso decir cosas ofensivas a un borracho.'
It is dangerous to say offensive things to a drunk man. (DS2005, cöcaataquim) RMH_08-04-07_130b
A singular DP with a generic interpretation may be left-dislocated and followed by a coreferential demonstrative pronoun:
(53) Xazoj quih, tiix ${ }^{\circ}$ ziix ccam ${ }^{\circ}$ cacaatol iha.
puma the.FL DDS animal SN-dangerous DCL
'EL PUMA es un animal peligroso.'
THE PUMA is a dangerous animal. RMH_08-04-07_236a
(54) Ac quii, tiix xiime cah imiihit.
canvasback the.Cm DDS sardine the.Fl-Foc 3:3-Px-eat
'El pato coacoxtle come sardinas.'
The canvasback eats sardines. (ES2007, ac 05) RMH_10-15-07_21
(55) Tojquítajc ${ }^{\circ}$ quii, tiix ihipon ${ }^{\circ}$ cop hoox yosoop. great.horned.owl the.Cm DDS her/his.voice the.Vt Intns Dt-low.timbre/thick
'La voz del tecolote cornudo es baja.'
The great horned owl's voice is quite low. (DS2005, csoop, improved) RMH_09-28-07_145e
(56) Cocazni ${ }^{\circ}$ com, tiix cacaatol iha, rattlesnake the.Hz DDS SN-dangerous DCL
haquiimet com ${ }^{\circ}$ iiqui cöihiin ${ }^{\circ}$ hac.
lizard the.Hz compared.to.it the.Lc
'Una víbora de cascabel es más peligrosa que una lagartija.'
A rattlesnake is more dangerous than a lizard. (DS2005, iquii cöhinin hac) RMH_07-11-07_51c
The article of a possessor phrase (§8.3) with a generic interpretation is commonly omitted, however; compare examples (57)-(58) where an article occurs and examples (59)-(60) where it does not.

## Examples with article in possessor phrase

(57) Hap quih casoopolca cap itaamalca quih hoox insooploj, ... mule.deer the.Fl spike.horn the.VT 3P-antler(s) the.Fl Intns Px-thick-PL 'Los cuernos de un venado bura con una punta en cada cuerno son muy gruesos, ...' The antlers of a spike horn mule deer are very thick .... (DS2005, casoopolca) RMH_09-28-07_146a
(58) Zixquisiil ${ }^{\circ}{ }^{\circ}$ cmaa hapx caap ${ }^{\circ}$ quih inaail com xina. child newborn the.Fl 3P-skin the.Hz Em-have-fur 'La piel de un bebé recién nacido es velluda.'
A newborn baby's skin is fuzzy. (DS2005, quina) RMH_09-28-07_146b

## Examples without article in possessor phrase

${ }^{\circ} \underline{Z i i x}$ imiipla haa coom ${ }^{\circ}$ itaasi hac ziix hapeexem iha. deceased.person 3P-name the.Lc thing SN-Pv-respect.by.not.saying DcL
'El nombre de una persona difunta se respeta por no decirlo.'
The name of a dead person is honored by not saying it. (DS2005, queexem) RMH_09-28-07_146d

| ${ }^{\circ} \underline{\text { Ziix }}$ hapx coom ${ }^{\circ}$ | ilít | quij | caacoj |
| :---: | :---: | :---: | :---: |
| whale | 3P-head | the.См | SN-big |
| 'La cabeza de una ballena es grande.' |  |  |  |
| A whale's head is | arge. (DS20 | , caacoj) RM | H_09-28-07_ |

An indefinite article is not generally used in this context; more details are given in §8.2.
(61) $*^{\circ} \underline{\underline{z i i x}}$ hapx coom ${ }^{\circ} \underline{\mathbf{z}}$ ilít quij
whale a 3P-head the.Cm
('la cabeza de una ballena') (a whale's head, the head of a whale)
The demonstrative hizquih (§21.3.2) is also used to explicitly indicate generic interpretation with a singular noun.
(62) Haxz hizquih tiifnij, titoj, miixax. dog Px.Pl-Fl Rl-have-nostril Rl have-eye-Pl Px- have-snout 'El perro tiene narices, tiene ojos, tiene hocico.'
A dog has a nose, eyes, and a snout. (HE 94, DS2005 quififij) RMH_08-04-07_67
(63) Zixquisiil ${ }^{\circ}{ }^{\circ}$ cmaa hapx caap ${ }^{\circ}$ hizquih inaail com xina. child newborn Px.Pl-FL 3P-skin the.Hz Em- HAVE-fur
'La piel de un bebé recién nacido es velluda.'
A newborn baby's skin is fuzzy. (DS2005, quina, modified) RMH_09-28-07_146c RMH_10-15-07_23
A generic interpretation is also indicated by the use of a plural noun with a singular article.
(64) Yooz quij ziicalc com ${ }^{\circ}$ hant cöquiiis ${ }^{\circ}$ iha.

God the.Cm bird-Pl the.Hz land 3IO-SN-Tr-? DCL
'Dios cuida a las aves.'
God takes care of the birds. (MAt 10:31) RMH_10-15-07_24
(65) ${ }^{\circ}$ xiica ccamotam ${ }^{\circ}$ com thing.PL SN -alive-PL the. Hz 'animales (en general)'
animals (in general) RMH_10-15-07_25a


### 8.2 Noun phrase

This section describes the internal structure of the noun phrase. First, however, a few comments are given on the distribution of noun phrases as opposed to determiner phrases.

NPs are part of the structure of DPs; this is the main focus of this section. Apart from that use, NPs occur as predicate nominals in the verbless predicate nominal construction, while determiner phrases do not. See chapter 10 for examples. In addition, an NP rather than a DP may occur when the embedded possessor is indefinite; in fact, an embedded indefinite DP is generally ungrammatical. Some examples with embedded possessors are given here:

b. ${ }^{*}\left[{ }^{\circ}\right.$ Ziix hapx coom $\left.{ }^{\circ} \quad \mathrm{z}\right] \quad$ ilít $\quad$ quij caacoj iha. a
'La cabeza de una ballena es grande.'
A whale's head is large. (DS2005, caacoi) (a) RMH_08-04-07_237a

| $\left[{ }^{\circ}\right.$ Ziix hapx coom |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| haih ] | ilít | quij | caacoj | iha, |  |
| whale | the.FL | 3P-head | the.CM | SN-big | DCL |


| $\left[\begin{array}{ll}\text { hacat }] & \text { ilít }\end{array}\right.$ | quij | ${ }^{\text {oiiqui cöihiin }}{ }^{\circ}$ | hac. |  |
| :---: | :--- | :--- | :--- | :--- |
| shark | 3P-head | the.CM | compared.to.it | the.LC |

'La cabeza de una ballena es grande en comparación a la cabeza de un tiburón.' A whale's head is large in comparison to a shark's head. RMH_08-04-07_237b

| a. | $\begin{gather*} {[\text { Heen ] }}  \tag{69}\\ \text { cow } \end{gather*}$ |  | ilít <br> 3P-head | $\begin{aligned} & \text { zo } \\ & \text { a } \end{aligned}$ | hyooho. 1SgS.Tr-Dt-see |
| :---: | :---: | :---: | :---: | :---: | :---: |
| b. | * [ Heen | $\begin{aligned} & \text { quih ] } \\ & \text { the.FL } \end{aligned}$ | ilít | zo | hyooho. |
| c. | * [ Heen | $\begin{aligned} & \mathbf{z}] \\ & \mathrm{a} \end{aligned}$ | ilít | quij / zo <br> the.См / a | hyooho. |



[^118]Other situations in which a noun phrase rather than a determiner phrase occurs are less well understood but apparently they all involve non-specific reference.

..., satoj caacoj 00 tompaho ma $x$, ... mussel(s) SN-big DL RL-N-Pv-see DS UT
'Cuando no se encontraban mejillones grandes, ...'
When big mussels weren't found, ... (Es2007, loomz 03a)
Some indefinite nouns appear without determiners and are part of the verb phrase (as defined in this grammar). See the discussion of these in $\S 5.4$. Two examples are given here.

| Hant hac iti | haxoi tafp, | t... |  |
| :--- | :--- | :--- | :--- | :--- |
| land the.LC | $3 P-$ on | shore | RL-arrive |

(74) ..., heme ${ }^{\circ}$ miizcam. camp Px-arrive.PL
'Llegaron a campamento.'
They arrived at camp. (Dos_Hermanos_21.3)
Plural NPs (as opposed to DPs) are not used with a generic interpretation.

* Xazle cacaatol iha. puma-Pl SN-dangerous Dcl
('Los pumas son peligrosos.') (Pumas are dangerous.)


### 8.2.1 Modifiers

The head noun in the noun phrase occurs in phrase-final position except when it is head-internal (see the discussion on relative clauses in §8.3). Possessor DPs precede the head noun (§8.3).

Some modifier NPs, usually but not necessarily simple nouns, indicate the material of which an item is made. These precede the head noun. See Figure 8.3.

(76) mooi poosj
cotton cord
cotton string, cotton cord
(78) hast hax
stone arrow.point
'pedernal', stone arrow point
(80) imám hamaax ${ }^{\circ}$

3P-fruit alcoholic.beverage
'vino de la fruta del cacto', cactus
fruit wine
(82) hapxöl isti haaonam
corn 3P-leaf ABs-hat
'tipo de sombrero', a kind of hat
made of corn leaves

## eenim haaonam <br> metal Abs-hat <br> 'yelmo', helmet

(79) haasman haaonam
woven.mat Abs-hat 'sombrero de palma', palm hat
eelgrass.seed porridge 'atole de semilla de trigo de mar', eelgrass seed porridge
caztaz haaztoj
wheat porridge
'atole de trigo', wheat porridge

An embellishment NP used with a name (§15.5) preceds the name.
$\frac{\text { cmiique }}{\text { person/Seri }}$ Roberto quih
Seri Roberto

Place of origin is sometimes indicated by a place name (used without an article) directly preceding a noun. ${ }^{7}$
(85) Tahejöc comcaac coi

Tiburon.Island person/Seri.Pl the.PL
'los seris de la isla Tiburón'
the Tiburon Island Seris
(86) Hant Ihiini ${ }^{8}$ comcaac coi

Baja.California person/Seri.Pl the.Pl
'los seris de Baja California'
the Baja California Seris
A postpositional phrase may modify a noun (although this is not common). ${ }^{9}$ Such a PP

[^119]precedes the head noun. ${ }^{10}$
[ coaaxyat quih iiqui ] haaho
place.of.spirits.of.dead the.FL 3P-toward

troad | tintica |
| :--- |
| MD-AW |

[hant Ejipto hac ano] ctam quih land Egypt the.Lc 3P.in man the.Fl 'egipcio', Egyptian (man) (Ac 7:28) RMH_08-04-07_241a RMH_09-28-07_147b
$\left[\begin{array}{l}\text { xepe ano }] \text { zaaj hac } \\ \text { sea 3P.in cave the.LC } \\ \text { 'la cueva del mar' } \\ \text { the sea cave (DS2005, quiipcö) RMH_09-28-07_147c }\end{array}\right.$

### 8.3 Possessor phrases

Possessor phrases precede the noun they modify, although this simple statement is clarified below. The noun must be a possessed noun - a body part noun, a kinship term, other personal item, or deverbal noun (object-oriented or action/oblique-oriented type). The possessor phrase therefore has a variety of semantic roles with respect to the possessed noun. With a body part noun, it represents the "whole". With a kinship term, it represents the person who is the point of reference. With a personal item, it represents the owner. And with a deverbal noun, it represents whatever semantic role the subject of the corresponding clause has.

The possessor phrase may be either a DP (with a definite article, for definites and those with a generic interpretation, see §8.1.2) or an NP (for indefinites and also those with a generic interpretation).

## Possessor of body part

(90) [ Cocazni ${ }^{\circ}$ com ] ${ }_{\text {DP }}$ ilít quij cactim iha xo ... rattlesnake the.Hz 3P-head the.Cm SN-be.cut DCL but
'La cabeza de la víbora de cascabel estaba cortada pero ...'
The rattlesnake's head was cut but ... (DS20005, cactim) RMH_09-28-07_147d
(91) [ Xazoi $]_{N P} \underline{\text { ilít } \quad \text { zo toc cöyiij tax, ... }}$ puma 3P-head a there 3IO-DT-sit Sbrd
'Hay una cabeza de puma allí, ...'
There is a puma's head there, ... (Conejo_Puma_12) RMH_09-28-07_147e

[^120]
## Part-whole

(92) [hast cop] iyat hac stone/mountain the.VT 3P-tip the.LC
'las cimas de las montañas'
mountain tops (DS2005 iyat) RMH_05-17-08_207
[xepe com ] ipot com
sea the.Hz 3P-bottom the. Hz
'el fondo del mar'
the bottom of the sea (DS2005 ipot) RMH_05-17-08_208
(94) [ Xepe com ] itacl tintica ah iti miihtolca. sea the.Hz 3P-surface Md-Aw Foc 3P-on Px-be.Fl-Pl-ImpF
'Andan sobre la superficie del mar.'
They go on the surface of the sea. ${ }^{11}$ (DS2005, ah) RMH_08-21-07_101b

## Possessor of kinship term

[zacaam cop] $\underline{\text { zP }}$ ata cop young.woman the.VT 3P-mother the.VT
'la madre de la jovencita'
the young woman's mother (Mk 6:28) RMH_09-28-07_147f
(96) $\ldots$, $\left[\underline{\text { Abraám quii }]_{D P}} \underline{\text { ai }}\right.$ quih ${ }^{\circ}$ hacx immiih ${ }^{\circ}$. the.Cm 3P-father.ME the.FL s/he.died
'..., el padre de Abraham murió.'
... Abraham's father died. (Ac 7:4) RMH_10-15-07_25

## Personal item

(97) [ zixquisiil $^{\circ}$ ctam ticop ] DP yaaco cop child male Md-Vt 3P-house the.Vt
'la casa de ese niño'
that boy's house RMH_09-28-07_148a
(98) [ Ctam cahtxima quii ] yp yaaco cop caacoj iha. man SN-rich the.Cm 3P-house the.Vt SN-big Dcl
'La casa de un hombre rico siempre es grande.'
A rich man's house is always large. RмH_09-28-07_148b

[^121]
## Deverbal noun

[ cmaam tiquii] ${ }^{\circ}$ an ihiliti $^{\circ}$ quih woman Md-CM 3P.in 3P-PON-HAVE-hair the.FL 'el pañuelo de esa mujer'
that woman's scarf RmH_09-28-07_148c
(100)

${ }^{\circ}$ hax ano hmiih ${ }^{\circ}$.
water 3P.in 1SGS.Tr-Px-put.FL
'Lavé el pantalón de tu hijo.'
I washed your child's pants. RMH_09-28-07_148d
A simple noun or a noun in the absolutive form (§13.1.2) cannot be possessed directly.
a. *Juan quih trooqui quij
the.Fl vehicle the.Cm
('el vehículo de Juan') (Juan's vehicle)
b. *Juan quih haaonam quij
the.Fl Abs-hat the.Cm
('el sombrero de Juan') (Juan's hat)
c. * Juan quih haaco cop
the.Fl Abs.house the.VT
('la casa de Juan') (Juan's house)
The grammatical counterpart to (101a) may be either (102a) or (102b). (102a) uses a possessed form of trooqui; this is one of the few nouns having both a simple form and a possessed form. (102b) uses the possessive pronoun $\mathbf{y a a}{ }^{\circ}$; see $\S 16.1 .6$. As (102c) shows, the two constructions cannot be combined.

| a. | [ Juan quih ] | itrooqui | quij |  |
| :---: | :---: | :---: | :---: | :---: |
|  | the.FL | 3P-vehicle | the.Cm |  |
| b. | Juan quih the.FL | trooqui vehicle | yaa $^{\circ}$ <br> his/hers | quij <br> the. См |
| c. | * Juan quih | itrooqui | yaa quij |  |

'el vehículo de Juan' / John's vehicle (a) RMH_09-28-07_149a; (b) RMH_09-28-07_149b
The typical grammatical counterpart to (101b) uses the possessed noun iionam, and that of (101c) uses the possessed noun yaaco. The existence of the nouns iionam and yaaco requires that they be used instead of the absolutive forms of the nouns with the possessive pronoun in the
most common situations.
(103) a. [ Juan quih ] iionam quij
the.FL 3P-hat the.Cm
'el sombrero de Juan' / John's hat RMH_09-28-07_149c
b. [Juan quih ] yaaco cop
the.FL 3P-house the.VT
'la casa de Juan' / John's house RRR
However, a noun for a personal item such as haaonam may be used with the possessive pronoun yaa ${ }^{\circ}$ in special contexts in which the item is separated from the person (such as on a table being entered in a contest, etc.).
(104) Juan quih haaonam $\mathbf{y a a}^{\circ}$ quij
the.Fl ABs-hat his/hers the.Cm
'el sombrero de Juan'
John's hat RMH_09-28-07_150

### 8.4 Relative clauses

Relative clauses are all formed with deverbal nouns. There are no relative pronouns or complementizers. Relative clauses in Seri may all be analyzed as head-internal and some must be so analyzed. The proposed structure is shown in Figure 8.4. ${ }^{12}$ The relative clauses are primarily restrictive in their usage. ${ }^{13}$ And since most descriptions are expressed by means of verbs (adjectives are almost non-existent), relative clauses are very common although generally shallow in their structure. It is also important to note that, like other DPs with relative clauses, the Seri phrases translated with adjectives in English generally (if not always) are understood as restrictive adjectives. XX NUMBERS ${ }^{14}$

The head-internal nature of the relative clause is not


[^122]usually obvious because of the three factors: lack of case marking, omission of pronouns, and some variation in word order. One might think that the clause follows the head noun in many cases, but it is claimed and shown here that these are as easily and appropriately analyzed as having internal heads.

The head of the relative clause is most commonly a noun, but it may also be a personal pronoun, as illustrated by examples in this section such as (239), a name (see §15.1) or null (analyzed here as a fused-head construction - see §4.3.4). A demonstrative pronoun cannot be the head of a relative clause, however.
$*\left[\begin{array}{lllllll}{\left[\begin{array}{lll}\text { Tiix } & \text { coos }] & \text { (cop) }\end{array}\right.} & \text { he } & \text { hita } & \text { chaa } & \text { ha. } \\ \text { DDS } & \text { SN-sing } & \text { the.VT } & \text { 1PRO } & \text { 1P-mother SN-EQ } & \text { DCL }\end{array}\right.$
('Esa que está cantando es mi madre.') (That one that is singing is my mother.)

* $\left[\begin{array}{lllll}\text { Taax } & \text { hap } & \text { quicötoi }] & \text { (coi) } & \text { ox mimjöc. } \\ \mathrm{DDP} & \text { mule.deer } & \text { SN-Tr-kill-PL } & \text { the.PL thus Px-think-PL }\end{array}\right.$
('Así piensan aquellos que son cazadores expertos de venado bura.')
(That's how those who are expert mule deer hunters think.)

The head noun may sometimes be marked as definite, although in many examples it does not have a definite article, as discussed below (§8.4.5). It rarely has an indefinite article. ${ }^{15}$

The form of the predicate in a relative clause is always one of the three deverbal noun forms (see §10.4 and chapter 14): subject-oriented, direct object-oriented, or proposition/obliqueoriented. ${ }^{16}$ The form chosen depends on the grammatical relation that the head noun has in the relative clause except when the head noun is a possessor. In the case of the latter, it is the grammatical relation of the noun possessed by the relativized possessor that is relevant.

A relative clause may have a finite dependent clause (see chapter 3) embedded in it, as in the following examples where this finite clause is underscored.
(107) ..., [ comcaac [Socaaix ano motat] person/Seri-Pl Punta.Chueca 3P.in/from Twd-RL-move-PL
he cazcam ] coi ...
1IO SN-arrive.PL the.PL quavL

[^123]‘...las personas que vinieron de Punta Chueca y que llegaron a mí ...’’ RMH_08-04.07_243a ... the people who came from Punta Chueca and arrived to me ... More literally: ... the people who, after they came from Punta Chueca, arrived to me ... (DS2005, xica caaitic)

| (108) | $\begin{aligned} & {\left[{ }^{\circ} \text { Ziix quiisax }{ }^{\circ}\right.} \\ & \text { person } \end{aligned}$ | $\left[\begin{array}{cc} \text { pootax } & \text { ta } \\ \text { Ir.Dp-go } \end{array}\right]$ | $\begin{aligned} & \text { quiho ] } \\ & \text { SN-Tr-see } \end{aligned}$ | zo a | haquix there | $\begin{aligned} & \text { imiih } \\ & \text { SN-N-be.FL } \end{aligned}$ | iha, <br> DCL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ${ }^{\circ}$ hant quix ghost.shri | $a^{\circ}$ quij <br> the.См |  |  |  |  |  |

'La persona que ha visto un camarón fantasma andar [en la tierra] no existe.' The person who has seen a ghost shrimp go on the land doesn't exist. (No one has ever seen a ghost shrimp travelling on the land.) (ES2007 hant_quixoaa 03) RMH_05-16-08_2

```
... [cmiique [ital ] tahac contica] tintica
    person 3:3-RL-accompany Md-LC 3IO-Aw-SN-move MD-Aw
    `hacx itamiihtajo, ...
        they.killed.him/her
```

    ‘..., habían matado a la persona que le había acompañado, ...'
    ... they had killed the person who had accompanied him, ... (Gigante_Comelon_264)
    The properties of the noun are inherited by the entire DP. Therefore, if the noun is plural, it requires a plural verb in the relative clause if it is the subject of that verb and a plural determiner is expected, and if the DP is subject of the verb of the clause to which it belongs, that verb also is plural. ${ }^{17,18}$
(110) [ Caaytaj quih coopl ] coi caacöl iha.
horse-Pl the.FL SN-black-Pl the.PL SN-big-PL DCL
'Los caballos (que son) NEGROS son grandes.'
The BLACK horses are big. RMH_10-16-07_11c
In order to make clear the claim regarding structure in the previous example as well as others that follow, the relative clauses are bracketed and the head noun is double underscored while the deverbal noun of the clause is single underscored. Some examples are given with layered bracketing to reflect the fact that they appear to have a more complex internal structure.

### 8.4.1 Subject relatives

In the following examples the head noun is the subject of the deverbal noun of the relative

[^124]clause, whether it is active or passive, affirmative or negative. (On the morphology of subjectoriented deverbal nouns, see $\S 14.1$ and $\S 14.5$. They distinguish between realis and irrealis but do not specify further.) The head noun occurs before the time adjunct moxíma in (117) and (118) just as a subject may in simple clauses although less commonly so (see §3.10).

## Subject of a transitive clause

```
i[Ctam [canoaa hoyaat quih / com ] queexl ] quih
man boat 1P-ON-own-Pl the.Fl/the.Hz SN-Tr-buy the.FL
            háqui tiih?
            which.one? Rl-be.Fl
```

‘¿Donde está el hombre que compró nuestra panga?’
Where is the man who bought our boat? RмH_08-04-07_242a
[With the article quih, the boat is not present; with the article com, the boat is present.]
(112)
i[Ctam [canoaa hoyaat quih ] imexl ] quih man boat 1P-ON-own-Pl the.FL SN-Tr-N-buy the.FL
háqui tiih?
which.one? Rl-be.Fl
‘¿Donde está el hombre que no compró nuestra panga?’
Where is the man who didn't buy our boat? RMH_08-04-07_242b
(113) [ Cmaam miisj quih sexl ca ] quih hiz cötmiij iho. woman 2P-basket the.Fl Ir.Id-buy Aux.SN the.Fl here 3IO-Rl-N-sit Dcl 'La mujer que va comprar tu canasta no está aquí.
The woman who will buy your basket isn't here. RMH_08-04-07_242f
$\left[\begin{array}{lllll}{\left[\begin{array}{lll}\text { Comcáac } & \text { ctamcö } & \text { quih }\end{array}\right.} & \left.\begin{array}{l}\text { sixoaaj }\end{array} \quad \text { ca }\right] & \text { coi } \\ \text { person/Seri-PL } & \text { man-PL } & \text { the.FL } & \text { IR.ID-plan.to.fight.PL AUX.SN } & \text { the.PL }\end{array}\right.$
'Los hombres seris que pelearían ...'
The Seri men who would fight ... (EZz2007 Azoj_CanojImatax 03a)
$\left[\begin{array}{lllll}\underline{\underline{\text { Ziix }}} & \text { xiica quih caai }\end{array}\right] \quad$ tahac iti quiij $]^{19}$ quij ... thing thing.Pl the.Fl SN-Tr-make Md-LC 3P-on SN-sit the.Cm
‘El Creador, quien estaba allí, ...'
The Creator, who was there, ... (Conejo_Cuerno__1a)

| [ Cmaam | ${ }^{\circ}$ zaxt quisiil ${ }^{\circ}$ | cmoqueepe quih | caazi / quiho ] |
| :---: | :---: | :---: | :---: |
| woman | child | SN-sick the.Fl | SN-Tr-carry / SN-Tr-see |

[^125]```
quih / quij - imoz caajo iha.
the.Fl the.CM worried DCL
```

'La madre de un niño enfermo siempre está preocupada.'
The mother of a sick child is always worried. RмH_09-28-07_1479 (More literally, The woman who is carrying/seeing a sick child, ...)
[With the article quih, the woman is not present; with the article quij, the woman is present.]

## Subject of a passive clause

(117) ¿[Canoaa moxíma hatalhaa ] quih háqui tiih? boat yesterday SN-Pv-buy/sell the.Fl which.one? RL-be.FL
‘¿Dónde está la panga que fue comprada ayer?'
Where is the boat that was bought yesterday? RMH_08-04-07_242c
(118) i[Canoaa moxima imahatalhaa ] quih háqui tiih? boat yesterday SN-N-Pv-buy/sell the.Fl which.one? Rl-be.Fl
‘¿Dónde está la panga que no fue comprada ayer?’
Where is the boat that was not bought yesterday? RмH_08-04-07_242d

thing.Pl Md-PL thing SN-alive SN-N-Pv-see a 3:3-RL-see-PL
'Vieron un animal desconocido, ...'
They saw an unrecognized animal (ziix ccam) ... (DS2005, caméepit) RMH_08-04-07_242e
(120) [ ziix quih hapahit quih cacaaixaj] ${ }^{20}$
thing the.FL SN-Pv-eat the.FL SN-cause.strong
'algo de comer que da fuerza'
something to eat (lit., that is eaten) that gives strength (DS2005, cacaiaxai) RMH_08-21-07_77b
(121) [ $\underline{\underline{\text { Ziix }}}$ spahit ca quisil ipi] impaho ha. thing Ir.Id-Pv-eat Aux.SN SN-small Intns SN-N-Pv-see Dcl
'No hay nada para comer.'
There isn't anything to eat. (DS2005, ca) хМН_08-15-07_33e

## Subject of an intransitive clause

(122) [ haaco caacoj caziim ${ }^{\circ}$ cmaa quiih ${ }^{\circ}$ ] zo

Abs.house SN-big SN-pleasant now SN-be.Fl a
'una casa grande, linda y nueva'
a big new beautiful house (DS2005, caháacot) RMH_08-21-07_77c

[^126](123) [ Xazlc quih ctamcö quih caacöl] quih htacotim,... puma-Pl the.Fl male-Pl the.Fl SN-big-Pl the.Fl 1SGS.Tr-Rl-kill-ImpF
'He matado pumas MACHOS GRANDES, ...'
I have killed BIG MALE PUMAS, ... (Conej__Puma_9) RMH_08-21-07_77f

```
... [ ['丷ᄊix quiisax }\mp@subsup{}{}{\circ}\mathrm{ xepe quih iteel com iti caap ] cop ...
    person sea the.FL 3P-edge the.CM 3P-on SN-stand the.VT
    '... la persona que está en la orilla del mar ...'
    ...the person that is on the seashore ... (Siete_Filos 35)
```


## Subject of a predicate nominal

The relative clause may also be a verbless predicate nominal construction (see §10.1) without a modal. This analysis, illustrated by Figure 8.5, accounts for the word order facts: it is not HeadModifier (which would be unexpected for a head-final language), but Subject-Predicate. The predicate nominals are single underscored below.
[ Haxz ctam] ticop hin yocatxla.
dog male Md-Vt 1SGDO Dt-bite.[like.dog]
'Ese perro macho me mordió.'
That male dog bit me. Lнс_2-00-07_179a

(128) ... cmaam zo toc cötiij, [ ziix cmiique caii ctam aal] woman a there 3IO-RL-sit thing person mature man 3P-spouse
quij, tiix ah Baríil impáh.
the.CM DDS Foc Px-Pv-say
'... había una mujer cuyo difunto esposo se llamaba Barril.'
... there was a woman whose [now deceased] spouse was called Barrel. (more literally, ... the thing who was an adult who was male who was her spouse ...)
(Hombre_Barril_26-27)
(129) [ $\underline{\underline{\text { He }} \text { cmajiic ] hascmalx aha. }}$

1Pro woman.Pl 1PlS-Ir.Id-N-go-Pl Aux-Dcl
'Nosotras las mujeres no vamos a ir.'
We women will not go. LHс_2-06.07_179b
The same analysis (with verbless head-internal relative clauses) may be used for the uncommon adjectives, as in (130), and the nouns used with special meaning when they modify nominals, as in (131)-(132).

Figure 8.5: Relative clause with predicate nominal (example (125))

(130) [ hap cöhaisx] tintica
mule.deer injured MD-Aw
'el venado bura herido’
the injured mule deer (DS2005, cönaisx) RMH_08-04-07_239a
(131) [ ${ }^{\circ}$ eenm haacni ${ }^{\circ}$ cmaacoi] rifle old.man
'rifle viejo y fiel', trusty old rifle (DS2005, cmaacoi) RMH_08-04-07_239b
(132) [ eenim comcaii] knife old.woman
'cuchillo favorito', favorite knife (DS2005, comcaiil) RMH_08-04-07_239c
The noun isoj means his/her/its body and is the historical source of the reflexive pronouns (§11.2.1); the plural form is isolca. As a noun it can be modified by áa (§23.1.1), ${ }^{21}$ as in example (133). This word isoj may occur in construction with another noun to indicate that the noun it modifies is the authentic type - the real thing. ${ }^{22}$
(133) [ hant quih iti icmiiquet isoj áa ] hac
land the.FL 3P-on 3P-PON-be.person 3P-self true the.LC
'su lugar de origen'
his own home area (Mt 13:53) RMH_05-29-07_123a

[^127]

> 'Éste es el verdadero ostión Saccostrea palmula.'

This is the real rock oyster. RmH_05-29-07_123b

| [ Ctam isoj ] iha. | (136) | $\left[\begin{array}{cl}\text { Ctamcön } \\ \text { man-PL } & \text { isolca }] \\ 3 P-s e l f-P_{L} & \text { ha. } \\ \text { DCL }\end{array}\right.$ |  |  |
| :---: | :---: | :---: | :---: | :---: |
| man 3P-self DCL |  |  |  |  |
| 'Es un verdadero hombre.' |  | 'Son verda | deros hombr | es.' |
| He is a real man. ${ }^{23}$ (offered) |  | They are real | al men. RMH_ | 08-04-07_240 |

### 8.4.2 Primary and secondary object relatives

Relativized direct objects use object-oriented deverbal nouns (§14.3 and §14.5) whether they are the primary object or the secondary object. ${ }^{24}$ The irrealis form is actually identical to the finite realis that is used in main clauses; when used in a relative clause, typically some auxiliary element such as ha in (139), occurs with it.

```
(137) [Icaapjöquij \({ }^{\circ}\) hoeenec ] cah tapxölim ma,...
    sea-pounding.stick 1P-ON-carry.PL the.Fl-Foc RL-broken.Hz DS
    'El palo que trajimos se quebró, ...'
    The pole that we brought broke, ... (DS2005, icáajioquij) RMH_08-04-07_243b
(138) [ cafee moosi ] cap
    coffee 2P-ON-drink the.VT
    'el café que tomas'
    the coffee that you drink (DS2005, cahoaatio) RMH_08-04-07_243d
(139) [ \(\underline{\underline{\text { Cafee }}} \underline{\text { nsiisi }} \underline{\text { ha }] ~ c o p ~ c o a a t j o ̈ ~ i h a . ~}\)
    coffee 2SGS-Ir.ID-drink Aux the.Vt SN-sweet Dcl
    'El café que tomarás es dulce.'
    The coffee that you will drink is sweet. RMH_08-04-07_243c
(140) [ \(\underline{\underline{\text { imám }}}\) quih \({ }^{\circ}\) hant cohsaheectim \({ }^{\circ}\) ha ] coi
        3P-fruit the.Fl land 1SGS.Tr-Ir.Id-? Aux the.Pl
    'la fruta que voy a transportar'
    the fruit that I am going to transport (DS2005, öcanéectim) RMH_10-16-07_06
(141) \(\ldots\) xo [ \(\underline{\underline{\text { ziix }}}\) isiiitoj ha ihmaa ] \(z\) itemaht iho.
        but thing 3:3-Ir.Id-eat.Pl Aux another a 3:3-Rl-N-see-Pl Dcl
    '.. pero no pueden encontrar algo para comer.'
    ...but they can't find anything to eat. (Mt 15:32) RMH_09-28-07_164e
```

[^128](142) [ María quih cafee oosi] cap cmatj iha. the.Fl coffee 3P-ON-drink the.VT SN-hot DCL
'El café que María toma/tomó está/estaba caliente.'
The coffee that María is drinking/drank is/was hot. (Offered) RMH_08-04-07_243e
(143) [Canoaa ma hiiye ] com cooxp iha. boat 2SGDO 1P-ON-give.gift the.Hz SN-white DCL
'La panga que te regalé es/era blanca.'
The boat I gave you is/was white. RмH_08-04-07_244f
(144) [Moxima quih canoaa ma hiiye ] quih cooxp iha. yesterday the.FL boat 2SGDO 1P-ON-give.gift the.FL SN-white DcL 'La panga que te regalé ayer es blanca.'
The boat that I gave you yesterday is white. RMH_11-00.07_115
(145) [Canoaa ma hiiye] com quiha ha. boat 2SGDO 1P-ON-give.gift the.Hz SN-fast Dcl
'La panga que te regalé es veloz.'
The boat that I gave you is fast. RMH_10-16-07_10
(146) Ziix icocooz quiya ha, [ ctam moxima quih
thing Inf.In-UO-steal SN-Tr-know Dcl man yesterday the.Fl
canoaa quih miiye ] quih.
boat the.FL 2P-ON-give.gift the.FL
'El hombre a quien le diste la panga ayer es un ladrón.'
The man that you gave the boat to yesterday is a robber. RMH_11-20.07_116
(147) a. [ Canoaa Juan quih ma iiye] com quiha ha. boat the.FL 2SGDO 3P-ON-give.gift the.Hz SN-fast DCL
b. [Juan quih canoaa ma iiye] com quiha ha.
'La panga que Juan te dio es muy veloz.'
The boat that John gave you is very fast. (a) RMH_09-28-07_152b (b) RMH_09-28-07_152c
An example like (142) can be reorganized with the head noun in clause-initial position just as objects may be fronted in finite clauses; see §3.10.
(148) [ Cafee María quih oosi ] cap cmatj iha. coffee the.Fl 3P-ON-drink the.VT SN-hot DCL
'El café que María toma/tomó está/estaba caliente.'
The coffee that Maria is drinking/drank is/was hot. (Offered) RNH_08-04-07_244a
But the head cannot be separated from the relative clause.
b. * [María quih oosi ] ematj iha, [ cafee cap ].
c. * Cafee cap ] [ María quih oosi ] cmatj iha.
d. * María quih oosi ] [ cafee cap ] cmatj iha.
[ Cmaam miisj quih sexl ca ] quih hiz cötmiij iho. woman 2P-basket the.Fl Ir.Id-buy Aux.SN the.Fl here 3IO-Rl-N-sit Dcl
'La mujer que va comprar tu canasta no está aquí.
The woman who will buy your basket isn't here. RMH_08-04-07_242f
The head noun of such a clause cannot have an article since there is another noun phrase in the clause.
(151) * Cmaam quih miisj quih sexl ca ] quih hiz cötmiij iho. ('La mujer que va comprar tu canasta no está aquí.)
(The woman who will buy your basket isn't here. )
[Canoaa ctam cop hihacohot] com quiha ha. boat man the.Vt 1P-ON-cause.see the.Hz SN-fast DcL
'La panga que le mostré al hombre es veloz.'
The boat that I showed to the man is fast. RMH_10-16-07_09

### 8.4.3 Indirect objects, oblique objects and objects of postpositions

When a relativized nominal is not the subject or direct object of the relative clause, nor a possessor (§8.4.4), the relative clause is presented with an action/oblique deverbal noun (§14.4 and $\S 14.5$ ). This is the form that number predicates are presented in to express an ordinal number after first and second; see Table 8.2.

### 8.4.3.1 Indirect objects and oblique objects

| a. | $\begin{equation*} \underline{\underline{\text { zaah }}} \tag{153} \end{equation*}$ | it | ${ }^{\circ} \mathrm{hapx} \underline{\text { mihiip }}^{\circ}$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | sun/day | $3 \mathrm{P}-$ on | outside 2P-PON-stand |  |
| b. | zaah | iti | micmiiquet | cop |
|  | sun/day | 3P-on | 2P-PON-be.person | the.V |
| c. | $\underline{\underline{z a h}}$ | iti | $\underline{\text { mihisil }}$ | cop |
|  | sun/day | 3P-on | 2P-PON-small | the.V |
| 'el día en que naciste' |  |  |  |  |
| the day on which you were born RMH_08-04-07_244b |  |  |  |  |

(154) a. [ eenim ziix ipxasi quih miizix ] cop knife thing 3P-flesh the.FL 2P-PON-saw the.VT
b. [ziix ipxasi quih eenim miizix] cop thing 3P-flesh the.Fl knife 2P-PON-saw the.VT
'el cuchillo con que lo cortabas/cortaste la carne'
the knife with which you cut the meat (a) RMH_08-04-07_244c. (b) RMH_09-28-07_152a
(155) [ Ctam canoaa quih cohyacohot] quih man boat the.FL 3IO-1P-PON-cause.see the.FL
he hoyacj iha.
1Pro 1P-ON-call.sibling DCL
'El hombre a quien le mostré la panga es mi hermano.'
The man that I showed the boat to is my brother. RNH_11-27-07_24
(156) [ $\underline{\text { eenim }}$ inyazix ] cop knife 2P-PON-UO-saw the.VT
'el cuchillo con que cortas/cortabas'
the knife that you are/were cutting with RMH_08-04-07_244d
(157) [ eenim misiizix ha ] cop knife 2P-Ir.Id-saw Aux the.VT 'el cuchillo con que lo/la cortarás' the knife that you will cut it with RMH_08-04-07_244e

|  | Table 8.2: Expressions for ordinal numbers |  |  |
| :--- | :--- | :--- | :--- |
| yeen oo caap* | 3P-face DL SN-stand | 'primero' | first |
| iic cöcaap | 3P-toward 3IO-SN-stand | 'segundo' | second |
| iiqui iipxa | 3P-toward 3P-PON-three | 'tercero' | third |
| iiqui izooxöc | 3P-toward 3P-PON-four | 'cuarto' | fourth |
| iiqui yaaitom | 3P-toward 3P-PON-five | 'quinto' | fifth |
| iiqui isnáap iizoj | 3P-toward 3P-chest 3P-PON-one | 'sexto' | sixth |
| iiqui tomcoj cöihiih | 3P-toward ? 3P-PON-be.FL | 'séptimo' | seventh |
| iiqui izooxolcam | 3P-toward 3P-PON-eight | 'octavo' | eighth |
| iiqui csooi ihánl | 3P-toward ? 3P-PON-ten | 'noveno', | ninth |
| iiqui ihanl | 3P-toward 3P-PON-ten | 'décimo' | tenth |
|  |  |  |  |
| *There are many situations in which this expression is not appropriately used, |  |  |  |
| but rather an expression using some contextually-appropriate verb with the |  |  |  |
| adverb íi (see §23.1.6). |  |  |  |



### 8.4.3.2 Objects of postpositions

The following examples illustrate the relativization of the object of a postposition. As in simple sentences, the object of the postposition may be fronted (see chapter 22).
(159)
$\left[\begin{array}{lll}\underline{\text { xiica }} & \text { iicot } & \text { hihiij ] }\end{array} \begin{array}{l}\text { coi } \\ \text { thing.PL }\end{array}\right.$
'la gente con quien yo estaba'
the people whom I was with RMH_08-04-07_245a
a. [Juan quih comcaac (qu)iicot ihiii ] coi the.FL person/Seri.PL 3P-with.PL 3P-PON-sit the.PL
b. [ comcaac Juan quih (qu)iicot ihiii] coi people the.FL 3P-with.PL 3P-PON-sit the.PL
'la gente con que estaba Juan'
the people that John was with RMH_08-04-07_245b
(161) [ hant iti haxoj hiizcam ] hac
land 3P-on shore $1 \mathrm{P}-\mathrm{PON}$-arrive.PL the.LC
'el lugar donde atracamos'
the place where we beached RMH_08-04-07_2450
a. [ ctamcö coi hant iti haxoj iizcam] hac man-Pl the.PL land 3P-on shore 3P-PON-arrive .PL the.Lc
b. [hant ctamcö coi iti haxoj iizcam ] hac
'el lugar donde los hombres atracaron'
the place where the men beached (a,b) RMH_08-04-07_245d
(163)


[^129]'la panga en que estamos/estábamos'
the boat that we are/were in (understood as restrictive reading, contrasting this boat with others) RMH_08-04-07_245e
(164) [ canoaa ano hiihca ] com boat 3P.in 1P-PON-sit.PL the.Hz
'la panga en que estamos/estábamos' the boat that we are/were in (understood as not restrictive reading) RMH_08-04-07_246a
(165) [he canoaa ano hisiihca ha ] com

1Pro boat 3P.in 1P-Ir.Id-sit.Pl Aux the.Hz
'la panga en que estaremos'
the boat that we will be in RMH_08-04-07_246b
(166) [ cafee ${ }^{\circ}$ xiica an icaai ${ }^{\circ}$ ipi an impaii ] quih coffee sugar Intns 3P.in 3P-PON-N-Pv-make the.FL
'café sin azúcar'
coffee without sugar in it (coffee in which sugar has not been put) RмH_08-04-07_246c
(167) [ hant an isquiih ha ]
place 3P.in 3P-Ir.Id-US-be.Fl Aux
'lugar en que uno vivirá'
place where one will live (Jn 14:20) RMH_09-28-07_164f

### 8.4.4 Possessor relatives

Relative clauses with heads that are possessors have the expected structure of PossessorPossessed. The deverbal noun that occurs in them has the form appropriate for the relation that the possessed noun has to the relative clause - whether subject, direct object, or other. Therefore in an example such as (170), illustrated by Figure 8.6, the object-oriented deverbal noun is used in the relative clause.
(168) child died: subject-oriented deverbal noun
[ cmaam iiquet $^{\circ}$ quih ${ }^{\circ}$ hacx cmiih $^{\circ}$ ] quih woman her.child the.FL dead the.FL
'la mujer cuyo/a hijo/a murió'
the woman whose child died RMH_08-04-07_246d
(169) fist is withered: subject-oriented deverbal noun

Hant tahac [ ctam yanopi eneeej ] $z$ iti tiij, toc cömiij. land Md-LC man 3P-fist SN-curled.up a 3P-on RL-sit there 3IO-PX-sit 'Había en ese lugar un hombre que tenía la mano tullida.'
A man was there whose hand was paralyzed. (LK6:7) RMH_08-04-07_246e
(170) we found the child: object-oriented deverbal noun
[ Cmaam iiquet ${ }^{\circ}$ quih hocoht ] quih ${ }^{\circ}$ iisax hant yaait ${ }^{\circ}$. woman her.child the.Fl 1P-ON-see-Pl the.Fl s/he.was.happy
'La mujer cuyo/a hijo/a encontramos está feliz.'
The woman whose child we found is happy. RMH_08-04-07_246f
(171) you were cutting with the knife: oblique-oriented deverbal noun
[ Cmaam eenim quih ziix ipxasi quih miizix] quij woman 3P-knife the.Fl thing 3P-flesh the.Fl 2P-PON-saw the.Cm
${ }^{\circ}$ iisax hant yaait ${ }^{\circ}$.
s/he.was.happy
'La mujer con el cuchillo de quien estabas cortando la carne está feliz.'
The woman whose knife you were cutting the meat with is happy. RMH_09-28-07_153a

Figure 8.6: Head is possessor of direct object $=(170)$


(172) you put firewood into the car: oblique-oriented deverbal noun [ cmaam itrooqui quih haquejöc ano miiquim ]

The possessor nominal phrase does not always directly precede the noun to which it relates. Consider the following examples: ${ }^{26}$

'la madre de Pedro, la mujer que es la madre de Pedro' (b) RMH_09-28-07_153d Pedro 's mother, the woman who is Pedro's mother (see Mt 8:14) (a) RMH_09-28-07_153c

Of these alternatives, the type of construction shown in (173b), with a preposed possessor, is apparently more common. An analysis for (173a) is given in Figure 8.7, and an analysis for (173b) in Figure 8.8.

### 8.4.5 The definite article in relative clauses

[^130]Definite complex noun phrases often have occurrences of the definite article quih in certain internal positions, especially when one wishes to emphasize the characteristics or descriptions provided. A very simple example is given in (174).
[ Canoaa quih quisil com ], tiix ihsexl aha. boat the.Fl SN-small the.Hz DDS 1SGS.Tr-Ir.Id-buy Aux-Dcl
'Compraré la panga PEQUEÑA.'
I will buy the SMALL boat. RMH_05-29-07_114a
The analysis of such an example, shown in Figure 8.9, falls out quite directly from the analysis of internally-headed relative clauses. The phrase canoaa quih is the DP subject; the word quisil corresponds to the predicate. The presence of the "internal" article is therefore a way to add contrastive focus. Another example is given in (175).

| $\left[\begin{array}{lll}\text { Caaytaj } & \text { quih } & \text { coopl ] }\end{array}\right.$ | coi | caacöl | iha. |  |
| :---: | :--- | :--- | :--- | :--- | :--- |
| horse-PL | the.FL | SN-black-PL the.PL | SN-big-PL | DCL |

'Los caballos (que son) NEGROS son grandes.'
The BLACK horses are big. RMH_10-16-07_11c
When the relative clauses are "stacked", more instances of quih are possible, as shown in the following examples. An analysis of (177) is given in Figure 8.10.
Figure 8.8: Diagram for (173b)
(176) [ Xazlc quih ctamcö quih caacöl] quih htacotim,... puma-Pl the.Fl male-Pl the.Fl SN-big-Pl the.Fl 1SGS.Tr-Rl-kill-ImpF
'He matado pumas MACHOS GRANDES, ...'
I have killed BIG MALE PUMAS, ... (Conjo_Puma_9) RMH_08-21-07_77f
(177) [ ${ }^{\circ}$ xiica quih quiistox ${ }^{\circ}$ quih ihmaa] com thing.PL the.Fl SN-have.life-PL the.Fl other the. Hz
'la otra gente'
the other people RMH_08-04-07_233b
(178) [ ziix quih imam ${ }^{\circ}$ hehe án ${ }^{\circ}$ com ano quiih thing the.FL 3P-fruit countryside the.Hz 3P.in SN-be.FL

| quih | quihic | quih | caacöl | quih | catxo ] | coi |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| the.FL | SN-HAVE.seed the.FL | SN-big-PL | the.FL | SN-many | the.PL |  |

'cosa cuya fruta en el desierto tiene semillas grandes'
thing whose fruit in the desert has big seeds (Hast_Quita) RMH_08-04-07_233c
(179) $\ldots$ [xepe quih exatlc quih emeque ] com, ... sea the.Fl SN-thin-Pl the.Fl SN-warm the.Hz
'... el mar poco profundo y cálido ...'
... the shallow and warm sea... (alo_quicoso 04) RmH_08-24-07_-50g
(180) [ Haxz quih quisil xah caacoj quih hant quih iti caap] cop dog the.Fl SN-small Crd SN-big the.Fl land the.Fl on SN-stand the.Vt
ziix $\mathbf{z}$ iij cöpomaiitim ta $\mathbf{x}$, ...
thing a differently 3IO-Ir.Dp-N-do DS UT

'Si hay un perro pequeño o grande en algún lugar que no hace nada de malo, ...' (Más literalmente: Si el perro - pequeño o grande - que está en un lugar - no está haciendo nada mal, ...'
If there is a small or big dog somewhere that isn't doing anything wrong, ...
(Consejos_perro_40.1)
[ [ Hap quih caacöl] quih quiipe] tacoi itamjc xox, ... mule.deer the.Fl SN-big-Pl the.Fl SN-good Md-PL 3:3-Rl-bring although
'Aunque trajo aquellos venados bura grandes y buenos, ...'
Although he brought those big good mule deer, ... (Gigante_Comelon_187)
The following examples, which are ungrammatical variations on (181), illustrate an important fact for all such cases. The robust determiner (whether an article other than quih or a demonstrative) is not permitted "internally" to the DP in the positions occupied by quih.
a. * Hap coi caacöl coi quiipe tacoi ...
b. * Hap tacoi caacöl quih quiipe quih ...
c. * Hap quih caacöl coi quiipe tacoi ...
d. * Hap quih caacöl tacoi quiipe quih ...
e. etc.

The preceding examples have had intransitive verbs in the relative clauses. The situation with transitive clauses is more complicated and more interesting. When there are two nominals

present (even if one is null), the head noun obligatorily does not have an article with it. This fact unambiguously signals it as the head of the relative clause. Furthermore, variability in word order is completely acceptable. In the following examples the head noun is double underscored.

| (183) | a. | $\underline{\text { haxz }}$ | ctam <br> man | quih the.Fl | ocoho 3P-ON-see | cop <br> the. VT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | b. | ctam <br> man | quih the.FL | $\frac{\underline{\text { haxz }}}{\operatorname{dog}}$ | ocoho 3P-ON-see | cop <br> the.VT |
|  | c. | $\emptyset$ |  | $\frac{\text { haxz }}{\operatorname{dog}}$ | ocoho 3P-ON-see | cop <br> the.VT |
|  | d. | * $\underline{\text { haxz }}$ | qu | ctam | quih | oho cop |
|  | e | * ctam | quih | haxz | quih | oho cop |
|  | f. | * $\varnothing$ |  | $\underline{\text { haxz }}$ | quih | oho cop |

'el perro que el hombre vio' (a-b) / 'el perro que vio' (c) (b) RMH_10-16-07_08b (c) RMH_05the dog that the man saw (a-b) / the dog that he saw (c) (a) RMH_10-16-07_08a

| a. | $\begin{equation*} \frac{\text { ctam }}{\text { man }} \tag{184} \end{equation*}$ | $\begin{aligned} & \text { haxz } \\ & \text { dog } \end{aligned}$ | quih the.Fl | ocoho 3P-ON-see | cop <br> the. VT |
| :---: | :---: | :---: | :---: | :---: | :---: |
| b. | $\begin{aligned} & \text { haxz } \\ & \operatorname{dog} \end{aligned}$ | quih the.FL | $\frac{\text { ctam }}{\operatorname{man}}$ | ocoho 3P-ON-see | cop <br> the. $\mathrm{V}_{\mathrm{T}}$ |
| c. | $\emptyset$ |  | $\underline{\text { ctam }}$ | ocoho 3P-ON-see | cop <br> the. $\mathrm{V}_{\mathrm{T}}$ |
| d. | * haxz | quih | ctam | quih | o cop |
| e. | * ctam | quih | haxz | quih | ho cop |
| f. | * ctam | quih | $\emptyset$ |  | ho cop |

'el hombre que el perro vio' (a-b) / 'el hombre que vio' (c) (c) RMH_05-17-08_211 the man that the dog saw (a-b) / the man that it saw (c) (a) RMH_10-16-07_08c (b) RMH_10-16-07_08c

Stacked transitive subject relatives have not observed in texts but may be elicited without too much difficulty (albeit with patience since they are hard to process). Note the lack of articles following the heads. ${ }^{27}$

```
(185) [ Haxz [ ziic [ zixcám siimet quih quihit] quih quicö] quih
    \(\overline{\operatorname{dog}}\) bird fish bread the.FL SN-Tr-eat the.FL SN-Tr-kill the.FL
```

[^131]```
cöcaaitim ] cop yaacö.
3IO-SN-chase the.VT Dт-UO-bark
```

'Ladró el perro que persiguió el ave que mató el pescado que comió el pan.'
The dog that chased the bird that killed the fish that ate the bread barked. гмн_10-
For reasons unknown, attempts to elicit stacked relatives that contained a non-subject relative with almost any other relative clause other than the simplest intransitive were completely unsuccessful, in sharp contrast to the situation with all subject relatives.
\(\left[\begin{array}{llllll}Zixcám com \& {[siimet} \& caaitic] \& oohit] \& quih \& mooxp. <br>

fish the.Hz bread \& SN-soft \& 3P-ON-eat\end{array}\right.\) the.FL | PX-white |
| :--- |

(187) $*[$ Ziic quij [ zixcam com siimet oohit] ooicö ] bird the.Cm fish the.Hz bread 3P-ON-eat 3P-ON-kill quih mooxp. the.Fl Px-white
('El pan que el pez comió que el ave mató era blanco.')
(The bread that the fish ate that the bird killed was white.)

| * Ziic | quij | [ zixcam | siimet | quih | quihit ] | 00icö |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| bird | the. См | fish | bread | the.FL | SN-Tr-eat | 3P-ON-kill |
|  |  | xp. <br> white |  |  |  |  |

('El pez que comió el pan que el ave mató era grande.')
(The fish that ate the bread that the bird killed was big.)
Under very unusual conditions relating to negation, the DP with a relative clause and also the head noun take the singular indefinite article.
..., [ cmiique zo ziix $\quad \mathrm{z}{ }^{\circ}$ imoz cöiihca ${ }^{\circ} \underline{\underline{z}}$ ] imaa ha. person a thing a who.hoards a SN-Tr-N-know DCL
'..., nunca había conocido a una persona tacaña.'
... he had never known a person who hoarded. (Gigante_Comelon_477)
..., [ ziix zo cöiyasíyalam $\underline{\text { zo }] ~ h a q u i x ~ i m i i h ~ i h a . ~}$ thing a 3IO-3P-ON-use-PL.IMPF a somewhere SN-N-be.Fl DCL '... no había otra cosa [concha] que usaron tanto.' /
... there was nothing else [no other shell] that they used as much. (xtip 06)

### 8.4.6 Headless relatives

A relative clause commonly occurs without an overt nominal head. ${ }^{28}$ Some of these have become quite conventionalized: caamjö (SN-UO.hunt) hunter and also screech-owl, quihehe ${ }^{\circ}$ (SN-rule, or more literally SN -have-plant, in the sense of rod, presumably) leader, governor, king, cooit (SN-dance) dancer, coos (SN-sing) singer, caazi (SN-Tr-carry) father (see him caazi, 1SGDO SN-Tr-carry, my father). Some are even more conventionalized and might be thought of as only etymologically related; see chapter 14 . The examples below seem a bit more spontaneous.

| (191) |  ‘..., un dueño estaba allí, ...' <br> ... an owner was there, ... (Gigante_Comelon_493) RMH_05-17-08_213 |
| :---: | :---: |
| (192) | hipi [ caaitom í ] <br> Intns SN-speak first 'el primero en hablar' <br> the first one to speak RmH_08-14-07_11d |
| (193) | $\left.\begin{array}{l}\text { [ Zixcám quih }\end{array} \begin{array}{l}\text { quihit }\end{array}\right] \quad$ tiquij, tiix $\quad$ he $\quad$ hoyacj |
| (194) | [ Cfit ] cop he hoyacj iha. <br> SN-stand ${ }^{29}$ the.VT 1Pro 1P-ON-call.sibling DCL <br> 'La/el que está parada/o es mi hermana/o.' <br> The one who is standing is my sister/brother. RMH_08-14-07_68a |
| (195) | $\begin{array}{lllll}{\left[\begin{array}{llll}\text { Hant } & \text { coom ] com } & \text { he hoyacj } & \text { iha. } \\ \text { land } & \text { SN-lie } & \text { the.Hz } & \text { 1PRO } 1 \text { 1P-ON-call.sibling }\end{array}\right.} & \text { DCL } \\ \text { 'La/el que está parada/o es mi hermana/o.' } & \\ \text { The one who is lying down is my sister/brother. } \text { RMH_08-14-07_68b }\end{array}$ |
| (196) | ... [ áno quiii quij] ${ }^{\circ}$ hacx yomiih ${ }^{\circ}$. <br> 3P.in SN-sit the.Cm apart DT-not.be.Fl <br> '... el/la que estaba en él [carro] murió.' <br> ... the one that was inside it [the car] died. (DS2005, capniicl) RMH_05-17-08_214 |

[^132][ Hant quiii] quij quihehe ${ }^{\circ}$ quih haa ha. land SN -sit the.CM ruler the.Fl SN.EQ DCL
'El que está sentado es el gobernador.'
The one who is sitting down is the governor. RmH_08-14-07_68c
[Quisíil ${ }^{\circ}$ ctam quih cacoxl ] quij he hiyal iha. child male the.Fl SN-Tr-tend the.Cm 1Pro 1P-spouse Dcl 'La/el que está cuidando el niño es mi esposa/o.'
The one who is taking care of the boy is my spouse. RMH_08-14-07_68e
[ Imitaamt ] ticop, tiix he hyaazi ${ }^{\circ}$ ha. SN-N-have.sandal(s) Md-Vt DDS 1Pro my.child Dcl
'El/la que no está descalzo/a es mi hijo/a.'
The barefooted one is my child. RMH_08-21-07_92
(200) ... tiix [hantx moca isoj] iha.

DDS at.base TwD-SN-move 3P-self DCL
'... es un verdadero ancestro.'
... s/he is a real ancestor. (Hipocampo_20) RMH_05-29-07_123c
[Coos] quij toc cötiij $x$, [ cooit] cop mos toc cömiip. SN-sing the.Fl there 3IO-Rl-sit UT SN-dance the.VT also there 3IO-PX-stand 'Había un(a) cantante allí, también había un bailador.'
There was a singer there, there also was a dancer. (siete_filos 41)
$\left[\begin{array}{llllll}{[ } & \text { Ziix } & \text { cmiique } & \text { caii } & \text { cmaam ipca } & \text { cöcoos }\end{array} \quad\right.$ quij $]$
cöcazcam ] tamocat ox tooza, yoque.
3IO-SN-arrive.Pl Md-Twd-Pl thus RL-speak.PL DT-US-say
'Así dijeron los que fueron a visitar a la mujer con el poder de la lluvia.'
That's what those who went to the "rain seer" woman said. (Es2007 cmaam_ipca 06)
$\begin{array}{clllll}{\left[\begin{array}{lll}\text { Icaatax } & \text { quimzo ] } & \text { zo }\end{array} \quad \text { haa }\right.} & \text { piij } \quad \mathbf{x}, \\ \text { Inf.In-go } & \text { SN-TR-want } & \text { a/one } & \text { there } & \text { Ir.Dp-sit UT }\end{array}$
isoj isataaho (a)ha.
3P-self 3:3-IR.ID-make.ready Aux-DCL
'El/la que quiere ir debe prepararse.'
Whoever wants to go should get ready. RMH_10-15-07_41a

### 8.5 Partitive construction

The partitive construction has a head word indicating a subset of a group that, if overtly identified, is expressed by a preceding DP.

One word that may occur as the head of a partitive construction is the (relatively uncommon) word antá some, ${ }^{30}$ referred to here as a quantificational pronoun, typically followed by the attenuating adverb xah (§24.6.1). If it is modified by the intensifying adverb hax (§24.1.2), it means quite a few, many.
(204) [ [ Haxöl quih ] antá xah] hiime. clam(s) the.Fl some Atten 1SGS.Tr-Px-give
'Yo le di unas cuantas almejas.'
I gave her/him some clams. (DS2005, antá) RMH_08-04-07_247d
(205) [ Antá xah] miizcam. some Atten Px-arrive.Pl
'Algunos llegaron.'
Some arrived. RMH_08-04-07_247e
(206) [ Hax antá xah ] miizcam. Intns some Atten Px-arrive.Pl
'Bastante muchos llegaron.'
Quite a few arrived. RMH_08-04-07_247f
Example (207) shows that the complement of antá may occur in a fronted position (see §3.10) preceding the adverb haptco.
(207) Comcaac ctamcö coi, haptco antá xah miizcam. person/Seri.Pl man-Pl the.Pl already some Atten Px-arrive.Pl
'Algunos hombres seris ya llegaron.'
Some Seri men already arrived. (DS2005, antä) RMH_08-04-07_248a
Another interesting word that may be the head of a partitive construction is the noun àpa enormous quantity. This word is phonologically unusual as it is unstressed; as a reminder of this fact, it is written here with a grave accent. It is also unusual as its complement must be singular.
[ [ Cmiique caacoj] àpa zo ] nsiiho (a)ha.
person SN-big enormous.quantity a 2SGS-Ir.Id-see Aux-Dcl
'Verás una enorme cantidad de personas grandes.'
You will see an enormous quantity of big people. (DS2005, apa) RMH_08-04-07_248b

| $\left[\begin{array}{lll}\text { Haxz }] & \text { àpa } & \text { zo }]\end{array}\right.$ | hmiiho. |  |
| :---: | :--- | :--- | :--- |
| $\operatorname{dog}$ | enormous.quantity a | 1SGS.Tr-Px-see |

'Vi una enorme cantidad de perros.'
I saw an enormous quantity of dogs. RMH_08-04-07_248c
An indefinite article may occur as both determiner and head of the partitive DP, as illus-

[^133]trated in Figure 8.6 for example (210). ${ }^{31}$
(210) [ [ Seaatoj tanticat ] pac ] queelcam iha. goat-PL MD-Aw-PL some SN-old-PL DCL
'Algunos de los chivos son viejos.'
Some of the goats are old. (DS2005, pac) RMH_08-04-07_248d
... [ [ ${ }^{\circ}$ xiica coosyatoj ${ }^{\circ}$ emajiic coi] zo ] haa, yoque. giants female.Pl the.PL a/one SN.EQ Dt-US-say
'... era una de las mujeres gigantes, se dice.'
... she was one of the female giants, it is said. (ES2007, acaam_ccaa 11b)
[ [ Xiica Hast ano coii Cofteecöl iti coii coi ] zo ] thing.Pl S.E.I. 3P.in SN-be.Fl.Pl S.E.I. 3P-on SN-be.Fl.Pl the.Pl a/one yohaa. DT-EQ
'Era uno de la gente de la Isla San Esteban.'
He was one of the San Esteban people. (DS2005, Cofféecal) RMH_08-04-07_250b
... [ [ xicacaziil ${ }^{\circ}$ iicot ihyaalim coi ] zo ] toc cötap,
children 3P-with.PL 1P-PON-play the.PL a/one there 3IO-RL-stand
‘ $\ldots$. uno de los niños con quienes yo estaba jugando, ...'
... one of the children with whom I was playing was there, ... (DS2005, caapxöim) OP_-2--07_120


[^134]
animal $\quad \mathrm{Md}-\mathrm{Hz}$ 3P-blood the.Vт some
'algo de la sangre de ese animal'
some of that animal's blood (Hb 13:11) RмH_08-04-07_251
(215) ... [ [ sahmees yatoiilcam tacoi ] pac ]
orange(s) 3P-ON-distribute-PL Md-PL some
ma hsacooomot
aha.
2SGDO 1SGS.Tr-Ir.Id-request.for Aux-DCL
'... voy a pedir algunas de esas naranjas por ti.'
... I will ask for some of those oranges for you. (DS2005, cacooomot) OP_2-2-07_121
Example (216) is interesting as it uses a singular complement DP referring to a class rather than a specific group.
(216) [ [ Zacaam hapáh quih ] zo ] haa, yoque, ... young.woman SN-Pv-say the.Fl a/one SN.EQ DT-US-say
'Era una jovencita.'
She was a young woman. (Gigante_Comelon_27) RMH_08-04-07_250a
The complement of the indefinite pronoun may be a DP that is a demonstrative pronoun or a personal pronoun.
(217) He [ [ taax ] zo ] haa ha.

1Pro DDP a/one SN.EQ DCL
'Soy uno de ellos.'
I am one of them. RmH_08-04-07_252a
(218) [ [ Taax ] pac ] yoozcam.

DDP some DT-arrive.PL
'Algunos de ellos llegaron.'
Some of them arrived. RMH_08-04-07_252b
Note that in example (219)-(220) the inflection on the verb is second person plural, in agreement with the complement of the partitive construction. The same phenomenon is seen in (225) and (228).

‘¿Han ido algunos de ustedes?’
Did some of you go? RMH_08-04-07_252C RMH_08-04-07_152
(220) [ [ Me ] pac ] mataainim x, Hezitmisoj quij 2Pro some 2PlS-Rl-mix.in UT Hermosillo the.Cm

```
hax ano/áno mimazcam oo, cömayooi.
just 3P.in 2P-PON-N-arrive.Pl Dl 3IO-2PlS-DT-do.PL
```

'Algunos de ustedes no llegaron a Hermosillo.'
Some of you didn't arrive to Hermosillo. (Offered) RMH_08-04-07_156 RMH_08-04-07_157
As heads we also find quantifying expressions such as the pronoun coox all (221-222), the adjective tazo one (223)-(225) - which may co-occur with the article zo in these constructions- and deverbal forms of number verbs (226-227). ${ }^{33}$
[ [ ${ }^{\circ}$ xiica quih quiistox ${ }^{\circ}$ coi ] coox ] people the.Pl all
'toda la gente'
all of the people RMH_08-04-07_252d
(222) [ [ xiica oeen coi ] coox oo ]
thing.Pl 3P-ON-carry.items the.PL all DL
'todo lo que llevaba'
everything that s/he was carrying RMH_05-17-08_215
[ [ xicaquiziil ${ }^{\circ}$ com ] tazo ipi] haquix piih, ...
children the.Hz one Intns somewhere Ir.Dp-be.Fl
'... si hasta uno de estos niños ...'
if even one of these children ... (Mt 18:14) RMH_08-04-07_252e
$\left[\begin{array}{clllll}{\left[\begin{array}{lll}\text { He }\end{array}\right.} & \underline{\text { tazo }} & \text { ipi } & \text { z }] & \text { imatax } & \text { iha. } \\ \text { 1PRO } & \text { one } & \text { INTNS } & \text { a } & \text { SN-N-go } & \text { DCL }\end{array}\right.$
'Ninguno de nosotros fue.'
Not one of us went. RMH_09-28-07_154b
[ [ Me ] tazo ipi zo ] mayomatax. 2Pro one Intns a/one 2PlS-Dt-N-go
'Ninguno de ustedes ha ido.'
Not one of you went. OP_2-2-07_073
[ [ xiica tacoi ] cooci ]
thing.Pl Md-Pl SN-two
'dos de ellos'
two of them (Mk 16:12) RMH_08-04-07_253b

[^135](227) [ [ xiica cmajiic chanl tacoi ] cooitom ]
thing.Pl female.Pl SN-ten Md-Pl SN-five
'cinco de esas diez mujeres'
five of those ten women (Mt 25:2) RMH_08-04-07_253C
When a deverbal quantifier noun follows a personal pronoun, it occurs in a partitive construction and not in a relative clause. Thus in (228) the phrase me coocj (2Pro SN-two) means two of you and not you two. ${ }^{34}$ (On the subject inflection for second person plural, see above.)
(228) [ [ (Me) ] cooci ] masiilx aha. 2Pro SN-two 2PlS-Ir.Id-go.Pl Aux-Dcl
‘Dos de ustedes deberán ir.' (*‘Uds. dos deberían ir.')
Two of you should go. (*You two should go.) RMH_08-04-07_253d
Examples (229)-(230) likewise have finite verb forms that agree with a first person plural subject (note the prefix ha-), but the verb stem is singular in these cases ( $\sqrt{ }$ atax rather than $\sqrt{ } \mathbf{a l x}$ ). (The pronoun itself is freely omissible in these examples with inflected finite verbs.)
(229) [ [ (He)] tazo ipi zo ] hayomatax.
(*yomatax, *hayomalx)
1Pro one Intns a/one 1PlS-Dt-N-go
'Ninguno de nosotros ha ido.'
Not one of us went. Op_2-2-07_056
(230) [ [ (He) ] zo ] hayootax.

1Pro a/one 1PlS-Dt-go
'Uno de nosotros ha ido.'
One of us went. RMH_08-04-07_150a
Just as the person of the complement of the partitive expression is relevant for subject inflection in the preceding examples, it is also relevant for direct object inflection and person marking on the postposition in the following examples, respectively.
(231) [ [ He ] coox oo ] hizi quíh iha. 1Pro all Dl 1PlDO SN-Tr-do DCL
'Lo hizo a todos nosotros.'
He did it to all of us. (Ro 4:24) RMH_08-04-07_150b

[^136]
'... nos ha bendecido a todos con ellos.'
... he has blessed all of us with them. (Jn 1:16) RMH_08-04-07_151
The expression for each is a modified version of a partitive construction. ${ }^{35}$ The head is tazo one, and it is preceded by one of the following phrases: iij càap (apart SN-stand), iij còom (apart SN-lie), iij quìij (apart SN-sit). ${ }^{36}$
[xiica czooxöc tacoi] iij càap tazo cop thing.PL SN -four Md-PL apart SN -stand one the.Vt
'cada uno de los cuatro seres'
each one of the four creatures (Rv. $4: 8$ ) RMH_ $09-28-07 \_154 \mathrm{C}$
[ xiica ihic coi] iij quìij tazo quij thing.Pl 3P-seed the.PL apart SN -sit one the.Cm
'cada una de las semillas'
each of the seeds (Mk 4:20) RMH_10-15-07_27a
[Zixcám coi] iij còom tazo ${ }^{\circ}$ hacx cmiih ${ }^{\circ}$ iha. fish the.Pl apart SN-lie one dead DCL
'Uno de los peces murió.'
One of the fish died. Rмн_10-15-07_28a


[^137](237) [ Zixcám coi] iij còom tazo cah ${ }^{\circ}$ hacx cmiih ${ }^{\circ}$ iha. fish the.Pl apart SN-lie one the.Fl-Foc dead Dcl 'Cada uno de los peces murió (uno por uno).'
Each one of the fish died (one by one). RMH_10-15-07_28b
(238) a. Iij coom cah cmoqueepe ha. apart SN-lie the.Fl-Foc SN-sick DCL
b. Iij còom tazo cah cmoqueepe ha.
c. * Iij còom cah cmoqueept iha.
SN-sick-PL DCL
'Cada uno está enfermo.'
Each one is sick. RMH_10-15-07_27c
(239) a. Tcooo cmoqueept iha.

RL-all SN-sick-PL DCL
b. * Tcooo cmoqueepe ha.

RL-all SN-sick DCL
'Todos están enfermos.'
All are sick. RMH_10-15-07_27d

## 9. Relational clause structure

The order of nominal phrases in the clause depends in part on their relationship to the clause. This chapter focuses on those relationships that are more basic than the ways in which they are represented linearly and morphologically. This chapter therefore also sets the stage for the morphological properties of verbs that are explained in chapter 17.

### 9.1 Syntax relating to subjects

The traditional notion of subject of the clause is important. It is relevant not only to the order of phrases in the clause (chapter 2), but also to Different Subject marking (§3.6), to subject inflection (§17.3.2.1), to control phenomena (§12.1), to certain adverb relationships (see §24.5.5, for example), to raising with phasal verbs (§12.3), with the verb meaning be able (§12.1.2), and to the form of deverbal nouns in various contexts (§14.3). In the next section, the topic of Different Subject marking that was introduced in $\S 3.6$ is taken up in more detail to show that the traditional notion of subject is not adequate. ${ }^{1}$ Likewise, in $\S 9.1 .2$ a particular raising construction is presented in detail that requires something other than that notion.

### 9.1.1 Different Subject marking

Basic structural aspects of the matter of Different Subject (DS) marking are presented in §3.6 and they are not repeated here. In that section the fact that the subject of the clause is relevant for DS marking was illustrated but other important details were not given. This section examines the question of coreference as it relates to the subjects.

The simple examples of DS marking have illustrated that one must compare the subjects of two clauses and determine whether they are coreferential or not. In active clauses, the subjects may be agents, or experiencers, themes, or patients; to use other semantic labels, they may be actors or undergoers. None of the examples observed shows any distinction between the subjects with these various roles. Some very simple examples of coreferential subjects with different roles are given in (1)-(6) to show that fact. Note that in each of them there is no DS marking present.

[^138](1) Coreference: Agent - Agent

Ziix $z$ itahit, hant $z$ iiqui yiin.
thing a 3:3-RL-eat place a 3P-toward Dt-go
'Comió algo y salió.'
S/he ate something and left. RMH_08-04-07_254a
(2) Coreference: Agent - Agent - Agent

| $\ldots$, | xazoj | cop itii, | ziix ticom | itácatx, |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| puma | the.VT | 3:3-RL-hear | thing | MD-Hz | 3:3-RL-release |


... Puma $_{i}$ heard it, he $i_{i * j}$ released that thing (Rabbit), he $e_{i * j}$ ran away... (Conjj_Puma_15.4-5)
(3) Coreference: Agent - Patient

Ziix z itahit, Lhacx yomiih.
thing a 3:3-RL-eat s/he.died
'Comió algo y murió.
S/he ate something and died. RMH_08-04-07_254b
(4) Coreference: Experiencer - Agent

Comcaac coi itaht, mójocam.
Seris the.Pl 3:3-Rl-see-Pl Px-flee-PL
'Cuando los seris ${ }_{i}$ los vieron, huyeron ${ }_{i},{ }^{*}{ }_{\mathrm{j}}$.' (también, 'Cuando vieron ${ }_{\mathrm{i}}$ a los seris, ellos ${ }_{i},{ }^{*} \mathrm{j}$ huyeron.') RMH_10-15-07_29
When the Seris ${ }_{i}$ saw them, they $i_{i,{ }_{j}}$ fled. (also When they $y_{i}$ saw the Seris, they ${ }_{i,{ }^{*}{ }_{j} \text { fled.) }}$
(5) Coreference: Patient - Agent

เHacx ipi tommiih , ziix z iyozaxö.
s/he.hadn't.died.yet thing a 3:3-Dт-discuss
'Antes de morir, dijo algo.'
Before $s / h e_{i}$ died, $s / h e_{i}$ said something. RMH_08-04-07_255a
(6) Coreference: Patient - Patient

Tmoqueepe, $\iota$ hacx yomiih.
RL-sick s/he.died
'Estaba enfermo/a y murió.'
S/he was sick and died. RMH_08-04-07_255b
If the subjects of the clauses in question are not coreferential, DS marking is typically obligatory. See the simple examples in (7)-(10).
(7) Lack of coreference: Agent - Patient
Cöitatni ${ }^{\circ}$ ma, yaxi.

3IO-3:3-RL-make.contact DS DT-die
'Lo tiró, y (el animal) murió.'
S/he shot it and it died. RMH_11-27-07_25
(8) Lack of coreference: Experiencer - Agent
Comcaac coi itaht ma, mójocam.

Seris the.Pl 3:3-Rl-see-Pl DS Px-flee.PL
'Cuando los seris ${ }_{i}$ los vieron, huyeron $*_{i, j}$.' (también 'Cuando vieron ${ }_{i}$ a los seris,
huyeron ${ }_{i, j}$.' ') RMH_09-28-07_155a
When the Seris ${ }_{i}$ saw them, they $*_{*_{i, j}}$ fled. (also When they ${ }_{i}$ saw the Seris, they $*_{i, j}$ fled.)
(9) Lack of coreference: Patient - Agent

Tmooxi ipi ma, ilít quij iyaactim.
RL-N-die still DS 3P-head the.CM 3:3-DT-cause.be.cut
'Antes de que muriera [el animal], le cortó la cabeza.'
Before it died, s/he cut off its head. RMH_11-27-07_26
(10) Lack of coreference: Patient - Patient Hai quih taaixaj ma, xepe com xohoopatj.
viento the.FL RL-strong DS sea the.Hz Em-wavy
'El viento era fuerte y el mar estaba con muchas olas.'
The wind was strong and the sea was rough. RMH_09-28-07_155b

### 9.1.1.1 Non-referential subjects

When the subject of a clause is non-referential, as is the case with meteorological verbs, then the transition between the clause with the meteorological verb and a clause without one is always marked with DS. See examples (11)-(13).
(11) Pomapca ta $x$, xepe com iiqui hpsiin aha.

Ir.Dp-N-rain DS UT sea the.Hz 3P-toward 1SGS.In-Ir.Id-go AuX-DCL
'Si no llueve, iré al mar para pescar.'
If it doesn't rain, I will go out on the sea (to go fishing). RMH_08-21-07_93a
(12) Tcozim ma, María quih xepe ano yaalim. ${ }^{2}$

Rl-hot.(weather) DS the.FL sea 3P.in Dt-play
'Como hacía calor, María fue al mar para nadar.'
Since it was hot, Maria went swimming in the sea. RMH_08-21-07_93d

[^139](i) María quih - tcozim ma, xepe ano yaalim. RMH_08-21-07_93b
(13) Tapca ma, cmaam quij yiijc.

RL-rain DS woman the.CM DT-wet
'Llovió y la mujer se mojó.'
It rained and the woman got wet. RMH_09-28-07_156a
In example (14) the clause with the meteorological verb is sandwiched between two other clauses and so DS marking occurs twice, as expected.
(14) ¿Hehe án」 com ano poquiihtim ta $x$, countryside the.Hz 3P.in Ir.Dp-US-be.Fl-ImPF DS UT
poopea ta $x$, squiije aha.
Ir.Dp-rain DS UT Ir.ID-US-wet AUX-DCL
'Si uno está en el monte cuando llueve, se mojará.'
If one is out in the desert when it rains, one will get wet. RMH_09-28-07_156b
Contiguous clauses with meteorological verbs in each of them sometimes have DS marking and sometimes do not. ${ }^{3}$ Consider the pairs in (15)-(16).

| a. | Poopca | ta | $\mathbf{x}$, | saapl | caha. |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Ir.DP-rain | DS | UT | IR.ID-cold | AUX.SN-DCL |
| b. | Poopca |  | $\mathbf{x}$, | saapl | caha. |

'Si llueve, hará frío.'
If it rains, it will be cold. (a) RMH_09-28-07_156c (b) RMH_09-28-07_156d

| a. | Pomapca | ta | $\mathbf{x}$, | scozim | caha. |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | IR.Dp-N-rain | DS | UT | Ir.ID-hot.(weather) | AUX.SN-DCL |
| b. | Pomapca |  | $\mathbf{x}$, | scozim | caha. |

'Si no llueve, hará calor.'
If it doesn't rain, it will be hot (weather). (a) RMH_10-15-07_30 (b) RMH_09-28-07_156f
The difference was described by a Seri consultant as follows: in the (a) examples, a short time frame is involved - a more immediate situation is being described such as the effect of an imminent rain or lack of rain. The (b) examples imply a longer time frame - relating to the weather more generally, or the entire season. Of course, this description does not tie in with anything relating directly to coreference.

[^140]
### 9.1.1.2 Possessors

When one subject is coreferential with the possessor of the other subject, this still counts as disjoint reference. See example (17).

| Hast quij iti hptozám, | cohtmihzx, |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| stone the.Cm | 3P-on | 1SGS.In-RL-UO-put.VT | 3IO-1SGS.Tr-RL-slip |  |  |
| hant | ihptahjiit | $\underline{\text { ma }}$, | hitoaa | cop | miictim. |
| land | 1SGS.In-RL-fall | DS | 1P-foot/leg | the.VT | Px-be.cut |

'Pisé en una piedra, me resbalé en ella, me caí y me corté el pie.'
I stepped on a rock, slipped on it, fell down, and cut my foot (more literally, and my foot was cut). (DS2010, cminzx) RMH_07-11-07_37c

A clause that is formed with an object-oriented deverbal noun calculates DS marking using the possessor/agent as the relevant nominal. In (18) the coreference is implied (by the obligatory omission of ma) between the first person singular subject of the second clause and the first person possessor of the third clause.

| Oot zo toc coyote a there | cötiih ma, 3IO-Rl-be.Fl DS | he <br> 1PRo | hapi <br> Intns | $\begin{equation*} \frac{\text { htaai }}{\text { 1SGS.TR-RL-make }} \tag{18} \end{equation*}$ | $\begin{gathered} \left({ }^{*} \mathbf{m a}\right), \\ \mathrm{DS} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| hoicö | iihi. |  |  |  |  |
| 1P-ON-kill | PAST |  |  |  |  |
| 'Maté un coyote.' |  |  |  |  |  |
| I killed a coyote $n$ |  |  |  |  |  |

Similarly, note the lack of DS marking ma between the penúltimate and final clauses in examples (19)-(20), both of which have deverbal nouns.
..., itaaizi
x , heme ${ }^{\circ}$ itámlajc
x , oiitoi iha.

3:3-RL-make-PL UT camp 3:3-RL-take/bring.PlUT 3P-ON-eat-PL DCL
'.. lo hicieron, los trajeron a campamento, los comieron.'
... they did it, they brought them to camp, they ate them. (Gigante_Comelon_199-201)

| Hipi | itacáp, | oeen | iha. |
| :---: | :---: | :---: | :---: |
| IntNs | 3:3-RL-lift.heavy.item | 3P-ON-carry.items | DCL |
| 'Él mismo lo levantaba, (y) los trajo.' |  |  |  |
| He himself picked it up, (and) he brought them. (Gigante_comelon_303=304) |  |  |  |

### 9.1.1.3 Overlapping reference

When coreferentiality between the two subjects overlaps but is not exact, DS marking is generally required. See example (21).
He ha cohptaasitim $\quad \underline{\text { ma，}}$, t toii
1PRo Aux 3IO－1SGS．In－RL－UO．deceive DS
＇Yo hice el engaño y escapamos，．．．＇

One situation with overlapping coreference in which DS marking is actually not possible is a kind of presentational construction for indefinite nominals（see $\S 25.1$ ）that is functionally a coordinate structure．This kind of construction is one of those discussed in $\S 3.6 .2$ where the clauses under consideration are taken as parallel events．One example is given in（22）．

＇Un perrito y un gatito están en la caja．＇
A puppy and a kitten are in the box．More literally，A puppy is with a cat，they are in the box．RMH＿08－14－07＿105b

## 9．1．1．4 Idioms

DS marking for sentences with some idioms（but not all）is not determined based on grammatical subject but rather on some semantic notion．Note the lack of DS marking in examples（23）－（27）．
x ＇s ？descends $=\mathrm{x}$ is happy

| Ihptoop（＊ma）x， | Łhiisax hant mooit」． |
| :---: | :---: |
| 1SGS．In－Rl－UO－sew．basket DS UT | 1P－？land Px－arrive |
| ＇Cuando estoy haciendo canastas，estoy feliz．＇ |  |
| When I am basket－sewing，I am happy．RMH＿09－28－07＿157a |  |
| x ＇s limbs die $=\mathrm{x}$ is tired（from physical activity） |  |
| Impopanzx（＊ma）x， Lmiihjoj $^{\text {a }}$ | sooxyat」 aha． |
| 2SGS－Ir．Dp－run DS UT 2P－limb．PL | Ir．Id－die．Pl Aux－Dcl |
| ＇Si corres，te cansarás．＇ |  |
| If you run，you will get tired． $\mathrm{XNH}_{\text {－}} 88-15-07$ |  |

（25）$x$＇s limbs go away $=x$ is upset
Pancho quih ziix $z$ itcmacö（＊ma），hans tiihjoj intíyatoj」．
the．Fl thing a 3：3－Rl－N－kill DS just 3P－limb．Pl Aw－Dt－move－Pl－ImpF
＇Pancho no mató nada，y se enfadó．＇
Pancho didn＇t catch anything and he was upset．RMH＿05－17－08＿216
x's heart ? to $\mathrm{y}=\mathrm{x}$ remembers y
Hasaaiti cap ıhimoz cötooit」 (*ma), ihyexl.
gasoline the.VT 1P-heart 3IO-RL-arrive DS 1SGS.Tr-Dt-take
'Me acordé de la gasolina y la llevé.'
I remembered the gas and took it. хмн__08-15-07-62g
x＇s strength is gone $=x$ is tired out
ŁIixaj quih tinej」（＊ma），hanso cooxi ha．

3P－PON－strong the．FL RL－empty DS just SN－die DCL
＇Cuando se ha cansado，muere．＇
When it＇s tired out，it just dies．RMH＿09－28－07＿157b
Examples（28）－（30）with different idioms show DS marking despite being，in some cases， parallel to the expressions in（23）－（27）．
（28）$x$＇s ？goes $=x$ has desire（to do something）
ŁHiisax com tatax $\lrcorner \underline{\text { ma，}}$ xaa hpmotj．
1P－？the．Hz Rl－go DS soon 1SGS．In－Px－arise
＇Tuve ganas y pronto me levanté．＇
I wanted to and soon I got up．хмН＿08－15－07＿62b
（29）blackness covers $\mathrm{x}=\mathrm{x}$ faints or x feels faint
Hehe htacotim，hinzeet quij iti httaxz ma，
plant 1SgS．Tr－Rl－kill－ImpF 1P－heel the．Fl 3P－on 1SGS．Tr－Rl－hit．Hz DS

（30）blackness covers $x=x$ faints or $x$ feels faint
LYapol hin taanim」

| 3P－PON－black 1 1SGDO RL－cause．covered |
| :--- |
| ＇Me iba a desmayar y me acosté．＇ |


| DS |
| :--- |

I felt faint and lay down．хм﹎＿08－15－07＿62d

## 9．1．1．5 Passive clauses

The most serious and systematic complication for the simple view of DS marking（that it relates to the surface subject）is found when one of the clauses in question is passive．In passive clauses （see §17．3．5）the grammatical subject（as commonly conceived）is not the nominal that is relevant for the purpose of DS marking；instead it is the unexpressed agent／experiencer－ whatever would be the subject in the non－passive clause－that is relevant for the question of
coreference.
The surface grammatical subjects (whether expressed overtly or not) in examples (31)-(37) are coreferential and yet DS marking obligatorily occurs. The subjects and subject inflection (when overt) are double underscored in these examples. Such examples are quite easy to find in texts as this situation is a common one.
(31) Hap com ${ }^{4}$ tooxi ma $x$, yopahit. deer the.Hz Rl-die DS UT DT-Pv-eat
'Cuando murió un venado bura, se comió.' / 'Cuando muere un venado bura, se lo come.' RмH_09-28-07_157c
Whenever a mule deer ${ }_{i}$ died, $i t_{i}$ was eaten. / When a mule deer dies, it is eaten.
(32) He hptahahásaquim ma $\mathbf{x}$, ihxoqueepe.

1Pro 1SGS.In-Rl-Pv-comb.hair.of DS UT 1SGS.Tr-Em-like
'Me gusta cuando me peinan.'
I like it when my hair is combed. (DS2010, ah-) RMH_08-04-07_255c
Zixcám $^{\circ}$ zo poxtamt ta, tompaho ho.
fish a Ir.Dp-abundant DS Rl-N-Pv-see DcL
'No se vieron/ven muchos peces.'
Not many fish were/are seen. RMH_09-28-07_157d
(34) Hasitj ${ }^{\circ}$ iti tpaxquim ma $\mathbf{x}$, toc comom. cradleboard 3P-on RL-Pv-put.Hz DS UT there 3IO-Px-lie 'Estaba puesto en la cuna, allí estaba.'
He was put on the cradleboard, there he was. (Gigante_Comelon_77-78)
..., tacsx max, hahótitol iha.
RL-wake.up DS UT SN-Pv-make.arise DCL
'.. , cuando se despierta, se alza.'
... when s/he wakes up, s/he is picked up. хмН_65_21810

```
... cmaax mos isoj quij tpaho ma,
    then also 3P-body the.CM RL-Pv-see DS
    \iotaziix ina cooxp }\rfloor\quadz itacö, ...
        antelope.jackrabbit a 3:3-RL-kill
```

'... entonces cuando se vio otra vez, había matado un liebre antílope, ...'
... then when he was seen again, he had killed an antelope jackrabbit, ...'
(Gigante_Comelon_128-129)

[^141]（37）Tpezi ma，tatax，yoque．
RL－Pv－defeat DS Rl－go Dt－US－say
＇Fuei vencido y se fue，se dice．＇
He was defeated and he went，it is said．（Apostador＿22－23）RMH＿08－04－07＿264b
When a passive clause is presented with an intransitive clause that has an unspecified subject that is construed as coreferential with the agent of the passive clause，DS marking does not occur．See examples（38）－（40）．
（38）Taax popasi（＊ta）x，เhacx scamiih」 aha．
DDP Ir．Dp－Pv－drink DS UT somewhere Ir．ID－US－not．be．Fl AUX－DCL
＇Si uno toma eso，morirá．＇RMH＿09－28－07＿158a
If one drinks that，one will die．（more literally，If that is drunk，one will die．）
（39） Ⓟsaac pocooxi」（＊ta）x，Łziix hapahit」 zo sahcaa aha． hunger Ir．Dp－US－die UT food a Ir．Id－Pv－look．for Aux－DCL ＇Si uno tiene hambre，debe buscar comida．＇
If one is hungry，one should look for food．（more literally，If one is hungry，food should be looked for．）RMH＿11－27－07＿27
（40）Heecot poquiih（＊ta）x，Łziix ccam」 zo popaho $x$ ， desert．area Ir．Dp－US－be．Fl UT animal a Ir．Dp－Pv－see UT
siic aha．

IR．ID－be．killed AUX－DCL
＇Un animal se mata si alguno lo ve cuando uno está en el monte．＇
An animal is killed if someone sees it while one is in the desert．（DS2010，quiic）RRR 7 May 2010
Example（41）was found in which the agent of the passive clause is understood as coreferential with the overt subject of the other clause；DS marking does not occur in this example．I was unable to construct acceptable examples similar to this one，however．

```
..., tpaaatim, ziix zo toc cötap,
    Rl-Pv-call-ImpF thing a there 3IO-Rl-stand
```

＇．．．（las aves）fueron llamadas，alguien estaba allí，．．．＇
．．．（the birds）were summoned，someone was standing there，．．．（Apostador 105－106）RRR （The man standing there was using a bull－roarer to call the birds．）

Examples can be found，such as those in（42）and（43），in which the implied agent of the passive clause cannot be assumed to be exactly coreferent with the implicit or expressed agent of another clause；in such situations DS marking occurs．${ }^{5}$

[^142](42) Taax thehe án」 com ano calx quih itaht $x$, DDP countryside the.Hz 3P.in SN-go.PL the.FL 3:3-RL-see-PL UT

| anxö | itaaizi, | itámlajc | ma | $\mathbf{x}$, | yopahit. ${ }^{6}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| InTNS | 3:3-RL-make.PL | 3:3-RL-take/bring.PL | DS | UT | DT-PV-eat |

'Cuando los que estaban en el monte las vieron, recolectaban muchas, las trajeron, y se comieron.'
When those who were in the inland area saw them, they collected a lot of them, they brought them, and they were eaten. (ES2007, Joeene 09)

'Se hacían tortillas de carbón y las comieron, se dice. Se hacía pan y también lo comieron.'
Charcoal tortillas were made and they ate them, it is said. Bread was made and they ate it also. (Apostador 50-54)

When both clauses are passive and when the implied agents are understood as being coreferential, DS marking does not occur even though the grammatical subjects (those relevant for subject inflection) are obviously different. The grammatical subjects are doubly underscored in examples (44)-(45); note that no DS marking occurs.

```
(44) Icozaplim quih cói tompaii ipi x,
    3P-PON-US-UO-sew the.Fl still Rl-N-Pv-make yet UT
    ihic coi cöhacooix iha.
    3P-seed the.PL 3IO-SN-Pv-remove DcL
    'Antes de hacer hilo, se quitan las semillas [del algodón].'
    Before thread is made, the seeds are removed [from the cotton]. (HE 100) RMH_08-04.07_255d
(45) Haat quih pahcaa \(\mathbf{x}\),
    limberbush the.FL Ir.Dp-Pv-look.for UT
    \(\begin{array}{llll}\text { heepol quih mos } & \text { sahcaa } & \text { aha. } \\ \text { ratany } & \text { the.FL also } & \text { IR.ID-Pv-look.for } & \text { AUX-DCL }\end{array}\)
    ‘Cuando se busca torote, también se deberá buscar cósahui.' RMH_09-28-07_158b
    When limberbush is looked for, white ratany should also be looked for.
```

[^143]The conditions for Different Subject marking therefore cannot be described precisely in terms of (traditional) grammatical subject (at surface structure) nor in terms of semantic roles (such as agent/experiencer/actor). The notion that seems relevant to most of the facts so far (the exceptions being the examples with idiomatic expressions) is that of logical/deep subject - the subject of the clause if there were no passivization.

Nevertheless, the notion of deep subject does not fit well with some linguistic theories since it is claimed by them that many verbs do not subcategorize for subjects at all. ${ }^{7}$ The facts presented by the times construction described in the following section also point to the need of an appropriate notion of subject other than deep subject.

### 9.1.2 Times construction

Sentences expressing the number of occurrences of an event are biclausal in structure; ${ }^{8}$ the number of times the event happened is the main verb and the event clause - which is evidently the subject of the number verb - is headed by a proposition/oblique-oriented deverbal noun. The simple example in (46) illustrates this.
(46) Event Number
[ Hipazt ] moocj.
1P-PON-Pv-tattoo Px-two
'Fui tatuado dos veces.'
I was tattooed twice. RMH_08-04-07_256a
The example in (46) is typical in the biclausal structure, but very atypical in its simplicity. ${ }^{9}$ Some speakers allow it in this case because of the passive verb, but it is not the preference of all. Usually the number verb is inflected for the same person as the (possessor) subject of the event clause, as shown in (47).

| Event | Number |
| :--- | :--- |
| [ Ma hiizt ] | $\underline{\text { ihpmaacj. }}$ |
| 2SGDO 1P-PON-tattoo | 1SGS.IN-PX-TIMES-two |
| 'Te tatué dos veces.' |  |
| I tattooed you twice. | RMH_08-04-07_256b |

Example (47) also shows one other important difference between it and the atypically

[^144]simple (46): the number verb has extra morphology (see $\S 19.11$ for details). There is no obvious gloss for this morpheme and no good literal translation of a verb like ihpmaacj because it is not used in isolation; nevertheless, the gloss Times is used here although the construction itself gives that meaning. ${ }^{10}$ As is made clear below, it is an intransitive verb in an intransitive construction - it cannot be translated 'I caused it to be two'.

Examples (48)-(55) further illustrate this construction and show a bit of the range of predicates in the event clause - agentive, non-agentive, meteorological, active, and passive. The deverbal noun of the event clause and the "number" verb are underscored.
(48) [tXiica hapamyam」 quih iij cooxalca coocj miimyam ] pills the.Fl differently SN-sit.PL SN-two 2P-PON-swallow-ImPF

| impaapxa | ta, | zaah | cop | siime | aha. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2SGS-Ir.DP-TIMES-three | DS | day | the.VT | IR.ID-depleted | AUX-DCL |

'Toma dos pastillas tres veces al día.'
Take two pills three times a day. (DS2010, aa-) RMH_08-04-07_256c
[Zeeme cop hihoocta ] hpmaaci. sunset the.VT 1P-PON-look.at 1SGS.In-Px-Times-two
'Miré la puesta del sol dos veces.'
I looked at the sunset twice. RMH_08-04-07_256f
i[tHacx mimiih $]$ intazooxöc?
elsewhere 2P-PON-not.be.Fl 2SGS-Rl-Times-four
‘¿Te desmayaste cuatro veces?’
Did you faint four times? RMH_08-04-07_258d
(51) Moxima quih [hiiqui iipca ] maapxa.
yesterday the.Fl 1P-toward 3P-PON-rain Px-Times-three
'Llovío tres veces ayer.'
It rained three times yesterday. RMH_08-04-07_258h
When the higher verb is based on the root $\sqrt{ }$ atxo many, much, the article quih is typically used with the event clause, as in (52)-(55).

| [ Hant oo hptap, | Xpanoháx | ano | hiifp | quih ] |
| :---: | :---: | :---: | :---: | :---: |
| land DL 1SGS.In-Rl-stand | Puerto.Libertad | 3P.in | 1P-PON-arrive | the.FL |
| hpmahaatxo. |  |  |  |  |
| 1SGS.In-Px-Times-many |  |  |  |  |

[^145]```
'He ido muchas veces a pie a Puerto Libertad.'
I have often gone to Puerto Libertad on foot. (DS2010, an-) RMH_08-04-07_256d
\begin{tabular}{rllllll}
{\(\left[\begin{array}{lll}\text { Luisa }\end{array}\right.\)} & quih & haat & quih & \(\underline{\text { icazni }}\) & quih ] & \begin{tabular}{l} 
mahaatxo. \\
the.FL \\
limberbush
\end{tabular} \\
the.FL & 3P-PON-bite & the.FL & & PX-Times-many
\end{tabular}
'Luisa ha mordido torote muchas veces.'
Luisa has bitten limberbush (basket material) many times. RMH_08-04-07_258g
[ Hipazt quih] hpmahaatxo.
1P-PON-Pv-tattoo the.Fl 1SGS.In-Px-Times-many
'Fui tatuado muchas veces.'
I was tattooed many times. RMH_08-04-07_256h

```

‘... murió muchas veces, ...'
... he died many times, ... (Apostador 176)

```

The construction described above, which tells how many times an event happened, contrasts with the simpler construction, illustrated by examples (56)-(57), which only indicates amount of time (and the resulting product) described by the deverbal noun - but not the number of times that the event occurred. The main verb in these examples is the simple verb.
(56) Ihyaaspoj quih yootxo.

1P-PON-write the.Fl Dt-much
'Escribí mucho.'
I wrote a great deal. RMH_08-04-07_258b
(57) Hayatósiploj quih yootxo.

1PLP-PON-write.Pl the.Fl DT-much
'Escribimos mucho.'
We wrote a great deal. RMH_08-04-07_258C

\subsection*{9.1.2.1 The subject of the number verb}

In the 'times' construction, except under specific conditions discussed below, the subject of the event clause is also the subject of the number verb. \({ }^{11}\) This claim is supported by several facts.

First, the verb is obviously inflected for the same person as the subject of the embedded clause; this is seen most easily when the subject is first or second person since the morphology for these persons is explicit. The subject person of the number verb is also explicit when this construction is embedded as the complement of the verb \(\sqrt{ }\) amzo want; the number predicate

\footnotetext{
\({ }^{11}\) This is a type of copy raising, in fact. I use the term "raising" here in a descriptive sense since one need not propose nor accept a derivational account of these facts.
}
appears as a deverbal noun (see \(\S 12.2\) ) as expected. See example (58).
\begin{tabular}{llll} 
[ Mihaactim ] & inyaazoj & oo & hmiimzo. \\
2P-PON-cause.be.cut & 2P-PON-TIMES-alone & DL & 1SGS.Tr-PX-want \\
'Quiero que lo/la cortes una vez.' & & \\
I want you to cut it once. RMH_08-04-07_258a &
\end{tabular}

Second, the number verb agrees in number with the subject (see §17.3.3). In (59) the verb has the stem \(\sqrt{ }\) ahaatxoj (for plural subjects) rather than \(\sqrt{ }\) ahaatxo (for singular subjects). In (60) the stem is \(\sqrt{\text { aacalcam }}\) (for plural subjects) rather than \(\sqrt{\mathbf{a a c j}}\) (for singular subjects).
[ᄂPsaac hayaxyat」 quih] hamahaatxoj.
hunger 1P-PON-die.Pl the.Fl 1PLS-Px-Times-many.Pl
'Muchas veces teníamos hambre.'
We were often hungry. RMH_08-04-07_258e
(60) [Hant hihajcooil] hamaacalcam.
land 1P-PON-fall.Pl 1PLS-Px-Times-two-Pl
'Nos caímos dos veces.'
We fell down twice. RMH_08-04-07_258f
Third, the number verb is an infinitive when it is controlled by the subject of the verb \(\sqrt{ }\) amzo want (see \(\S 12.1\) ); see example (61). \({ }^{12}\)


Fourth, imperatives and hortatives can be formed on the number verb, as with other verbs that have second person and first person plural subjects. See (62)-(63).
```

i[Mihexl] aacj!
1P-PON-take Im-Times-two
‘AAgarra dos veces!’
Grab twice! Rмн_08-04-07_259b

```

\footnotetext{
\({ }^{12}\) An "extent" construction similarly embedded does not result in an infinitive. The appropriate deverbal noun must be used instead of the infinitive because the subject of the verb indicating the length of time is the embedded clause and is therefore not coreferential with the subject of \(\sqrt{\text { amzo }}\) want.
\begin{tabular}{lllllll} 
(iii) & ¿Hant himcac iti & mihiih & quih & ixaap \({ }^{\circ}\) izooxöc & intamzo? \\
place DT.LC & 3P-on & 2P-PON-be.FL & the.FL days & 3P-PON-four & 2SGS-RL-want \\
& 'Quieres quedarte allí por cuatro días?' / Do you want to stay there for four days? RMH_-08-04-07_258i
\end{tabular}
}
            i [ Hihexaj ] scaacalcam!
        1P-PON-take.Pl Ir.Id-1Em.S.In-Times-two.Pl
¡¡Agarremos dos veces!’
Let's grab twice! RMH_08-04-07_259c
Except in the atypical example (46) (which has not been discussed in detail yet), the number predicate and the event clause have the same subject. The number predicate cannot have a subject that is distinct from the event clause subject, such as being coreferent with the direct object or the possessor of some argument in the event clause. See examples (64)-(66).
\begin{tabular}{cc} 
* Ma hiizt & inyaacj. \\
2SGDO 1P-PON-tattoo & 2SGS-PX-TimES-two \\
('Te tatué dos veces.') (I tattooed you twice.)
\end{tabular}
\begin{tabular}{|c|c|}
\hline \multirow[t]{4}{*}{a.} & Hii quih yaazxl quih yahaatxo. \\
\hline & 1P-father.ME the.Fl 3P-PON-cough the.Fl Dt-Times-many \\
\hline & 'Mi padre ha tosido muchas veces.' \\
\hline & My father has coughed many times. RMH_09-28-07_158\% \\
\hline \multirow[t]{2}{*}{b.} & * Hii quih yaazxl quih hpyahaatxo. \\
\hline & 1SGS.In-Dt-Times-many \\
\hline \multirow[t]{4}{*}{a.} & Hitrooqui quij imiipala yaapxa. \\
\hline & 1 P -vehicle the.Cm 3P-PON-bad-ImPF DT-Times-three \\
\hline & 'Mi vehículo se ha descompuesto tres veces.' \\
\hline & My car has broken down three times. RMH_09-28-07_158d \\
\hline \multirow[t]{2}{*}{b.} & * Hitrooqui quih imiipala hpyaapxa. \\
\hline & 1SGS.In-Dt-Times-three \\
\hline
\end{tabular}

The same is true if the event clause contains an idiom of the type discussed in \(\S 9.1 .1\), such as \(x\) 's? lands for happy. The literal subject of the idiom is the nominal coreferenced on the main clause verb. Therefore the number verbs in (67) and (67) are inflected for third person (unmarked) and not for second person.
```

a. i LMiisax hant yaait^ quih tahaatxo?
2P-? land 3P-PON-arrive the.Fl Rl-TimES-many
`¿Has estado feliz muchas veces?`
Have you been happy many times? RмH_09-28-07_159a

```
b. \(\llcorner\) Miisax hant yaait \(\lrcorner\) quih tahaatxo ma,

2P-? land 3P-PON-arrive the.Fl RL-Times-many DS

\section*{ma hmiiho.}

2SGDO 1SGS.Tr-Px-see
'Te he visto feliz muchas veces.'
I have seen you happy many times. RMH_09-28-07_159b
But examples such as (68) show that raising is not limited to the common grammatical subject. The unspecified agent of the verb \(\sqrt{ }\) asi \(d r i n k\), though unexpressed and unexpressible in the embedded passive clause, is the subject of the number verb. The morphology ca- (here with its allomorph c-) indicates this fact (see §17.3.5). The final independent clause has this same subject.
(68) Sooda coopol quih ipasi quih pocahaatxo x, soda SN-black the.Fl 3P-PON-Pv-drink the.Fl Ir.Dp-US-Times-many UT
thacx scamiih」 aha. elsewhere Ir.Id-US-not.be.Fl Aux-Dcl
'Si se toma Coca Cola muchas veces, uno morirá.'
If Coke is drunk often, one will die. RMH_08-04-07_259d

\subsection*{9.1.2.2 An intransitive construction}

The event clause is not superficially the direct object of the number verb. Thus the construction in (47), repeated as (69) below, cannot be analyzed something like I twiced my tattooing of you. \({ }^{13}\) By all of the available tests (see Appendix C), the main clause is intransitive. Notice, for example, the intransitive allomorph of the first person singular subject prefix occurs in (69), the intransitive allomorph of the infinitive prefix in (61), the intransitive allomorph of the second person imperative prefix in (62), an intransitive allomorph of the proposition/oblique nominalizer in (70), the intransitive allomorph of the first person singular restrictive prefix in (71), the presence of the unspecified subject prefix in (72) instead of passive morphology, and the lack of the 3:3 marker in (53).
\begin{tabular}{ll} 
[ Ma hiizt ] & \multicolumn{1}{l}{ ihpmaacj. } \\
2SGDO 1P-PON-tattoo & 1SGS.IN-PX-TIMES-two \\
'Te tatué dos veces.' \\
I tattooed you twice. & \\
\end{tabular}

\footnotetext{
\({ }^{13}\) The intransitivity of the construction is predicted by the interaction of certain "laws" of Relational Grammar, as argued in Marlett (1981b), chapter 11.
}
(70) [[ Mihexl] inyaacj] ihmiimzo.

2P-PON-take 2P-PON-Times-two 1SGS.TR-Px-want
'Quiero que agarres dos veces.'
I want you to grab twice. RMH_08-04-07_260b
(71) [Méjico hac ano hatiifp] quih imcahaatxo.
the.Lc 3P.in 1Em.P-PON-arrive the.Fl Px-1Em.S.In-Times-many
'En cuanto a mí, he estado en México muchas veces.'
As for me, I have been to Mexico City many times. RMH_08-04-07_2600 RMH_05-17-08_217
\(\left[\begin{array}{lll}\text { An icaafp } & \text { quih }] \\ \text { 3P.in } & \text { 3P-PON-US-arrive } & \text { pocahaatxo } \\ \text { the.FL }\end{array}\right.\) IR.Dp-US-TimES-many
'Si uno llegá allí muchas veces, ...'
If one arrives there often, ... RMH_08-04-07_260d

\subsection*{9.1.2.3 Passive complements}

Some speakers disprefer the use of this construction (with the Times morphology and the subject copying) when the event clause is passive. The atypically simple construction presented in (46), repeated as (73a), is preferred over (73b). In fact, (73b) is simply unacceptable to some speakers. \({ }^{14}\)
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{a.} & \multicolumn{2}{|l|}{[ Hipazt ]} & \multicolumn{2}{|l|}{moocj.} \\
\hline & \(1 \mathrm{P}-\mathrm{PO}\) & -Pv-tattoo & Px-two & \\
\hline \multirow[t]{2}{*}{b.} & * / OK & [ Hipazt ] & & ihpmaacj. \\
\hline & & 1P-PON-P & - tattoo & 1SGS.In-Px \\
\hline
\end{tabular}
'Fui tatuado dos veces.'
I was tattooed twice. (a) RMH_08-04-07_256a (b) RMH_08-04-07_261
In fact, for some speakers it is ungrammatical to have a passive event clause in the times construction unless the number predicate is \(\sqrt{\text { atxo many, as in (54) and (68). }}\)

Examples such as (73a) show that the meaning of "times" is not wrapped up in the morphology of the number verb, but rather in the construction itself. Rather, there is a close relationship between that morphology and the subject raising that is observed.

\footnotetext{
\({ }^{14}\) Raising does occur in the following sentence, which has a nominalized clause with the focal demonstrative pronoun.
(iv) Ziix zo cöhimahit, taax tatxo \(x\), haa caahca ha. thing a 3IO-1P-PON-N-eating DDP RL-many UT there SN-be.located DCL 'Había muchas veces en que no comí nada.' I There were many times that I didn't eat anything. RRR
}

\subsection*{9.1.2.4 The times construction and Different Subject marking}

In the times construction the "raised" subject is the subject relevant for Different Subject marking. In (74) the phrase haxz \({ }^{\circ}\) himcop is the subject of pahaatxo as well as sooxi; as a result, DS marking is not possible.

'Si ese perro me muerde muchas veces, morirá.'
If that dog bites me often, it will die. RMH_11-27-07_29

\subsection*{9.2 Syntax relating to direct objects}

Some constructions in the language relate specifically to direct objects or to both direct and indirect objects but not subjects.

\subsection*{9.2.1 Adverbs}

The postverbal adverb iiha may have a semantic relationship with the direct or indirect object of a clause but not the subject. This is illustrated in (75)-(78).
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{(75)} & Ziix & Łhacx cmiih」 & zo & hayooht xo &  \\
\hline & thing & dead & a & 1PLS-Dt-see-Pl but & 3P-bone-PL \\
\hline & & hayooht & iih & & \\
\hline & & PLS-DT-see-PL & & & \\
\hline
\end{tabular}
'Encontramos un muerto, pero solamente vimos LOS HUESOS.'
We found a dead person, but only THE BONES. (DS2010, iiha) RMH_11-27-07_31
(impossible reading: * Only WE saw the bones.)
(76)
\begin{tabular}{llllll} 
Ítajc & coi & oo & hascmaht & iiha ha. \\
3P-bone-PL & the.PL & DL & 1PLS-Ir.ID-N-see-PL & only AUX-DECL
\end{tabular}
\begin{tabular}{lllll} 
Ipxasi & coi & mos & hasiiht & aha. \\
3P-flesh & the.Pl & also & 1PLS-Ir.Id-see-PL & AUX-DECL
\end{tabular}
'No veremos sólo huesos; veremos CARNE también.'
We won't just see bones; we'll see FLESH also. (DS2010, iina) RMH_11-27-07_32
```

Hap yaao tazo hamiiht iiha.
mule.deer 3P-PON-UO.pass.by one 1PLS-Px-see-Pl only
'Vimos una HUELLA DE VENADO BURA, no más.'
We saw a MULE DEER'S TRACK and nothing else. (DS2010, ina) RMH_11-27-07_33

```
(78) \(\quad\)\begin{tabular}{l} 
LZiix hapx coom」 \\
whale \\
com hamiiht \(\quad\) iiha.
\end{tabular}
'Vimos sólo la ballena.' (*'Sólo NOSOTROS vimos la ballena.')
We saw only the whale. RNH_11-27-07_34
(Impossible reading: *Only WE saw the whale.)

\subsection*{9.2.2 Personal and impersonal passives}

Two kinds of passive construction exist: a short personal passive and a short impersonal passive. Both passive constructions are "short" in the sense that a nominal expressing the agent/experiencer/actor role in the clause is never overtly present.

In both kinds of passive constructions, the verb occurs in the passive voice (§17.3.5). All passive clauses are based on transitive verbs; no passives formed on intransitive verb stems are possible. The subject of a passive verb always corresponds to the direct object of the same verb in the active voice. Indirect objects and oblique objects are never the subject of the corresponding passive verb.

All passive clauses are superficially intransitive. This includes passives of ditransitive verbs (see §18.6). \({ }^{15}\)

One of the passives is "personal" in that the verb is inflected for the person of the subject, and that subject corresponds to the nominal that would be the direct object in a clause in the active voice with that verb. Some very simple examples include those in (79):
a. Ihpyopazt.
1SGS.In-Dt-Pv-tattoo
'Fui tatuado.'
I was tattooed. RMH_08-04-07_262a
c. Inyompezi.
2SGS-DT-N-Pv-defeat
'No fuiste vencido.
You weren't defeated. RMH_08-04-07_263a
b. ¿Ihptahcazni?
1SGS.In-Rl-Pv-bite
‘¿Fui mordido?’
Was I bitten? RMH_08-04-07_262b
d. ¿Ctam quih tahcazni? man the.FL RL-Pv-bite
‘¿Fue mordido el hombre?'
Was the man bitten? RMH_08-04-07_263b

The other passive construction is impersonal in that the verb is always inflected for a third person singular subject. \({ }^{16}\) The verb is morphologically passive, but it looks like it is inflected for a direct object. See examples (80)-(84). With respect to the verb stem, it appears to be inflecting

\footnotetext{
\({ }^{15}\) The intransitivity of these clauses is also predicted by the interaction of certain laws within Relational Grammar and motivates a particular conceptualization of passivization that was proposed within that theory. See Marlett (1984b).
\({ }^{16}\) This is taken here as being a non-referential "dummy" subject.
}
for a third person singular subject; it uses the imperfective stem (see \(\S 17.3 .8\) ). \({ }^{17}\) These facts are most obvious when the patient is not third person, but it is reasonably assumed that the same analysis is true when the patient is third person.
(80) Hizi yahcazja.

1PlDO Dt-Pv-bite-ImpF
'Fuimos mordidos.'
We were bitten. RMH_08-04-07_263c (More literally, It was bitten us.)
(81) Hazi yahfaiilquim.

1PlDO Dt-Pv-tie.up-ImpF
'Fuimos amarrados.'
We were tied up. (More literally, It was tied us up.) RMH_05-17-08_218
(82) Hazi yopaho.

1PlDO Dt-Pv-see
'Fuimos vistos.'
We were seen. (More literally, It was seen us.) RMH_05-17-08_219

\section*{i เZó tpacta ma」 mazi tpázitim?} why? 2PlDO Rl-Pv-tattoo-ImpF
‘¿Por qué fueron tatuados ustedes?'
Why were you tattooed? RмH_11-27-07_35 (More literally, Why was it tattooed us?)
Itooit coi tahfaiilquim, \(\ldots\)
3P-foot/leg-Pl the.PL RL-Pv-tie.up-IMPF
'Sus pies habían sido atados, ...
His/her/its feet had been tied up, ... RMH_08-04-07_263d

The arguments for the subjecthood of the patient nominal in personal passive clauses are quite straightforward. They are based, for example, on the presence of the subject person inflection (§17.3.2.1), the lack of direct object person inflection (§17.3.2.3), and control facts in infinitival clauses (§12.1).

While all of the passive clauses are short in that the agent/experiencer/actor nominal cannot appear overtly, the switch-reference system of the language clearly motivates a non-trivial conceptualization of passive clauses in which the non-overt agent nominal plays a role. In examples (85-86), Different Subject marking occurs between clauses that have coreferential

\footnotetext{
\({ }^{17}\) In the case of the verb \(\sqrt{ }\) fain tie up, there are two stems for imperfective aspect with a singular subject (only one of which was recorded in the 2005 dictionary, unfortunately): \(\sqrt{ }\) failquim (IMPF) used for tying up multiple objects once, \(\sqrt{ }\) faiilquim (IMPF+IMPF) used for tying up one or more items multiple times. The stem used in the impersonal passive described here is the first of these two stems unless, of course, multiple events are envisioned.
}
surface subjects. In each case a passive clause is present. (See other examples earlier in this chapter, including (32-36). Such examples are not at all uncommon.)
(85) Hap com tooxi ma \(x\), yopahit.
mule.deer the.Hz RL-die DS UT Dt-Pv-eat
'Cuando se muriera un venado, se comió (el venado).'
Whenever a deer died, it (the deer) was eaten. Unpublished text, Marrett (1984b: 237) RMH_08-04-07_264a
(86) Tpezi ma, tatax, yoque.

RL-Pv-defeat DS RL-go Dt-US-say
'Fuei vencido y se fue, se dice.'
He was defeated and he went, it is said. (Apostador_22-23) RMH_08-04-07_264b
Examples such as (87-88) are also relevant since Different Subject marking does not occur even though the surface subjects are different. Again, passive clauses are involved. Example (87) is not be a strong example, however, since the clauses present parallel actions (see §3.6.2). While (88) avoids this problem, I should also point out that it was not possible to elicit good examples of the same type to strengthen the case.
\(\begin{array}{lllll}\text { (87) } & \text { Haat } & \text { quih } & \text { pahcaa } & \mathbf{x}, \\ & \text { limberbush } & \text { the.FL } & \text { IR.DP-PV-look.for } & \text { UT }\end{array}\)
```

heepol quih mos sahcaa aha.
ratany the.Fl also Ir.Id-Pv-look.for Aux-DcL

```
‘Cuando se busca torote, "heepol" también se debe buscar.' RMH_08-04-07_264c Whenever limberbush is looked for, white ratany should also be looked for. Marlett (1984b: 237)
(88) Icozaplim quih cói tompaii ipi x, 3P-PON-US-UO-sew the.FL still RL-N-Pv-make yet UT
\begin{tabular}{llll} 
ihic & coi & cöhacooix & iha. \\
3P-seed & the.PL & 3IO-SN-Pv-remove & DCL
\end{tabular}
'Antes de hacer hilo, se quitan las semillas [del algodón].'
Before thread is made, the seeds are removed [from the cotton]. (HE 100) RMH_08-04-07_255d
These facts motivate an analysis of passives in which the actor nominal has a role in the syntax of the clause even though it is not present phonetically. The fact that this nominal may also be "active" in the raising construction is also relevant; see §9.1.2.

Personal and impersonal passives are in complementary distribution. A personal passive with a plural subject is ungrammatical; an impersonal passive is required if the patient nominal is plural and the clause is passive (except in special situations, as discussed below). A personal passive with an indirect object or oblique object present in the clause is ungrammatical; an
impersonal passive is also required in these cases. These seem to be the only situations in which an impersonal passive occurs.

The examples in (89)-(96) illustrate the ungrammaticality of personal passives with plural subjects, and the corresponding grammatical impersonal passives. They also show that the verb stem used with the impersonal passives is the singular imperfective stem (which is sometimes not distinct from the perfective stem, see §17.3.8), and not the plural stem.
(89) a. Ihpyahmiiit.

1SGS.In-Dt-Pv-ask
I was asked.
(90)
a. Ihpyahzaxö.

1SGS.In-Dt-Pv-discuss
I was talked to
a. Ihpyahamsisiin.

1SGS.In-Dt-Pv-love
I was loved.
a. Ihpyahnifz.

1SGS.In-Dt-Pv-kick
I was kicked.
a. Ihpyahfain.

1SGS.In-Dt-Pv-tie.up
I was tied up.
a. Hizi yahcazja.

1PlDO Dt-Pv-bite-ImPF
'Fuimos mordidos. \({ }^{18}\)
We were bitten. RMH_11-27-07_42a
\(\begin{array}{lll}\text { b. } & \text { Hizi yahmiiitim. } & \\ & \text { 1PLDO DT-PV-ask-IMPF } \\ & \text { We were asked. }\end{array}\)
b. Hizi yahzaxö.

1PLDO DT-Pv-discuss
We were talked to. RMH_11-27-07_38ab
b. Hizi yahamsisiin.

1PLDO DT-Pv-love We were loved. RMH_11-27-07_39ab
\(\begin{array}{ll}\text { b. Hizi yahnífajquim. } \\ & \text { 1PLDO DT-Pv-kick-IMPF } \\ & \text { We were } \text { kicked. } \quad \text { RMH_11-27-07_40ab }\end{array}\)
b. Hizi yahfaiilquim.

1PLDO Dт-Pv-tie.up-IMPF
We were tied up. RMH_11-27-07_41ab
b. * Hayahcazjoj.

1PLS-Dt-Pv-bite-PL
c. \(\quad *\) Hizi yahcazjoj.

1PLDO DT-Pv-bite-PL
a. Mazi yahcazja.
2PlDO Dt-Pv-bite-ImPF
b. * Mayahcazjoj. 2PlS-Dt-Pv-bite-PL
c. * Mazi yahcazjoj. 2PLDO DT-Pv-bite-PL
'Ustedes fueron mordidos. (Fuisteis mordidos.)'
You (pl.) were bitten. RNH_11-27-07_42b

\footnotetext{
\({ }^{18}\) The use of literal (and highly unnatural) Spanish here is meant to explicate the structure of the Seri examples.
}
(96) a. Yahcazja.

DT-Pv-bite-IMPF
'Fueron mordidos.'
They were bitten. RMH_08-04-07_265
Plural stems are sometimes allowed in passive constructions but only if the passive verb is an infinitive, as in (97), or in a relative clause, as in (98).
(97) Icahcazja / icahcazjoj \({ }^{19}\) hayoomcajc.

Inf.In-Pv-bite-ImpF / Inf.In-Pv-bite-PL 1PLS-DT-want.PL
'Quisimos ser mordidos.'
We wanted to be bitten. RMH_08-04-07_266a
(98) ctamcö hacazja / hacazjoj coi
man-Pl SN-Pv-bite-ImpF / SN-Pv-bite-Pl the.PL
'los hombres mordidos'
the men who were bitten RMH_08-04-07_266b
Usually, however, singular stems are preferred even in these kind of structures. See examples (99)-(102).
a. hásatoj hapesxö \begin{tabular}{lllll} 
coi & b. & * hásatoj & \begin{tabular}{l} 
hapéslajc \\
stone-PL \\
SN-Pv-hide
\end{tabular} & \begin{tabular}{l} 
coi \\
the.PL
\end{tabular} \\
'las piedras escondidas'
\end{tabular}
stones that were hidden
a. Icahfaiilquim hayomámcajc. Inf.In-Pv-tie.up-ImpF 1PlS-Dt-N-want.PL
b. * Icahfaiilcam hayomámcajc. Inf.In-Pv-tie.up-PL
'No queremos estar atados.'
We don't want to be tied up. RMH_09-28-07_160a
(101) Icahfaiilquim hayomaaj.

Inf.In-Pv-tie.up-ImpF 1PlS-Dt-N-know-PL
'No podemos estar atados.'
We can't be tied up. RmH_09-28-07_160b
(102) ctamcö hafaiilquim coi
man-PL SN-Pv-tie.up-ImpF the.PL
'los hombres que están/estaban atados'
the men who are/were tied up RMH_09-28-07_160c

\footnotetext{
\({ }^{19}\) The verb stem of the infinitive in these cases has been recorded as either singular imperfective or plural stem. For some speaker(s the simple singular stem ( \(\sqrt{ }\) cazni) was even judged as the preferred rendering.
}

Personal passives with a cross-referenced oblique object present (see §2.4), such as the (a) examples in (103)-(106), are also ungrammatical. An impersonal passive is required, as shown by the (b) examples. Note the following in the grammatical examples: passive morphology occurs on the verb, the verb is inflected for third person singular subject, and direct object inflection is determined by the patient/theme. The last characteristic is obscured somewhat by the morphological blending of direct and indirect/oblique object inflectional morphology; see §17.3.2.5.
(103)
\begin{tabular}{ccll} 
a. & \(* \boldsymbol{*}\) Hehe \\
stick
\end{tabular}\(\quad\)\begin{tabular}{l} 
himcom \\
DT-Hz
\end{tabular}\(\quad\)\begin{tabular}{l} 
contahaxz? \\
3IO-2SGS-RL-Pv-hit.Hz \\
b. \\
\(\boldsymbol{i}\) Hehe \\
\end{tabular}
‘¿Fuiste pegado con ese palo?’
Were you hit with that stick? RMH_08-04-07_267a
a. * iÁz -ya cohptpazt? what? QM 3IO-1SGS.In-Rl-Pv-tattoo
b. ¿Áz -ya he tpazt?

3IO+1DO-RL-Pv-tattoo
‘¿Con qué fui tatuado?'
What was I tattooed with? RMH_08-04-07_267b
(105)
\begin{tabular}{llllll} 
a. & \(*\) iTal \\
coal & quih & haa & -ya & contpazt? \\
& the.FL & AUX & QM & 3IO-2SGS-RL-Pv-tattoo \\
b. & \(\boldsymbol{i}\) Tal & quih & haa & -ya & me tpazt? \\
& & & & & \(3 I O+2 D O-R L-P v-t a t t o o ~\)
\end{tabular}
‘¿Fuiste tatuado con carbón?’
Were you tattooed with charcoal? RMH_08-04-07_268
(106) a. *Xepe com contihpyahaazi.
sea the.Hz 3IO-Aw-1PlS.In-Dt-Pv-carry
b. Xepe com intheyahaazi.

Aw-3IO+1DO-DT-Pv-carry
c. Xepe com contheyahaazi. \({ }^{20}\)

3IO-Aw-1DO-DT-Pv-carry
'Fui llevado al mar.'
I was taken to the sea. RMH_08-04-07_267d

\footnotetext{
\({ }^{20}\) This example has the optional "double" marking of oblique object inflection as mentioned in §17.3.2.4.
}

The analysis proposed for these impersonal passives includes the following claims: \({ }^{21}\)
(107) a. the grammatical subject is a non-overt non-referential dummy pronoun.
b. the patient/theme is not a direct object but has some of the characteristics of a direct object.

The 3:3 marker i- occurs in both personal and impersonal passives of ditransitive verbs, as in (108)-(109). It never occurs in passives of simple transitives (§17.3.2.1). Thus, while passive clauses of ditransitives are intransitive by all other tests (Appendix C), they have this connection with transitive clauses that is not shared by the passives of simple transitive verbs.
(108) Iyopehe.

3:3-Dt-Pv-give.gift
'Le fue dado. \({ }^{22}\)
S/he was given it. RMH_08-04-07_269a
(109) Ctamcö coi iyopéhetim.
man-Pl the.Pl 3:3-Dt-Pv-give.gift-ImpF 'Se les dio a los hombres.'
The men were given it. RMH_08-04-07_269b

Examples (110)-(111) show that object prefixes in impersonal passives, unlike those in simple transitives, do not provide the environment for the application of \(\mathbf{c}\)-Epenthesis (see \(\S 27.1 .4\) ). This provides a striking and unexpected piece of evidence for a distinction between the nominals that determine phonologically-identical material.
\[
\begin{array}{ll}
\text { a. } & \text { Hizi smahmiiitim } \quad \text { aha. }  \tag{110}\\
\text { 1PlDO Ir.Id-N-Pv-ask-ImPF AUX-DECL } \\
\text { b. } & \text { Hizi scmahmiiitim aha. }
\end{array}
\]
'No seremos preguntados.'
We will not be asked. RMH_08-04-07_269c
(111)
a. Mazi smahcazja ha.
2PlDO Ir.Id-N-Pv-bite-ImpF Aux-Decl
b. * Mazi semahcazja ha.
'No seréis mordidos.'
You will not be bitten. RMH_08-04-07_269d

\footnotetext{
\({ }^{21}\) See Marlett (1984b). In Relational Grammar terms, direct object inflection relates to acting direct objects. Only one object prefix may occur on a verb. If there are two non-third person acting direct objects in the same clause, the patient direct object occurs as the phrase that literally refers to one's body (see §16.1.3), and the non-patient direct object determines the object prefix, as in the following example.
(v) ¿Hipi hisoj hipcop hita ma iite?

IntNS 1P-body PX-Vt 1P-mother 2SGDO RL-give
'¿Me obsequió mi madre a ti?' / Did my mother give me to you? (Marlett 1981:176, note 4)
\({ }^{22}\) The Spanish translations here are not literal due to the constraints of Spanish syntax.
}

Likewise, the blended object prefixes in impersonal passives do not provide the environment for \(\mathbf{c}\)-Epenthesis, unlike the blended object prefixes in active clauses (see §27.1.4). See examples (112)-(113).
\begin{tabular}{lllll} 
a. & Eenim & hipcop & me smahníp & aha. \\
& knife & PX-VT & 3IO+2DO Ir.ID-N-Pv-hit & Aux-DCL
\end{tabular}
b. ... * me scmahníp ...
'No serás apuñalado con este cuchillo.'
You will not be stabbed with this knife. хмн_08-08-07_284
a. Tal zo he sompazt
aha.
coal a 3IO+1DO Ir.ID-N-Pv-tattoo Aux-DCL
b. ... * he scompazt ...
'No seré tatuado con carbón.'
I will not be tattooed with charcoal. RMH_05-17-08_220
Impersonal passives, having a dummy subject, enter into the raising construction (§12.1.2) with an extra subject nominal that could potentially be raised. Compare the following sentences, which are all paraphrases and considered acceptable. In (114a) raising has not occurred (the preferred case, for some speakers, when the embedded clause is passive); note that the verb Vatxo many is not inflected for first person plural subject and has the simple verb stem. In (114b) the dummy has raised; the evidence for this is the use of the "raising" stem Vahaatxo many. \({ }^{23}\) In (114c) the first person plural pronoun has raised to be the subject of the verb Vahaatxo. \({ }^{24}\)

\begin{tabular}{llllll} 
b. Hizi ipaspoj \(\quad\) quih & cöpahaatxo & ta & \(\mathbf{x}, \ldots\) \\
& 3IO-IR.Dp-TIMES-many & DS & UT
\end{tabular}

\footnotetext{
\({ }^{23}\) The brother-in-law relation of Relational Grammar was invoked to account for these facts in the analysis given in Marlett (1984c).
\({ }^{24}\) The lack of Different Subject marking in this example is additional evidence of the raising; this is a topic that is discussed in §9.1.2.4.
}
\[
\begin{array}{lll}
\text { c. Hizi ipaspoj }
\end{array} \quad \text { quih } \begin{aligned}
& \text { cöhapahaatxoj } \\
& \\
& \\
& \text { 3IO-1PLS-IR.DP-TIMES-many-PL UT }
\end{aligned} \quad \begin{aligned}
& \text { x, }
\end{aligned}
\]
'Si seremos fotografiados muchas veces, estaremos ricos.'
If we are photographed often, we will be rich. (a) RMH_08-04-07_270b RMH_08-14-07_69a (b) etc

\subsection*{9.2.3 Transitivity in general}

The notion of transitivity is very important in the grammar of this language. \({ }^{25}\) Various morphemes have suppletive allomorphy that depend wholly or partially on this notion, for example: the first person singular subject prefix and the first person restrictive prefix (§17.3.2.1), the infinitive prefix (§17.4.1), the imperative prefix (§17.4.2), and the realis proposition/oblique nominalizer (§14.4). One morphophonological rule refers to intransitivity (§27.2.2). The unspecified subject prefix (§17.3.5) occurs only in (superficially) intransitive clauses. And the transitive prefix (§14.1.1) occurs in subject-oriented deverbal nouns (§14.1) only when the clause is transitive. Something fairly explicit as the statements in (115) is necessary: \({ }^{26}\)
(115) A transitive clause is one that has a subject and a direct object.

An intransitive clause is one that is not transitive.
A ditransitive clause is a subtype of transitive clause. A clause with an indirect object and no direct object is not transitive, however, by all of the tests known.

\subsection*{9.3 Plurality}

Simple plurality is expressed in three places: in the inflectional form of a noun (§13.1.3), in the form of a determiner (§21.2), and in the inflectional form of a verb (§17.3.3). Of course, a quantifier may also be present, either a number or other quantifying predicate (§19.11) or a quantifying adjective (§23.1.3).

It is very common - in fact, most common - for plurality to be overtly expressed in all three locations, regardless of the redundancy involved. Some examples are given in (116)-(119).
(116) Taax yaacöt coi caacöl iha. (* caacoj)

DDP 3P-house-Pl the.PL SN-big-PL DCL SN-big
'Las casas de ellos/ellas son grandes.'
Their houses are big. (ALIM 77) RMH_05-17-08_221

\footnotetext{
\({ }^{25}\) The notion of transitivity is fatally vague unless more information is given. In all cases in Seri the notion refers to some superficial level of the syntax. In terms of the theory of Relational Grammar, one would specify that one is referring to the "final" level.
\({ }^{26}\) This is adapted from Relational Grammar. See Perlmutter and Postal (1984:94).
}
\begin{tabular}{lll} 
Háxaca coi quiipcoj iha. & (* quiip) \\
ABS-pet-PL the.PL SN-HAVE-tail-PL DCL & SN-HAVE-tail \\
'Los perros tienen colas.' & \\
Dogs have tails. (ALIM 90) RMH_05-17-08_222 &
\end{tabular}
(118) Háxaca coi cpancojc iha.
(* cpanzx)
Abs-pet-Pl the.Pl SN-run-Pl Dcl
SN-run
'Los perros están corriendo.'
The dogs are running. RMH_05-17-08_223
(119) Cmajiic himcoi cacöla ha.
(* cacösxaj)
woman.Pl DT-Pl SN-tall/long.Pl DCL
SN-tall/long
'Aquellas mujeres son altas.'
Those women are tall. RMH_05-17-08_224
As shown in §13.1.3, some nouns do not have a distinct plural form and, as shown in §17.3.3, some verbs do not have a distinct plural form (although this is rare). In such situations, the plural determiner thus has a more important role in indicating number. In (120) plurality is shown only in the determiner.
(120) Coqué coi cmaax cheel iha. chile(s) the.PL now SN-red DCL 'Los chiles ya están rojos.'
The chiles are already red. (ALIM 77) RMH_05-17-08_225
In some examples (not well-studied), perhaps always involving an inanimate group viewed as a group, the verb is normally singular even though the subject is explicitly plural. However, the plural form is possible if a selection is being made and certain items are being contrasted with others. See (121)-(123).
(121) Sahmees hizcoi xöaatjö (/ xöaatzil). orange(s) Px-Pl Em-sweet Em-sweet-Pl
'Estas naranjas están dulces.'
These oranges are sweet. RMH_05-17-08_225
(122) Siimet hizcoi xiipe (/xiipt).
bread Px-Pl Em-good EM-good-PL
'Estos panes están buenos.'
These rolls are good. RMH_05-17-08_226
(123) Ool imám hizcoi quicös iha. organpipe 3P-fruit Px-PL SN-HAVE-thorn DCL 'Estas frutas de pitaya tienen muchas espinas.'
These organpipe cactus fruits are thorny. RмH_05-17-08_228

Examples (121)-(123) above contrast with very similar ones in which a plural inanimate noun co-occurs with a plural verb. One example of the latter type is given in (124).
(124) Hiisilca coi tacöla, hiipajö cop íyataj coi 1P-wing-Pl the.Pl Rl-long.Pl 1P-tail the.Vt 3P-tip-Pl the.PL
```

hax iiqui oo mítajij.
IntNs 3P-toward DL Px-sharp.PL

```
'Mis alas son largas, y las puntas de mi cola son puntiagudas.'
My wings are long, and the tips of my tail are pointed. (Aves_7)
Some words (also not well-studied) - perhaps only a few loanwords that refer to people, such as santaar soldier and paar priest - allow a three-way contrast: singular noun with singular determiner, singular noun with plural determiner, and plural noun with plural determiner. See examples (125)-(126).
(125) a. santaar cop soldier the.VT the soldier
b. santaar coi soldier the.PL the soldiers (a dozen or fewer)
c. santaaroj coi soldier-Pl the.Pl the soldiers (numerous)
d. * santaaroj cop soldier-Pl the.VT
(126) a. Santaar hizcoi cmaacöl quih quihiiha hi hiz cömoii. soldier Px-Pl old.man-Pl the.Fl SN-pure Foc here 3IO-Px-be.Fl.Pl 'Estos soldados son todos ANCIANOS.'
These soldiers are all OLD MEN. RMH_05-17-08_229
b. Santaaroj hizcoi cmaacöl quihiiha hiz cömoii. soldier-Pl Px-PL old.man-Pl SN-pure here 3IO-Px-be.Fl.PL 'Estos soldados son TODOS ancianos.'
These soldiers are ALL old men. RMH_05-17-08_230
Accordingly, the common situation when a small number is explicitly indicated is for the singular form of these nouns to occur in those sentences, as in (127).
(127) Santaar (*Santaaroj) quih capxa coi hant \(z\) iiqui yitooij. soldier soldier-PL the.FL SN-three the.PL land a 3P-toward Dt-go.PL 'Los tres soldados salieron a otro lugar.'
The three soldiers went somewhere. RMH_05-17-08_231
Loanword nouns that do not have this three-way contrast include yequim Yaqui (plural, yectz) and caamiz shirt (plural, caamijoj). \({ }^{27}\)

\footnotetext{
\({ }^{27}\) The noun tootar chicken has a plural form listed in the 2005 dictionary. One consultant indicated that he did not use an explicitly plural form for this noun despite the context.
}

Different types of ungrammatical combinations for normal nouns are shown in (128).
(128) ('Los perros están corriendo.')
(The dogs are running.)
a. Plural noun, singular determiner, singular verb
* Háxaca quih cpanzx iha.

Abs-pet-Pl the. Fl SN-run DCL
b. Singular noun, plural determiner, plural verb
* Haxz \({ }^{\circ}\) coi cpancoje iha.
dog the.PL SN-run-Pl DCL
c. Singular noun, plural determiner, singular verb
* Haxz \({ }^{\circ}\) coi cpanzx iha. dog the.PL SN-run DCL
d. Plural noun, plural determiner, singular verb
* Háxaca coi cpanzx iha.

ABS-pet-Pl the.Pl SN-run DCL
Plural nouns may be used with the singular determiner com (the.Hz) to indicate a generic interpretation (§8.1.2) or another non-referential interpretation. In these situations a plural verb is used if the nominal in question is the subject. See examples (129)-(130).
(129) Yooz quij ziicalc com thant cöquiiis」 iha.

God the.Cm bird-Pl the.Hz land 3IO-SN-Tr-? DCL
'Dios cuida a las aves.'
God takes care of the birds. (NTT, Mt 10:31) RMH_10-15-07_24
(130) ... \(\llcorner\) xiica quih quiistox \(\perp\) com \(\llcorner\) áno sozamlcam \(」\) aha. people the.Hz they.will.step.in.it Aux-DcL
'... las personas se pisarán en ella.'
... people will step on it. (NTT, Mt \(5: 13\) ) RRR 10 May2010 QUIH really extra. check other examples

\section*{10. Predicative clauses}

Two types of predicative constructions exist: those with no verb and those with a copular verb. The verbless construction ( \(\$ 10.1\) ) typically is used to indicate membership in a class; a modal is required in this construction (§10.2). The copular construction (§10.3) has broader uses, both specifying and ascriptive. A basic difference between the verbless construction and the copular construction can be seen by comparing examples (1)-(3).
(1) Verbless construction

Eenim iha.
metal/knife DCL
'Es un cuchillo.' (*Es de metal.)
It is a knife. (*It is metal.)
(2) Copular construction

Eenim quih chaa ha. metal/knife the.FL SN-EQ DCL
'Es de metal.' (*Es el/un cuchillo.')
It is made of metal. (*It is the/a knife.)
(3) Copular construction
... tiix hooro quih thaa, ... DDS gold the.Fl Rl-EQ
' [el anillo] era de oro, ...'
... [the ring] was made of gold, ...
(Apostador_279)

The verbless clauses are more frequent in the language than one might expect. Many clauses expressed with active verbs in English are commonly expressed in Seri with the verbless construction, with deverbal nouns and (certain) adjectives as the predicate complement (§10.4).

\subsection*{10.1 Verbless clauses}

The simplest construction for predicate clauses as main clauses is shown in Figure 10.1 and illustrated by simple example (4).

Figure 10.1: Verbless construction


Complement
\begin{tabular}{|c|c|c|c|}
\hline (4) & Subject & Complement & Modal \\
\hline & Ctam hipquij & cmiique & \\
\hline & man Px-CM & person/S & DCL \\
\hline
\end{tabular}

> 'Este hombre es un seri.'

This man is a Seri.
The constituents typically occur in the order shown although the subject can be right-dislocated just like any definite subject (see §3.12).
(5) Cmiique ha, ctam hipquij.
person/Seri DCL man PX-CM
'Es un seri, este hombre.'
He is a Seri, this man.
The modal, however, must follow the predicate complement. Unlike in the case of the complement with a copular verb ( \(\$ 10.3\) ), the complement in the verbless construction cannot be left-dislocated (with or without a focal pronoun, see \(\S 16.2 .4\) ).
(6) * Cmiique, (tiix) ctam hipquij __ iha person/Seri DDS man Px-CM DCL
('Este hombre es seri.') (This man is a Seri.)
(7) \(\quad \begin{array}{rll}\text { * Cmiique, } & (\mathbf{t i i x}) & \text { he } \\ \text { person/Seri } & \text { DDS } & \text { 1PRO }\end{array} \quad \begin{aligned} & \text { ha. } \\ & \text { DCL }\end{aligned}\)
('Soy seri') (I am a Seri.)
The verbless construction is used to discuss permanent, less permanent and even temporary predications, as shown in (8)-(13) (and see various other examples below).
(8) Ac quij \(\quad\) xepe ziic iha. canvasback the.CM sea bird DCL 'El pato coacoxtle es una ave marina.' The canvasback is a sea bird. (ES2007, ac)
(9) Heeesam timoca, tiix \(\llcorner\) hantx moca isoi iha.
seahorse MD-TwD DDS ancestor 3P-self DCL
'El hipocampo es un verdadero ancestro.'
The seahorse is a true ancestor. (Hipocampo_20)
(10) \(\llcorner\) Ziix cooha」 cap, tiix \(\llcorner\) ziix ccam \(\lrcorner\) hant quicaayot iha. cow the.VT DDS animal land SN-go.on.four.feet DCL
'Una vaca es un animal cuadrópodo.'
A cow is a quadruped animal. (Improved from HE 95)
(11) Itleen oo moaah」 í quih ctam -ya? your.deceased.child first the.FL male QM '¿Era hombre tu primogénito (ahora difunto)?' Was your (now deceased) firstborn child a male? (Ds2010, ctam)
(12) \(\varnothing\) Hasai iihi.
flat.basket PAST
'Era una corita.'
It was a flat basket. (DS2010, ini)
(In answer to the question, 'What did you find?')
(13) He tziix quiisax \(\lrcorner\) hap quícotim isoi iihi. 1PRo person mule.deer SN-kill-ImpF 3P-self PAST 'Yo era un experto cazador de venado bura.'
I used to be a expert mule deer hunter. (Adapted from an overheard claim)
This kind of predicative construction cannot be negated. \({ }^{1}\) If negation is to be expressed, an overt copula is required (see \(\S 10.3\) below).

\subsection*{10.1.1 Restrictions on the complement}

There are no restrictions on the subject of the verbless construction: it may be a phrase or a pronoun, overt or not overt. The predicate complement, however, must be a noun phrase (NP, see \(\S 8.2\) ); that is, it must be a nominal without a determiner. It may be singular or plural. See examples (14)-(21).


\footnotetext{
This fact actually follows trivially from the fact that the only way to do negation in the language is through an affix on a finite verb. Since the verbless construction does not have a finite verb, it cannot be negated.
}
(19) Hita quih cmaam quiipe ha.

1P-mother the.FL woman SN -good DCL
'Mi madre es buena mujer.'
My mother is a good woman.
(20) Hizcoi cmajiic iha.

Px-PL woman/female.PL DCL
'Éstas son hembras / mujeres.'
These are females / women.
(21) Hizcoi cmajiic poho.

Px-PL woman/female.PL DoubT
'Éstas posiblemente son hembras / mujeres.'
These may be females / women. RRR 10May2010
The complement cannot be a determiner phrase (DP, see \(\S 8.1\) ) - neither a typical determiner phrase, nor a name, nor a pronoun. Examples (22)-(23), well-formed semantically though they may be, are ungrammatical because they have DPs rather than NPs in the complement position.
(22) * Ctam hipquij cmiique zo ha. man Px-CM person/Seri a DcL
('Este hombre es un seri.') ( This man is a Seri.)
(23) * Hipiix hast zo ha.

DPS stone a DCL
('Esto es una piedra.') (This is a stone.)
Examples (24)-(30) are ill-formed in two ways. They have DPs in the complement position and they seem (through the use of the definite article in some cases) to be attempting to specify a particular individual. They are thus inappropriate for indicating membership in a class.
\begin{tabular}{|c|c|}
\hline \multirow[t]{4}{*}{(24)} & * Hipiix hast quii \\
\hline & DPS stone the \\
\hline & ('Ésta es la piedra.') \\
\hline & (This is the stone.) \\
\hline
\end{tabular}
(25) * Tiix cmaam quii iha.

DDS woman the DCL
'Es la mujer.'
('She (or, That one) is the woman.')
(26) * Quihehe \({ }^{\circ}\) quih Pedro Mendoza quih ha. ruler the.Fl the.Fl DCl
('El gobernador (jefe) es Pedro Mendoza.') /
(The governor (leader) is Pedro Mendoza.)
(27) * He Pedro Mendoza ha.

1Pro DcL
('Soy Pedro Mendoza.') (I'm Pedro Mendoza.)
(28) * Hant himcac Tahejöc iha. land Dt.Lc Tiburón.Island DCL ('Esa tierra es la isla Tiburón.) (That land is Tiburon Island.)
(29) * Tiix iha. DDS DCL
('Es aquél.) (It is that one.)
(30) \(\quad *\) iMe -ya? 2Pro QM
('¿Eres tú?) (Is it you?)

The class of items that is being predicated may be small, perhaps unique in relationship to another entity, as illustrated in (31)-(36). In (31), for example, we do not know if Manuel has more than one child, and he may have only one.
(31) He Manuel hapáh quij yaazi \({ }^{\circ}\) ha. 1Pro SN-Pv-say the.CM his.child DCl 'Soy (la) hija / (el) hijo de Manuel.'
I am Manuel's daughter / son. (ALIM 100)
(32) Alberto Suárez quih he iti hmiiha」_ctam iha.
the.FL 1PRO my.parent male DCL
'Alberto Suárez es mi padre.'
Alberto Suárez es mi padre.
(33) ¿Cmaam himcop me mata -ya? woman Dt-Vt 2Pro 2P-mother QM
‘¿Es aquélla tu madre?' Is that one your mother?
(34) Haxz \({ }^{\circ}\) cmaam himcac ano caap cop aal iha. dog woman/female DT-Lc 3P.in SN-stand the.VT 3P-spouse DcL 'Es el macho de esa perra que está allí.' It is the mate of that (female) dog over there. (DS2010, all)
(35) Pedro Mendoza quih quihehe \({ }^{\circ}\) ha. the.FL ruler DCL
'Pedro Mendoza es (el) gobernador (jefe).' Pedro Mendoza is (the) governor.
(36) Moxima quih "lunes" iihi. yesterday the.Fl Monday Past 'Ayer era lunes.' Yesterday was Monday. (HE 108)

The predicate complement may contain the interrogative determiner zó (§6.2.1.5), as in (37).
(37) ¿Me zó cmiique -ya?

2Pro which? person/Seri QM
'Qué persona Seri eres?'
Which Seri person are you? (Who are you?) (Overneard)
Whatever accounts for the ungrammaticality of examples like (29) above must not rule out the grammaticality of the verbless construction with an interrogative pronoun (§16.4); see examples (38)-(39).
(38) ¿Me quíih -ya?
2Pro who? QM
(39) ¿Tiix quíih -ya?
‘¿Quién eres?'
Who are you?

DDS who? QM
‘¿Quién es ése?'
Who is s/he?

\subsection*{10.2 The modals}

The modal function in Figure 10.1 may be filled by a small class of items, but the modal may be absent entirely under certain conditions (discussed in \(\S 10.2 .2\) ). The modals are those listed in (40). The basic modals are extremely commonly used; the "tensed" modals are much less commonly used. The "special" modal poho, to express doubt, is not uncommon.
\begin{tabular}{lllllll} 
(40) & Basic & Modals \((\S 20.5)\) & \multicolumn{2}{c}{ Tensed Modals (§20.6) } & \multicolumn{2}{l}{ Special Modal (§20.4.1) } \\
& ha & Declarative & iihi & Past & poho & Doubt \\
& -ya & Interrogative & siihi & Future & &
\end{tabular}

The (unstressed) declarative modal ha has the allomorph iha after consonants. The question modal -ya is written as suffix in the practical orthography. See the discussion of these basic modals in §20.5.

The modals iihi \({ }^{2}\) and siihi have a bit more phonological weight than the basic modals because of the long vowel in each, but they do not carry the intonational peak of the construction.

The common declarative intonation pattern for this construction puts high tone on the last stressed syllable of the predicate nominal. In the case of an example such as (10), repeated here, this syllable is caa, part of the stem \(\sqrt{ }\) icaayot.


When ha is used, the predication is affirmed, while -ya questions the predication. A

\footnotetext{
\({ }^{2}\) This morpheme was written with an acute accent in the 2005 dictionary.
}
sentence using the modals ha, iihi, or poho must be construed as a statement. Question intonation itself cannot make questions from these sentences (see chapter 6). See examples (43)-(44).
(42) \(\quad{ }_{i}\) ¿Cmaam iha? female Dcl
('¿Es/Era mujer/hembra?’)
* ¿Cmaam iihi? female PAST
(Is/was it a female.)
(‘¿Era hembra?’)
(Was it a female?)
(44) * ¿Cmaam poho?
female perhaps
(¿Tal vez es/era hembra?) (¿Maybe it is/was a female?)

The future modal siihi is not used in simple statements. It seems to be usually rendered as \(I\) wonder or as a self-directed question, as in (45)-(46). See \(\S 20.6\).
(45) ¿Zó haxz \({ }^{\circ}\) siihi?
which? dog Future
‘¿Qué perro será?'
What dog would that be? (or I wonder what dog that is.) (DS2010, siihi)
(46) ¿Haan siihi?
smooth.Pacific.venus.clam Future
‘¿Será una almeja china?’
Would it be a smooth Pacific venus clam?

\subsection*{10.2.1 Time}

The verbless construction with the basic modals is tenseless but realis in interpretation. If one wishes to express tense straightforwardly, for example, one typically uses the overt copula construction ( \(\$ 10.3\) ). The translations of the verbless examples in this chapter do not indicate all of the possible interpretations. Examples (47)-(48) are very simple illustrations.


When the pronoun hipiix this one is the subject, the pragmatics of the situation makes the interpretation more likely to be present tense than past. See example (49).
(49) Hipiix stacj iha. DPS rock.oyster DcL
'Éste es un ostión.'
This is a rock oyster.
The less common modals iihi and siihi include past and future tense, respectively. See examlpes (50)-(52).
(50) \(\varnothing\) Cmaam iihi.
woman/female PAST
'Era mujer / hembra.'
It was a female / woman.
(51) \(\varnothing\) Ctam quiipe isoj iihi.
man SN-good 3P-self PAST
'Era un hombre muy bueno.'
He was a very good man. (Overheard)
(52) \(\varnothing\) Ctam quiipe siihi.
man SN-good Future
‘¿Será un buen hombre?’
I wonder if he is a good man.

\subsection*{10.2.2 Omission and non-omission of the modal}

The verbless predicative construction usually requires one of the modals listed in (40) in a simple utterance. It is generally not acceptable to simply juxtapose two nominals for a grammatical statement or question. Occasionally one does hear a simple NP spoken in response to a question, but this not typical and such examples are judged unacceptable when elicited. Thus such examples are marked "?*" below. The interrogatives without -ya are more strongly rejected, however; they are marked with a simple asterisk.
(53) ?* Hipiix stacj.

DPS rock.oyster
('Éste es un ostión.')
(This is a rock oyster.)
(55) ?* Stacj.
rock.oyster
('Es (un) ostión.)
(It is a rock oyster.)
(54) \(\quad{ }_{\text {¿Hipiix }}\) stacj? DPS rock.oyster (‘¿Es éste un ostión?) (Is this is a rock oyster?)
(56) * ¿Stacj?
rock.oyster
(‘¿Es (un) ostión?)
(Is it a rock oyster?)

The modal may be omitted in the first part of a construction in which two clauses are juxtaposed, and the adverb mos may precede the second. (Examples (57) and (58) utilize deverbal nouns; see §10.4.)
(57) Hitrooqui quij quisil (iha), mos imaaixaj iha. 1P-vehicle the.Cm SN-small DcL also SN-N-strong DCL 'Mi carro es pequeño, y no es fuerte.' My car is small, and it isn't strong.
(58) Caay ihyaa \({ }^{\circ}\) cop imooxp (ha), mosimoopol iha. Quimaaxat iha. horse mine the.Vt SN-N-white DCL also SN-N-black DCL SN-gray DCL 'Mi caballo no es blanco, ni es negro. Es gris.' My horse is neither white nor black. It is gray. (ALIM 79)
(59) Iimox Impafc hapáh quij, tiix ziix impezi (ha), SN-Pv-say the.Cm DDS thing SN-N-Pv-defeat DCL
ziix imahtai ha.
thing \(\mathrm{SN}-\mathrm{N}-\mathrm{Pv}\)-overcome DCL
'El llamado Iimox Impafc era invencible e insuperable.'
The one called Iimox Impafc was invincible and insuperable. (Es2007 Imox_Impaic 01)
The distribution of the verbless construction is like that of independent clauses. Two such clauses may be conjoined with the coordinator \(\mathbf{x o}\) (25.2). The modal on the first of the coordinated clauses cannot be omitted; see example (60).
(60) a. Hitrooqui quij quisil iha xo caaixaj iha. 1P-vehicle the.Cm SN-small DcL but SN-strong DcL b. * Hitrooqui quij quisil __ xo caaixaj iha.
'Mi carro es pequeño pero fuerte.'
My car is small but it is strong.
Since it has the distribution of an independent clause, the verbless construction cannot be used as a simple adverbial clause or a protasis clause (§3.8); see (61)-(62). The ungrammaticality in the protasis clause, as in (62), is also expected because such a clause would need to be in the irrealis mood, which would make it incompatible with the verbless construction.
(61) a. *Stacj iha, iyomahit. rock.oyster DCL 3:3-DT-N-eat
b. *Stacj, iyomahit.
('Aunque era ostión, no lo comió.')
(Although it was a rock oyster, s/he didn't eat it.) \({ }^{3}\)

\footnotetext{
\({ }^{3}\) Example (61a) is grammatical with a different intonation pattern, having the reading It was a rock oyster. S/he didn't eat it.
}
(62) a. *Stacj iha, ihsiihit aha.
rock.oyster Dcl 1SGS.Tr-Ir.Id-eat Aux-Dcl
b. * Stacj, ihsiihit aha.
('Si es ostión, lo comeré.') (If it is a rock oyster, I'll eat it.) \({ }^{4}\)
The verbless construction may occur in a subordinate clause with a subordinator such as yax since, because (§25.4). The modal is required in this construction. See example (63).

\section*{(63) a. Siimet quih quiipe ha yax, imiihit.}
bread the.FL SN-good DCL since 3:3-Px-eat
b. * Siimet quih quiipe yax, imiihit.
'Como el pan era bueno, lo comió.'
Since the bread was good, s/he ate it.
The verbless construction may be embedded as a direct quote, as examples (64)-(65) show. A modal is required when the construction is embedded in this situation.
\[
\begin{aligned}
& \text { (64) - Me quihehe }{ }^{\circ} \text { caacoj poho - ox imii. } \\
& \text { 2Pro ruler SN-big Doubt thus 3:3-Px-tell } \\
& \text { '-Quizás eres un rey -le dijo.' } \\
& \text { "Maybe you are a king," he said to him. (NTT, Jn 18:37) }
\end{aligned}
\]
\[
\begin{array}{llllll}
\text { (65) } & \text { a. } & -\emptyset & \begin{array}{l}
\text { Stacj } \\
\text { rock.oyster }
\end{array} & \frac{\text { iha }}{\text { DCL }} & -\mathbf{o x} \\
\text { thus } & \text { imii. } & \begin{array}{l}
\text { 3:3-Px-tell }
\end{array} \\
\text { b. } & *-\emptyset & \mathbf{S t a c j} & & -\mathbf{o x} & \text { imii. } \\
& \text { "—Es un ostión —le dijo.' } & & \\
& \text { "It is a rock oyster," s/he told him. }
\end{array}
\]

But when embedded as indirect speech or thought (somewhat broadly construed), the modal is necessarily absent, with one exception, as noted below. Examples (66)-(68) show the ungrammaticality of the inclusion of the modal.
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{4}{*}{(66)} & * Haxölinaail \({ }^{\circ}\) & hipquij & stacj & iihi, & him miii. \\
\hline & mollusk & PX-См & rock.oyster & PAST & 1SGDO Px-say.PL \\
\hline & \multicolumn{5}{|l|}{('Me dijeron que este molusco es un ostión.)} \\
\hline & \multicolumn{5}{|l|}{(They told me that this mollusk is a rock oyster.)} \\
\hline
\end{tabular}
(67) a. Hipiix stacj DPS rock.oyster _, hax maaimoz. just Px-1Em.S.Tr-think

\footnotetext{
\({ }^{4}\) Example (62a) is grammatical with a different intonation pattern, having the reading It is a rock oyster. I will eat it.
}
b. * Hipiix stacj iha, hax maaimoz.
'Éste es un ostión, creo.'
This is a rock oyster, I think.
(68) * Haxölinaail \({ }^{\circ}\) hipquij stacj iha, him miii.
mollusk Px-Cm rock.oyster DcL 1SGDO Px-say.PL
('Me dijeron que este molusco es un ostión.')
(They told me that this mollusk is a rock oyster.)
The exception is that the special modal poho Doubt can be present, as in (69).
(69) Haxölinaail \({ }^{\circ}\) hipquij stacj poho, him miii.
mollusk Px-Cm rock.oyster Doubt 1SGDO Px-say.PL
'Me dijeron que este molusco posiblemente es un ostión.'
They told me that this mollusk is perhaps a rock oyster.
Examples (70)-(74) show grammatical embedded predicate nominal constructions without a modal. (The null subject is represented explicitly.)
(70) Pedro quih ctam quiipe _, imiih.
the.FL man SN-good 3:3-Px-say
'Le(s) dijo que Pedro es buen hombre.'
S/he told him/her/them that Pedro is a good man.
(71) Ctam ticop cocsar , teemyo.
man Md-Vт Mexican Px-say-PL
'Dicen que ese hombre es un mexicano.'
They say that that man is a Mexican.
(72) \(\quad ., \varnothing\) hipi iiquet \(^{\circ} \quad \ldots\), \({ }^{\circ}\) hax tahii」 hax maa. Intns her.child it.seemed just Px-be
'..., (y) era como si fuera su propio hijo.'
... (and) he was as if he were her own child. (Ac 7:21)
(73) Ziix coosyat \(\lrcorner\) heeque quij ctam _ , yoque. giant juvenile the.Cm man/male Dt-US-say
'El gigante joven era un varón, se dice.'
The young giant was a male, it is said. (Gigante_Huerfano_01)
(74) ŁAzlc canl」 quih capxa coi \(\llcorner x i i c a\) ccamotam \(\lrcorner\) \(\qquad\) , yoque. stars the.Fl SN-three the.PL animals Dt-US-say 'Se dice que las tres estrellas eran animales.'
The three stars were animals. (Es2007, Hapj_03)
The embedded sentence is interpreted necessarily as a statement, as shown in (75).
(75) Haxölinaail \({ }^{\circ}\) hipquij stacj __, him miih. mollusk Px-Cm rock.oyster , 1SGDO PX-say 'Me dijo que este molusco es un ostión.' S/he told me that this mollusk is a rock oyster. (*S/he asked me if this mollusk is a rock oyster.)

Given the existence of (internally-headed) relative clauses (§8.4), one should expect to find the verbless construction modifying a nominal. Examples such as (76)-(77) show that they indeed exist. \({ }^{5}\) The analysis of these as relative clauses, illustrated by Figure 8.5 (see §8.4.1), accounts for the word order straightforwardly. In this construction, however, as in other cases of embedding, the modal does not occur.
(76) \(\mathrm{Haxz}^{\circ}\) ctam (*iha) ticop hin yocatxla. dog male DCL Md-Vt 1SGDO Dt-bite.[like.dog] 'Ese perro macho me mordió.'
That male dog bit me.
(77) He cmajiic (*iha) hascmalx aha.

1Pro woman.Pl Dcl 1PlS-Ir.Id-N-go-Pl Aux-Dcl
'Nosotras las mujeres no vamos a ir.'
We women will not go.
The possessive pronouns (§16.1) may be used adnominally, as shown in (78); these may be taken as examples of this same construction although they are rendered as possessive adjectives in free Spanish and English translations.
(78) trooqui hyaa \({ }^{\circ}\) quij
vehicle mine the.См
'mi vehículo'
my vehicle

\subsection*{10.3 Copular construction}

A predicative construction may include a copular verb, as in example (79).

\footnotetext{
\({ }^{5}\) This kind of structure is ungrammatical with a demonstrative pronoun as head of the modified nominal.
(i) * Taax cmajiic (*iha) smalx aha.

DDP woman.PL DCL Ir.Id-N-go.PL AUX-DCL
('Ésas que son mujeres (o ésas las mujeres) no van a ir.')
(Those who are women (or those the women) will not go.)
}


The copular construction is similar to other clauses in that it has DPs followed by a VP; compare Figure 10.2 with Figure 2.1 in chapter 2. The verb may be in a finite form, as in (79), but more commonly the copula appears in one of two subject-oriented deverbal noun forms, haa (SN.EQ) and chaa (SN-EQ) - the difference between these forms is discussed in \(\S 10.3 .4\) followed by a modal in the same pattern as that found with other verbs ( \(\S 10.1, \S 20.5, \S 20.6\) ). See example (80).
\begin{tabular}{llllll} 
(80) & \begin{tabular}{l} 
Subject \\
Hipiix
\end{tabular}\(\quad\) Complement & Copula & Modal \\
& quij & haa & ha. \\
DPS & 1P-nose & the.CM & SN.EQ & DCL \\
'Ésta es mi nariz.' & & & \\
& This is my nose. (HE 61) & & &
\end{tabular}

Whether the copula is a finite verb or a deverbal noun, it may be negated, as in (81)-(82).
(81) Cmiique zo pohaa, cmiique zo pomhaa, ...
person/Seri a Ir.Dp-EQ person/Seri a Ir.Dp-N-EQ
'Sea seri o no sea seri, ...'
Whether s/he is a Seri or s/he is not a Seri, ...
(82) Tiix cmiique ha xo cmiique áa \(z\) imhaa ha.

DDS person/Seri Dcl but person/Seri true a SN-N-EQ DCL
'Era una persona, pero no era una verdadera persona.'
He was a person, but he wasn't a real person. (Hipocampo_24)

In fact, the copular construction is necessary if the predication is negated since the verbless construction (§10.1) has no way of indicating negation. Notice the negative copula in (83).
(83) Juan quij, tiix ziix zo cöcacoaat z imhaa ha. \({ }^{6}\) Juan the.CM DDS thing a 3IO-SN-cause.know a SN-N-EQ DCL 'Juan no es (el) maestro.'
Juan is not a/the teacher. \({ }^{7}\) (modified from ALIM 99)
The copular construction with a finite verb is necessary if mood (realis or irrealis) is expressed, as in (84)-(85).
(84) María quij ziix zo shaa caha. the.Cm thing a Ir.Id-EQ Aux.SN-DCL
'María será una oficial.'
Maria will be an official/officer. \({ }^{8}\)
(85) Ctam quij, tiix \(\quad\) ziix hast iizx ano coom」com imhaa. male the.Cm DDS northern.chuckwalla the.Hz Px-EQ
'El hombre se volvió la iguana de la piedra.'
THE MAN became the northern chuckwalla. (ES2007, acaam_ccaa 20) RRR 7May2010
The copular construction with a finite verb is necessary if the predication is being expressed as a condition clause or as an adverbial clause without a subordinator, as in (86)-(87).
(86) \(\quad\) Ziix quih cöihiihat \(\lrcorner\) quih pohaa ta \(\mathbf{x}\), hasiyaj aha. truth the.Fl Ir.Dp-EQ DS UT 1PlS-Ir.Id-know-Pl Aux-Dcl
'Si es la verdad, lo sabremos.'
If it's the truth, we will know it. (Nтt, мt 27:43)
(87) ..., ıziix hast iizx ano coom」 com mos cmiique quih thaa \(x, \ldots\) northern.chuckwalla the.Hz also person the.FL RL-EQ UT
'..., la iguana también era una persona.'
..., the northern chuckwalla also was a person. (Es2007, acaam_ccaa 13) RRR 7May2010
The copular construction is also necessary if the complement has a determiner - whether definite, as in (79), or indefinite, as in (82), since the verbless construction also disallows both of these. As a result, if the complement is a partitive expression (§8.5), the copular construction is
\({ }^{6}\) Compare also the following grammatical example:
(ii) Juan quij, tiix ziix quih cöcacoaat quih imhaa ha. the.CM DDS thing the.FL 3IO-SN-teach the.FL SN-N-EQ DCL 'Juan no es el maestro.' / Juan is not the teacher.
\({ }^{7}\) Since negative sentences often use indefinite articles even though the referent is definite, this example is actually ambiguous between an ascriptive and a specifying interpretation.
\({ }^{8}\) The expression for officer/official, person of authority is ziix zo chaa (thing a SN-EQ) who is a thing.
required to express the relationship between the subject and the complement. See examples (88)(89).
(88) He mos Lola hapáh quij ilyat cöcoocapoi_ coi,

1Pro also Lola SN-Pv-say the.Cm his/her.descendants the.PL
he zo haa ha.
1Pro a/one SN.EQ DcL
'Yo también soy uno de los descendientes de Lola (Casanova).'
I also am one of the descendants of Lola (Casanova). (Ds2010, coocp)
(89) Xiica Hast ano coii Cofteecöl iti coii coi
thing-Pl S.E.I. 3P.in SN-be.Fl.PL S.E.I. 3P.on SN-be.Fl.Pl the.Pl
zo haa ha.
a/one SN.EQ DCL
'Era uno del grupo de isla San Esteban.'
He was one of the San Esteban people. \({ }^{9}\) (DS2010, Coftecail)
The predicate complement of a copular verb can be one that is strengthened with a focal demonstrative pronoun (§16.2.4), as illustrated by example (90) as well as (85) above.
(90) He Pedro González, tii haa ha. 1 Pro DDS SN.EQ Dcl
'Yo soy Pedro González.'
I am Pedro González.
The copular construction may be either ascriptive (§10.3.1) or specifying (§10.3.2). The ascriptive examples are actually quite limited, as explained below.

\subsection*{10.3.1 Ascriptive}

The previous section has shown several situations in which the copular construction is necessary, including when there is mood or negation. Setting aside the situations in which a finite copular verb is present, we see that the ascriptive uses of the copular construction with a deverbal noun are somewhat special in nature and usage. For example, in response to a question such as (91), one may answer with (92), which is a verbless predicate nominal expression as described in (§10.1) above.

\footnotetext{
\({ }^{9}\) The sentence in the 2005 dictionary had yohaa (DT-EQ), which some consultants interpret as meaning became; the preferred form is the one given here.
}
(91) Cotx - iÁz haxehe -ya? what? Intns QM
""Cotx"- ¿Qué es?'
"Cotx" - What is it?
(92) Tiix hehe ha.

DDS plant DCL
'Es una planta.'
It is a plant.
The use of the non-finite copular construction here is not straightforward. Examples like (93)-(95) are understandable but are considered ungrammatical.
(93) * Tiix hehe zo haa ha. DDS plant a SN.EQ DCL ('Es una planta.') (It is a plant.)
(94) * Pedro quih ctam quiipe zo haa, imiih. the.Fl man SN-good a SN.EQ 3:3-Px-say
('Le dijo que Pedro es buen hombre.') (S/he told him/her/them that Pedro is a good man.)
(95) * Ziix cameepit zo haa, yoque. thing SN-strange a SN.EQ DT-US-say
('Se dice que era una cosa extraña.') (It is said that it was a strange thing.)
The nonfinite copular construction with an ascriptive function is apparently much more acceptable when embedded if there is doubt involved, as in (96).
(96) Hipiix stacj zo haa, hax maaimoz. DPS rock.oyster a/one SN.EQ just Px-1Em.S.Tr-think 'Éste es un ostión, creo.'
This is a rock oyster, I think. LHC_2.00-07_183
A non-finite copular construction may be used to express sarcasm, using a rhetorical question with the question modal - ya and a particular intonation, as in (97)-(98).
icTiix hehe zo haa -ya?!
DDS plant a/one SN.EQ QM
‘i¿Es una planta?!' (¡No es planta!)
It's a plant?! (It's not a plant!) RMH_09-28-07_163d
(98) i¿Tiix Łziix hapahit」zo haa -ya?!

DDS food a SN.EQ QM
¡ i Es comida?! ( \(¡\) No es comida!)
That's food?! (It's not food!) RMH_09-28-07_163e

The complement of the non-finite copular construction may sometimes be very similar to that found in the verbless construction - a noun phrase denoting a very small class. Compare examples (99)-(100) with (31)-(36) above.
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{4}{*}{(99)} & Hipiix hita & chaa & ha. \\
\hline & DPS 1P-mother & SN-EQ & DcL \\
\hline & \multicolumn{3}{|l|}{'Ésta es mi madre.'} \\
\hline & \multicolumn{3}{|l|}{This is my mother. LLC_2-06-07_185} \\
\hline \multirow[t]{4}{*}{(100)} & Hizaax citi hmiihat & • chaa & ha. \\
\hline & DPP my.parents & SN-EQ & DcL \\
\hline & \multicolumn{3}{|l|}{'Éstos son mis padres.'} \\
\hline & \multicolumn{3}{|l|}{These are my parents. Lнс_2-00-07_18} \\
\hline
\end{tabular}

\subsection*{10.3.2 Specifying}

The copular construction is primarily used with a specifying function - a function that the verbless construction does not have. The complement is a specific individual or group, and as such may be represented by a name, as in (101)-(102); by a determiner phrase, as in (103); or by a pronoun, as in (104)-(106).
(101) Quihehe \({ }^{\circ}\) quih Pedro Mendoza chaa ha.
ruler the.FL SN-EQ DCL
'El gobernador (jefe) es Pedro Mendoza.'
The governor (leader) is Pedro Mendoza. Lнс_2-00607_187
(102) Alberto Suárez quih he citi hmiiha ctam quih chaa ha. the.FL \(\overline{1 P R O}\) my.parent male the.FL SN-EQ DCL
'Alberto Suárez es mi padre.'
Alberto Suárez es mi padre. LHс_2-06-07_188
(103) "Ziix hipxahcop haa poho," ox tee, yoque. thing Px---Vt SN.EQ Doubt thus Rl-say Dt-US-say
‘¿Tal vez es éste/ésta? -así preguntó.’
"Might this be him/her/it?" s/he asked. (DS2010, poho) LHC_2-06-07_190
(104) iTiix haa -ya? DDS SN.EQ QM ¿¿Es aquél? LHc_2-06-07_191a Is it that one? (Overheard)
(105) Tiix haa ha. DDS SN.EQ DcL 'Es aquél.' LHC_2-06-07_191b It is that one. (Overheard)
(106) ¿Me haa -ya?

2Pro SN.EQ QM
'Eres tú?'
Is it you? (Overheard) LHC_2-06-07_191c

\subsection*{10.3.3 Embedded examples}

The copular construction may be embedded, as examples (107)-(109) show.
\begin{tabular}{|c|c|}
\hline (107) & \begin{tabular}{l}
Tiix haa, hax maaimoz. \\
DDS SN.EQ just Px-1Em.S.Tr-think
\end{tabular} \\
\hline & 'Es aquél/aquélla, creo.' \\
\hline & S/he/it is the one, Ithink. (DS2010, a-) RMH_08-14-07_91 LHC_2-06-07_191d \\
\hline (108) & \begin{tabular}{l}
..., me tiix haa, teemyo. \\
2Pro DDS SN.EQ Px-say-PL
\end{tabular} \\
\hline & '..., dicen que eres aquél.' \\
\hline & ..., they say that you are he. (NTT, M1 16:14) RMH_08-14.07_89a \\
\hline (109) & me tiix haa poho, teemyo. \\
\hline & 2Pro DDS SN.EQ Doubt Px-say-Pl \\
\hline & '..., posiblemente tú eres él, dicen.' \\
\hline & ..., they say that maybe you are he. (NTT, Mt 16:14) RMH_08-14-07_896 \\
\hline
\end{tabular}

The copular construction may occur as a relative clause (see \(\S 8.4\) ). Example (110) has a null head, and example (111) has ctam as head.
(110) [ \(\emptyset\) Hateeya quih chaa quij] ano hpsoosi aha. glass the.FL SN-EQ the.CM 3P.in/from 1SGS.In-Ir.Id-UO-drink AUX-DCL 'Voy a tomar de la (taza) de vidrio.'
I am going to drink from the glass one (cup). (DS2010, coosi) LHc_2-00607_192
(111) [Ctam fariseo quih chaa cop] tfit oo, toc cötap, ... \({ }^{10}\) man Pharisee the.Fl SN-EQ the.Vt RL-stand DL there 3IO-RL-stand 'El (que era) fariseo estaba de pie, ...'
'The (man who was the) Pharisee stood there, ... (NTT, Lk 18:11) LHс_2-06-07_193
Such examples are not common and seem to have a greater contrastive focus than similar examples using the verbless construction (§10.2.2).

\subsection*{10.3.4 The distribution of chaa and haa}

The two forms chaa and haa occur in various examples above. These are distinct but in some sense competing forms of the subject-oriented deverbal noun of the otherwise regular copular verb \(\sqrt{ }\) haa. \({ }^{11}\) They are not simple variations one of the other; they cannot be freely interchanged.

\footnotetext{
\({ }^{10}\) If the adverb oo were removed from this example, the meaning would be that he stood up, according to René Montaño Herrera.
\({ }^{11}\) Examples like (112) with an article before chaa are very important. For a long time I was unsure about whether chaa really existed because the sequence quih haa would be pronounced precisely as chaa. As explained in §21.2.4, the article quih has a variable pronunciation, depending on the phonological context, and before haa it
}

The morphologically irregular form haa, which is a bare stem, \({ }^{12}\) is much more common. The morphologically regular form chaa occurs only following a restricted set of constructions.

The complement of chaa may be generic, as expressed in (112), with the definite article quih.
(112) Cmiique thaaix ima」quij cmiique áa quih chaa ha. person/Seri serious the.Cm person/Seri true the.FL SN-EQ DcL
'Una persona seria es una persona buena.'
A serious person is a good person. (DS2010, haa) LHC_2-06-07_194
The complement may also be semantically definite as the result of ending with a possessed noun, as in (99)-(100) above. And it may also be a name; see example (101).

A definite nominal is most commonly expressed with an explicit determiner, and a priori one might expect to find any one of the various determiners in the DP before the copular verb. While no particular prohibition of any of them seems to exist, it is also true that the determiner quih is far and away much more common than the others. When another article is used, the preference is to use the form haa of the copula. See examples (113)-(115).
(113) LItj iixquim \(\lrcorner\) com ziix inaail quih chaa ha. his/her.belt the.Hz thing 3P-skin the.Fl SN-EQ DCL 'Su cinturón era de cuero.'
His belt was made of leather. (NTT, мк 1:6) LHC_2-06-07_194
(114) Haptco cmiique caii quih chaa ha. already person/Seri mature the.FL SN-EQ DCL 'Ya es un adulto.'
He is already an adult. (NTT, Jn 9:21) LHc_2-06-07_194
\begin{tabular}{lllllll} 
a. & Hant & himquij & Tahejöc & quii & haa ha. \\
& \begin{tabular}{l} 
land
\end{tabular} & Dт-Cm & Tiburón.Island the.Cм & SN.EQ DCL \\
b. & ?* Hant & himquij & Tahejöc & quij & chaa & ha.
\end{tabular}
'Aquella tierra es la isla Tiburón.'
That land is Tiburon Island. Lнс_2-06-07_194

\footnotetext{
would be expected to be [k], since the two glottal stops would merge and the vowel \(\mathbf{i}\) would not appear. Either the vowel is dropped, or (as seems more likely) the vowel was never there in the underlying form of the article at all. The spelling convention, writing the article as quih in all situations, helps to avoid the frustration of trying to write different phonetic realizations of this ubiquitous article, but speakers are also quite aware that it is not as strong quih [kı?] in many situations. Even the pronunciation of the verb form chaa has neither a very strong velar stop nor a very strong glottal stop in normal speech.
\({ }^{12}\) This is one of perhaps only two verbs in Seri that have a word form that is identical to the root.
}

Unlike the form haa (see examples above), the form chaa cannot usually occur with an indefinite DP nor with a pronoun in this construction, as shown in (116)-(118).
(116) * Hipiix stacj zo chaa, hax maaimoz. DPS rock.oyster a SN-EQ just Px-1EM.S.Tr-think ('Éste es un ostión, creo.') (This is a rock oyster, I think.)
(117) * Tiix chaa ha. DDS SN-EQ DCL
(118) \(\quad \boldsymbol{i}_{\mathbf{~}} \mathbf{M e}\) chaa -ya? 2Pro SN-EQ QM ('Es aquél.') (It is that one.)

However, the form chaa very occasionally does occur following the pronoun zo or pac when used in a partitive expression, although the preferred form is haa (see examples (88-89)). For some speakers these are less acceptable or have a different meaning (become rather than be).
(119) (compare with (88))
? He mos Lola hapáh quij เiyat cöcoocapoj coi, he zo 1 Pro also SN-Pv-say the.Cm his/her.descendants the.Pl 1Pro a/one

> chaa ha.

SN-EQ DCL
'Yo también soy uno de los descendientes de Lola (Casanova).'
I also am one of the descendants of Lola (Casanova). RMH_05-16-08_27a
(120) Taax santaaroj coi pac chaa ha.

DDP soldier-Pl the.PL some SN-EQDCL
'Ellos (ahora) son algunos de los soldados (pero antes no eran).'
They (now) are some of the soldiers (but weren't before). \({ }^{13}\) RMH_05-16-08_276
(121) Taax cmaax santaaroj coi pac chaa ha.

DDP now soldier-PL the.PL some SN-EQ DCL
'Ellos ahora son soldados (no eran antes).'
They became soldiers. (offered) RMH_08-14-07_95
The form chaa also occurs with an indefinite nominal in the expression ziix zo \(\sqrt{ }\) haa be someone of rank or with authority (literally, be a thing). So ctam ziix zo chaa is a male official, man with rank, and santaar ziix zo chaa is a soldier with rank, such as a commander.

\subsection*{10.4 Clauses with deverbal nouns}

Clauses with deverbal nouns instead of finite verbs are very common. Their syntax resembles the structure of verbless clauses with respect to the use of modals (see \(\S 10.1\) ), but in many cases

\footnotetext{
\({ }^{13}\) Note the slightly different sense that the use of chaa gives to this sentence.
}
they do not seem to have any of the expected semantics of a predicative construction. This section discusses the use of deverbal nouns in main clauses primarily and briefly mentions their use in relative clauses - the adnominal uses shown in the following sections - without analyzing the structure in the latter (see §8.4). See also the sections about deverbal nouns in complement clauses ( \(\$ 12.2\) ). Since there are three major types of deverbal nouns in Seri, they are presented separately here, first in their realis forms and then in their irrealis forms (§10.4.5). Any of these deverbal nouns may be inflected for negation (which is part of the verb morphology, see \(\S 17.3 .4\) ), and those based on transitive verbs may be passive (see \(\S 17.3 .5\) ).

\subsection*{10.4.1 Subject-oriented deverbal nouns}

Subject-oriented deverbal nouns (see \(\S 14.1\) ) are ubiquitous. \({ }^{14}\) The subject of the deverbal noun construction is what would be the subject of the verb in a synonymous finite construction. The deverbal noun may be based on any kind of predicate, as illustrated by examples below in main clauses and in relative clauses.

The use of a subject-oriented deverbal noun necessarily prompts the use of an independent pronoun to express the subject if that subject is first or second person since subject person is not marked on subject-oriented deverbal nouns. The absence of a pronoun necessarily prompts an interpretation of the subject as third person. The number of the subject is expressed by the form of the verb stem ( \(\S 17.3 .3\) ) since personal pronouns do not indicate number. See examples (122)(129).
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{4}{*}{(122)} & He coos iha. & (123) & He coosi ha. \\
\hline & 1 Pro SN-sing Dcl & & 1 Pro SN-sing-Pl Dcl \\
\hline & 'Estoy cantando.' & & 'Estamos cantando.' \\
\hline & I am singing. RMH_05-16-08_28 & & We are singing. RMH_05-16-08_29 \\
\hline \multirow[t]{4}{*}{(124)} & Me coos iha. & (125) & Me coosi ha. \\
\hline & 2 Pro SN-sing Dcl & & 2 Pro SN-sing-Pl Dcl \\
\hline & 'Estás cantando.' & & 'Ustedes están cantando.' \\
\hline & You (sg.) are singing. RMH_05-16-08_30 & & You (pl.) are singing. RMH_05-16.08_31 \\
\hline \multirow[t]{4}{*}{(126)} & Tiix coos iha. & (127) & Taax coosi ha. \\
\hline & DDS SN-sing DCL & & DDP SN-sing-Pl DCL \\
\hline & 'Ése/ésa está cantando.' & & 'Ésos/esas están cantando.' \\
\hline & That one is singing. RMH_05-16-08_32 & & Those are singing. RмН_05-16-08_33 \\
\hline
\end{tabular}

\footnotetext{
\({ }^{14}\) This is the form used as the entry word for the verbs in the 2005/2010 dictionary.
}
(128) Coos iha. SN-sing DCL
Coosi ha.
'Está cantando.'
S/he/it is singing. RMH_05-16-08_34 (*I am singing. *You are singing.)
\[
\begin{align*}
& \text { SN-sing-Pl DCL }  \tag{129}\\
& \text { 'Están cantando.' } \\
& \text { They are singing. RMH_05-16-08_35 } \\
& (* W e / \text { You are singing.) }
\end{align*}
\]

\subsection*{10.4.1.1 Deverbal nouns based on stative verbs}

The clause may be headed by a deverbal noun based on a stative verb, as in examples (130)(138).
(130) Hanso quisil iha.
just SN-small Dcl
'No más es pequeño.'
It is just small. LHC_2-06-07_200
(131) He hooxi zo toc cöimiih iha.

1Pro 1P-ON-finish a there 3IO-SN-N-be.Fl DCL
'Nunca he hecho uno.'
I have never made one. (DS2010, quixi) LHC_2-06-07_201
(132) ¿Zímjöc xepe iti coom -ya?
when? sea 3P-on SN-lie QM
‘¿Cuándo la echaron al mar?’ เнс_-206-07_202
When was it (the boat) launched? (More literally, When was it on the sea? (Overheard)
(133) Tiix quiteejöc iha.
(134) Tiix cacösxaj iha.

DDS SN-thin DCL DDS SN-tall/long DCL 'Es / era alto/a / largo/a.'
'Es / era flaco/a.' S/he/it is / was tall / long.
(135) Tiix cacösxaj, hax maaimoz.

DDS SN-tall/long just Px-1Em.S.Tr-think
'Es / era alto/a largo/a, creo.'
S/he/it is / was tall / long, I think. LLC_2-06-07_203c
(136) Zaaj ahoot hac caail iha.
cave 3P-entrance the.Lc SN-wide/spacious DCL
'La entrada de la cueva es ancha.'
The cave entrance is wide. (DS2010, ahoot) LHC_2-066-07_204
(137) ¿Cmaa quiih \(\rfloor\), hax maacta. now SN-be.Fl just Px-1Em.S.Tr-look.at
'Es nuevo [el nombre], me parece.'
[The name] is new, I think. (Overneard) LHC_2-06-07_205
(138) \(\mathbf{H a x z}^{\circ}\) ticom quictamo siihi.
\(\operatorname{dog} \mathrm{Md}-\mathrm{Hz}\) SN-ferocious Future
'Me pregunto si ese perro es bravo.'
I wonder if that dog is ferocious. (DS2010, siihi) LHC_2-06-07_206
Adnominal examples
(139) Cmaam cacösxaj zo yoofp. woman SN-tall/long a DT-arrive 'Una mujer alta llegó.'
A tall woman arrived. RMH_08-14-07_96b
(140) Cmiique caacoi àpa nsiiho aha. person SN-big enormous.quantity a/one 2SGS-Ir.Id-see Aux-Dcl 'Vas a ver una enorme cantidad de personas grandes.'
You are going to see a lot of big people. (DS2010, apa) RMH_08-04-07_248b
10.4.1.2 Deverbal nouns based on intransitive verbs (agentive and nonagentive)

The clause may be headed by a deverbal noun based on an intransitive action verb.
(141) ..., cooha, yoque. SN-cry DT-US-say
'..., está llorando, se dice.'
..., she is crying, it is said. (Es2007, acaam_ccaa 22b)
(142) Cmaam tiquij xeele cöcoos, yoque. woman MD-CM fog 3IO-SN-sing DT-US-say
'Esa mujer tenía poder sobrenatural de la neblina, se dice.'
That woman had supernatural power of the fog, it is said. (Offered) RMH_08-14-07_97a
(143) Cocazni \({ }^{\circ}\) com ilít quij cactim iha xo rattlesnake the.Hz 3P-head the.CM SN-be.cut DcL but
\[
\begin{array}{llllll}
\text { isoj } & \text { com } & \text { cói } & \text { csiijim } & \text { oo } & \text { ha. } \\
\text { 3P-body } & \text { the.Hz } & \text { still } & \text { SN-move } & \text { DL } & \text { DCL }
\end{array}
\]
'La cabeza de la víbora de cascabel se cortó, pero el cuerpo todavía se movía.'
The head of the rattlesnake was cut off, but its body was still moving. (DS2010, isoj) RMH_08
(144) Hapaspoj \({ }^{\circ}\) quih hocö quih ano moca ha. paper the.Fl wood the.FL 3P.in/from Twd-SN-move DcL 'El papel se obtiene de la madera.'
Paper is made from wood. (DS2010, ano) RMH_08-14-07_97c

\section*{Adnominal examples}
(145) Coos quij he hita quih haa ha.

SN-sing the.Cm 1Pro 1 P-mother the.Fl SN.EQ DCL
('La que está cantando es mi madre.)
The one who is singing is my mother. RMH_08-14-07_97d
(146) cocsar caticpan tacoi

Mexican(s) SN-work MD-PL
'esos trabajadores mexicanos no indígenas'
those non-Indian Mexican workers (lit., those non-Indian Mexicans who work)
(DS2010, catascar) XMH_08-15-07_29a

\subsection*{10.4.1.3 Deverbal nouns based on transitive verbs}

The clause may be headed by a deverbal noun based on a transitive verb.
(147) Haxz \(^{\circ}\) ticop zixcám \({ }^{\circ}\) zo quihit iha.
\(\operatorname{dog} \mathrm{Md}-\mathrm{Vt}_{\mathrm{t}}\) fish a SN-Tr-eat DCL
'Ese perro está comiendo un pescado.'
That dog is eating a fish. хмн_08-15-07_29b
(148) Haxz \(^{\circ}\) ticop zixcám \(^{\circ} z\) imahit iha.
dog Md-Vt fish a SN-Tr-N-eat Dcl
'Ese perro no está comiendo un pescado.'
That dog is not eating a fish. XMH_08-15-07_29C
(149) Haxz \(^{\circ}\) ticop zixcám \({ }^{\circ}\) zo quihit iihi.
dog Md-Vt fish a SN-Tr-eat Dcl
'Ese perro estaba comiendo un pescado.'
That dog was eating a fish. хмп__08-15-07_29d
(150) Hapete quih \(\quad\) miizjemiique caai \(\quad\) ha.

ABS-mother the.FL well person SN-Tr-make DCL
'Nuestra madre nos cuida.' ('La madre de uno lo/la cuida.')
Our mother does good things for us. (DS2010, ata) XMH_08-15-07_29e

\section*{Adnominal examples}
(151) Ziix xiica quih caai, tahac iti quiij quij, ... thing thing.Pl the.Fl SN-Tr-make Md.Lc 3P-on SN-sit the.Cm
'El creador de las cosas who was there ...'
The maker of the things, who was there, ... (Conjo_Cuernos_1a)
(152) 」Acaam ccaa」tiquij, ziic ziix zo quihit áa \(z\) imhaa ha. wren Md-Cm bird thing a SN-Tr-eat Intnsa/one SN-N-EQ DcL
'El chivirín no es un pájaro que come mucho.'
The wren is not a bird that eats a lot. (ES2007, acam ccaa 04)

\subsection*{10.4.1.4 Deverbal nouns based on passives of transitive verbs}

The clause may be headed by a deverbal noun based on a passivized transitive verb.
(153) Ziix spahit ca quisil ipi impaho ha. thing Ir.Id-Pv-eat Aux.SN SN-small Intns SN-N-Pv-see DCL 'No hay nada para comer.'
There isn't anything to eat. (DS2010, ca) XMH_08-15-07_30a
(154) Hast coopol ticom, ¿zó hapai siihi?
mountain SN-black Md-Hz how SN-Pv-tell Future
'¿Cómo se llama ese cerro negro? me pregunto.'
What could that black mountain be called, I wonder. (DS2010, siihi) XMH_08-15-07_30b

\section*{Adnominal examples}
(155) Ziix hapahit iha.
thing SN-Pv-eat DCL
'Es comida.'
It is food. (more literally, It is something that is eaten.) (Overheard) XMH_08-15-07_30c
(156) Hapeme quij ziix impaxpx iha.

Abs-father.FE the.CM thing 3P-ON-N-Pv-mad.at DCL
'Una mujer no se debe enojar con su padre.'
A woman should not get angry with her father. (DS2010, am) XMH_08-15-07_30d

\subsection*{10.4.2 Person-marking in sentences headed by deverbal nouns}

Sentences with deverbal nouns as the predicate in the main clause are interesting syntactically in that their presence affects the construction of the remainder of the sentence. The dependent clauses in examples like these are quite unusual, although this is not immediately evident. The verbs of the dependent clauses are stripped of subject inflection, including the 3:3 marking (§17.3.2.1): tazoj rather than hptazoj (with first person singular intransitive subject hp-) in (157), tcooo rather than hatcooo (with first person plural subject ha-) in (158) and (159), tahit rather than itahit (with 3:3 i-) in (160), and taai rather than itaai in (161). The person of the subject is only indicated by the overt or implicit pronoun. In fact, in no other context is a word form such as tahit or taai grammatical. \({ }^{15}\)
(157) He tazoj oo, comsisiin iha.
(*hptazoj)
1Pro RL-alone DL SN-pitiable Dcl
'Soy el único pobre.'
\(I\) am the only pitiful/poor one. XMH_-88-15-07_30e

\footnotetext{
\({ }^{15}\) The form tazoj, on the other hand, as an intransitive verb, is easily used elsewhere as a third person form. The crucial difference with tahit and taai is that these two are transitive verbs.
}
(158) He tcooo, hizac iti coii ha.
(*hatcooo)
1 Pro RL-all Px.Lc 3P-on SN-be.Fl.Pl Dcl
'Estamos todos aquí.'
We are all here. (HЕ 34) RMH_09-28-07_164a
(159) He tcooo, Yooz quij oeen \({ }^{\circ}\) iha.
(*hatcooo)
1Pro RL-all God the.CM his.children DcL 'Somos todos los hijos de Dios.' We are all God's children. (NTT, 1Ti3:15) RMH_09-28-07_164b
(160) theen imt」quij tahit quícatx quij (*itahit) milk the.Cm RL-eat SN-Tr-release the.CM 'el que dejó de comer la leche (en polvo)' the one who stopped eating the (powdered) milk RMH_09-28-07_164c
(161) hant quij taai quixi quij
(*itaai)
earth the.Cm Rl-make SN-Tr-finish the.Cm
'el creador del mundo'
the creator of the world RMH_09-28-07_164d
(162) ¿Me hoox oo ihaamac poop, siitax quee -ya? (*impoop) 2Pro Intns Dl alone Ir.Dp-stand Ir.Id-go Aux.SN QM ‘¿Vas sin acompañante?' Are you going unaccompanied? (DS2010, haamac) RMH_05-17-08_232
The same kind of stripping of subject inflection is seen in example (163) that has a deverbal noun (camoz) as the main predicate with a complement that is a thought (§12.5). Note that the verb saai is not inflected for subject person. \({ }^{16}\)
\begin{tabular}{clllll} 
(163) & i Me áz & saai & taa & camoz & -ya? \\
2Pro what? & IR.ID-make & Aux.RL & SN-think & QM
\end{tabular}

The unusualness of the construction with a deverbal noun as head extends to the reflexive pronoun that occurs in them: it is always third person (unlike in finite clauses; see \(\S 11.2\) ). See examples (164)-(166).
\begin{tabular}{lllr} 
(164) & He \(\quad\) isoi & cnipatim iha. & (*hisoj) \\
1PRO & 3P-self & SN-Tr-hit-IMPF DCL & 1P-self \\
& 'Me estoy pegando.' \\
& I am hitting myself. RMH_10-15-07_32a &
\end{tabular}

\footnotetext{
\({ }^{16}\) This is not an infinitival complement. Vebs like \(\sqrt{ }\) amoz are discussed in §12.6.
}
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{4}{*}{(165)} & Me isoj cnipatim iha. & & (*misoj) \\
\hline & 2Pro 3P-self SN-Tr-hit-ImpF DCl & & 2P-self \\
\hline & 'Te estás pegando.' & & \\
\hline & You are hitting yourself. RMH_10-15-07_32b & & \\
\hline \multirow[t]{4}{*}{(166)} & \(\dot{\boldsymbol{i}}^{\text {LZó tpacta ma」 me ísolca cnooptolca }}\) & -ya? & (*mísolca) \\
\hline & why? 2Pro 3P-self-Pl SN-Tr-hit-Pl-ImpF & QM & 2P-self-Pl \\
\hline & ¿¿Porqué se están pegando ustedes?' & & \\
\hline & Why are you hitting yourselves? RMH_10-15-07_320 & & \\
\hline
\end{tabular}

\subsection*{10.4.3 Object-oriented deverbal nouns}

The object-oriented deverbal noun (§14.3) is used in similar constructions. \({ }^{17}\) This nominalization requires a possessor that corresponds to the subject of the verb in a synonymous finite construction. All of the verbs in this case are, of course, transitive.
(167) Comcaac coi ocoaaj iha.
person/Seri.Pl the.PL 3P-ON-know-Pl DcL
'La gente seri lo sabe.'
The Seri people know it. Xмн_08-15-07_31a
(168) He hant moyaai zo himaai iha.

1Pro place 2P-ON-travel.to a 1P-ON-N-know-Pl DCL
'No sabemos a dónde vas.'
We don't know where you are going. (NTT, Jn 14:5) XMH_-88-15-07_31b
(169) Oot zo toc cötiih ma, he hapi htaai, hoicö iihi. coyote a there 3IO-Rl-be.Fl DS 1Pro Intns 1SGS.Tr-Rl-make 1P-ON-kill Past 'Yo mismo maté un coyote.'
I myself killed a coyote. хмH_08-15-07_31c
(170) Cmaam himcop xiica hizcop ipasi oomzo ha. woman DT-VT thing-Pl Px-VT 3P-PON-Pv-drink 3P-ON-want DcL
'Esa mujer quiere que esto se tome.'
That woman wants this to be drunk. хм﹎﹎08-15-07_31e

\section*{Adnominal examples}
(171) Hap hoiicö com iiha capii」 ha.
mule.deer 1P-ON-kill the.Hz fat DCL
'El venado bura que maté era gordo.'
The mule deer that I killed was fat. (DS2010, capii) XMH_08-15-07_31f

\footnotetext{
\({ }^{17}\) The thing to which the deverbal noun refers is apparently the topic in these examples.
}
(172) haxöl inaail caziim ocoho quih
clam 3P-shell/skin SN-pleeasant 3P-ON-see the.FL
'la concha bonita que había encontrado'
the pretty shell that s/he had found (DS2010, cacocta) XMH_08-15-07_32a
(173) He hant moyaai zo himaaj iha.

1Pro place 2P-ON-travel.to a 1P-ON-N-know-Pl DCL
'No sabemos a dónde vas.'
We don't know where you are going. (NTT, Jn 14:5) XMH_08-15-07_32b

\subsection*{10.4.4 Proposition/oblique-oriented deverbal nouns}

The proposition/oblique-oriented deverbal noun (§14.4) is commonly used in similar constructions. The possessor of the deverbal noun construction corresponds to what would be the subject of the verb in a synonymous finite construction.
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{4}{*}{(174)} & Cöizaxö & \multicolumn{3}{|l|}{hac haptco cöiyaasitim} & iha. \\
\hline & 3IO-3P-PON-discuss & the.Lc & alread & 3IO-3P-PON-deceive & DCL \\
\hline & \multicolumn{5}{|l|}{'Ya estaba engañándole con lo que decía.'} \\
\hline & \multicolumn{5}{|l|}{Already he was tricking him by what he was saying. (Tramposo_37) XMH_08-15-07_32C} \\
\hline \multirow[t]{4}{*}{(175)} & \multicolumn{5}{|l|}{Cöiyaasitim iha.} \\
\hline & 3IO-3P-PON-deceive & DcL & & & \\
\hline & 'Le había engañado & & & & \\
\hline & He had tricked him. & nejo_Coyc & & & \\
\hline
\end{tabular}

\section*{Adnominal examples}
(176) Hateeya Łziix iháx \(\lrcorner\) an ihiip quih conspooin aha. bottle cooking.oil 3P.in 3P-PON-stand the.FL 3IO-2SGS-Ir.ID-close Aux-DcL 'Debes cerrar la botella de aceite.'
You should close the bottle of oil. (DS2010, an ihiip) ХмН_ 08 -15-07_32d

\subsection*{10.4.5 Irrealis examples}

While the examples above are all realis, "deverbal" irrealis forms also exist and are common, although numerous complications present themselves. Only a few simple examples are given here; more are found in \(\S 14.5\) where they are discussed in detail.

A common future sentence has a stripped irrealis form (one lacking subject person inflection) followed by either the auxiliary ca ( \(\S 20.2 .2\) ) and the declarative modal ha seen above (see also \(\S 20.5\) ), or by the auxiliary quee (a contextual variant of ca, see \(\S 20.2 .2\) ) and the question modal-ya (§20.5).

Both finite and deverbal irrealis forms utilize the prefix si- (§17.3.1.3). The deverbal irrealis forms are distinguished from the finite irrealis forms in that the deverbal forms do not inflect for
subject (§17.3.2.1) with the same morphology as finite verbs. When the verb is intransitive and the subject is third person, the irrealis finite and deverbal forms are indistinguishable except for the choice of auxiliary.

Examples (177)-(182) show the use of irrealis deverbal nouns as main verbs. Note the lack of any marking of subject person on the verb itself.
(177) Hizac iti hayaii quih ixaap \({ }^{\circ}\) poopxa ta,

Px.Lc 3P-on 1PlP-PON-be.Fl.Pl the.Fl days Ir.Dp-three DS
he cösitooii caha.
1Pro 3IO-Ir.Id-go.Pl Aux.SN-DCL
(*cöhasitooij)
3IO-1PLS-Ir.Id-go.PL
'Después de quedarnos aquí tres días, saldremos.'
After we have been here three days, we will leave. хмн_ \(08-15-07 \_33 а\)
(178) iSaapl quee -ya?

Ir.Id-cold Aux.SN QM
‘¿Hará frío?’ / ‘¿Estará frío?’ хмн_08-15-07_33b
Will it be cold? (ambiguous between weather and simple interpretation)
(179) ¿Me \(\quad\) hant pofii ta \(\lrcorner\) smaaitoj quee -ya?

2Pro tomorrow Ir.Id-N-fish-Pl Aux.SN QM
‘¿No vas a ir a la pesca mañana?’
Won't you go fishing tomorrow? RMH_10-15-07_61a RMH_10-15-07_61c
(180) He ma siiho caha. (*ma hsiiho)

1Pro 2SGDO Ir.Id-see Aux.SN-Dcl 2SGDO 1SGS.Tr-Ir.Id-see
'Te veré.'
I will see you. RMH_10-15-07_61b
(181) ¿Cmaacoj quih zímjöc siifp quee -ya?
old.man the.Fl when? Ir.Id-arrive Aux.SN QM
'¿Cuándo va a llegar mi viejo (padre)?'
When is my old man (father) going to arrive? (DS2010, cmaacoi) Хмн_08-15-07_33c
(182) ¿Me cmaax siitax quee -ya? (*insiitax)

2Pro now Ir.Id-go Aux.SN QM 2SGS-Ir.Id-go
'¿Vas a ir ahora?'
Are you going to go now? (DS2010, cmax) \(\times \mathrm{XMH}-08-15-07 \_33 \mathrm{~d}\)
Irrealis forms are also used adnominally. The forms become more complicated, however; see \(\S 8.4\) for examples and \(\S 14.5\) for discussion of the forms.

\subsection*{10.4.6 The distribution of the deverbal nouns}

At least two major questions arise. First, when does one use a deverbal noun construction rather
than a finite verb? And second, how does one choose which deverbal noun type to use? The issue is important since some sentences that might be expected to be grammatical are not. The use of deverbal nouns in questions is discussed in chapter 6 .

In the case of simple statements, the use of deverbal nouns expands the options for expressiveness, although sometimes there is no obvious difference in meaning between a predicative clause of this type and clauses with finite verbs, as example (183) shows.
(183) Me mipnaail quih maziim. 2Pro 2P-skirt the.Fl Px-pleasant
\begin{tabular}{lllll}
\(\cdots\) & xaziim. & \(\cdots\) & caziim & iha. \\
& Em-pleasant & & SN-pleasant & DCL
\end{tabular}
'Tu falda es bonita'.
YOUR skirt is pretty. RRR \(10 \mathrm{May2010}\) yazim is past tense.
In other cases, it seems that the deverbal noun is the preferred form for describing an action that is currently happening.
(184) Caticpan iha.

SN-work DCL
'Está trabajando.'
S/he is working. RRR
(185) Caafp iha.

SN-arrive DCL
'Está llegando’
S/he is arriving. RRR
Nevertheless, some collocations and situations yield differences between these realis forms, of course.
(186) ŁHax cmaapa」 miifp. ... yoofp. ... *xoofp ... caafp iha. just.now Px-arrive DT-arrive Em-arrive SN-arrive DCL
'Acaba de llegar.'
S/he/it just now arrived. RRR
\(\begin{array}{llllll}\text { (187) } & \begin{array}{l}\text { Zaah } \\ \text { sun/day }\end{array} & \text { quih } & \text { coox } & \text { cah } & \text { cömaticpan. } \\ & \text { the.FL } & \text { all } & \text { the.FL-Foc } & \text { 3IO-PX-work }\end{array}\)

'Trabaja todos los días.'
S/he works every day. RRR
(188) Mipnaail quih maziim áa.

2P-skirt the.Fl Px-pleasant Intns

'Tu falda es muy bonita'.
Your skirt is very pretty. RRR
(189) Panaal hizquih moaatjö. ... *yaatjö. ... xöaatjö. ... *coaatjö iha. honey Px.Pl-Fl Px-sweet DT-sweet Em-sweet SN-sweet DCL 'La miel es dulce.'
Honey is sweet. (using the generic determiner hizquih) RRR
(190) Panaal quih moaatjö. ... *yaatjö. ... xöaajö. ... coaatjö iha. honey the.FL Px-sweet DT-sweet Em-sweet SN-sweet DCL
'La miel es dulce.'
Honey is sweet. RRR
(191) Panaal quih yaatjö, \(\llcorner x i i c a\) an icaai coi」 Łiiqui cöihiin hac \(\lrcorner\). honey the.FL DT-sweet sugar with.respect.to.it
'La miel es más dulce que el azúcar.'
Honey is sweeter than sugar. RRR

\subsection*{10.4.7 The comparative constructions}

Several comparative constructions exist and all utilize a deverbal noun used predicatively. In each of these the item being compared to another is the subject of the clause and generally appears first.

In the most common comparative construction, the 'standard' is presented most often in a phrase that appears after the simple statement using the complex phrase iiqui cöihiin hac with respect to him/her/it/them or another appropriate form (the etymology of which is not entirely clear). \({ }^{18}\) See example (192).
(192) Cocazni \({ }^{\circ}\) com, tiix cacaatol iha, rattlesnake the.Hz DDS SN-dangerous DCL
        haquiimet com iiqui cöihiin \(_{\perp}\) hac.
        lizard the.Hz compared.to.it the.Lc
'Una víbora de cascabel es más peligrosa que una lagartija.'
A rattlesnake is more dangerous than a lizard. (DS2010, iqui cöhiin hac) RMH_07-11-07_51c

\footnotetext{
\({ }^{18}\) This type of comparative construction does not neatly fall into any of the types presented in Stassen (2001)
although it is most similar to the so-called locational comparative
}

However, there is flexibility in the presentation of the items being compared, as (193) demonstrates. But even in this more complicated presentation, the compared item precedes the standard (and then is repeated).
(193) Haamjö icáp coi hesen coi iiqui cöihiin hac \({ }_{\perp}\) Agave.subsimplex 3P-stalk the.PL ironwood the.PL with.respect.to
\begin{tabular}{llllll} 
haamjö & icáp & coi, & taax & cafzx & iha. \\
Agave.subsimplex & 3P-stalk & the.PL & DDP & SN-lightweight & DCL
\end{tabular}
'LA INFLORESCENCIA DEL AGAVE SUBSIMPLEX es más liviano que palo fierro.' RRR 7May2010
THE FLOWERING STALK OF THE AGAVE SUBSIMPLEX is lighter than ironwood. (DS2010, icap)
Example (194) is similar to the preceding one except that the compared item (ego) does not lead out in the sentence.
(194) Rosa quih iiqui he ihiin hac he cacösxaj iha. the. FL compared.to.me 1Pro SN-long/tall DCL
'Yo estoy más alta que Rosa.'
I am taller than Rosa. (DS2010, cacösxaj) RRR 7May2010
While the construction with iiqui cöihiin hac seems to be the most common explicit comparative construction, it is not the only one. In fact it is common in a conversation in which a couple of referents are already established, to hear simple questions like those in (195)-(196):
(195) ¿Quíih caii -ya?
who? mature QM
‘¿Quién es mayor?'
Who is older? (More literally, Who is mature? RRR 7 May2010
(196) ¿Me caii -ya? ¿Me quisil -ya?

2Pro mature QM 2Pro SN-small QM
'¿Eres mayor o menor?'
Are you older or younger? (More literally, Are you mature? Are you young?) RRR 7May2010

The reply to these kinds of questions typically is a simple sentence such as the one in (197).
(197) He quisil iha.

1Pro SN-small Dcl
'Yo soy menor.'
I'm younger. (Literally, I'm little.) RRR7May2010
The idiomatic expressions iizc ano cöcayaxi (3P-front 3P.in 3IO-SN-measure) and iizc ano coha (3P-front 3P.in 3IO-SN-be Irreg ) mean smaller, younger; they have comparison included in
them automatically and are illustrated by examples（198）－（199）．The standard is the oblique／indirect object of the predicate expressed as the deverbal noun．
（198）Oot cop，tiix xeecoj cop Łiize ano cöcayaxi」 ha． coyote the．VT DDS wolf the．VT smaller／younger DCL ＇El COYOTE es más pequeño que el lobo．＇
A COYOTE is smaller than a wolf．（DS2010，cöcayaxi）RRR 7May2010
（199）He \(\llcorner\) miize ano me coha」 ha． 1Pro 2P－front 3P．in 2IO 3IO－SN－be \({ }_{\text {Irreg }}\) DCL
Yo soy más joven（o más pequeño）que tú．＇
I am younger（or smaller）than you．（DS2010，coha）RRR 7May2010
The idiomatic expressions เitacl cöcayaxi」（3P－surface／place．above 3IO－SN－measure）and titacl cöquiyat」（3P－surface／place above 3IO－SN－reach）are similar in structure and mean bigger， older，and higher，respectively．See example（200）．
（200）Zaah quij hant quij เitacl cöcayaxi」 ha． sun the．Cм earth the．CM bigger／older DCL ＇El sol es más grande que la tierra．＇ The sun is larger than the earth．（DS2010，cöcayax）7May2010

Another，but less common，comparative construction presents the compared item in a simple clause and then tells the way in which it surpasses another item．This is illustrated in（201）．
（201）Eenim quih ziix caaiscan iha． metal the．Fl thing SN－hard DCL
Hocö quih iiscan quih anxö cöqueemij iha． sawn．wood the．FL 3P－PON－hard the．Fl Intns 3IO－SN－Tr－surpass DcL
＇El metal es duro．Es mucho más duro que la madera．＇
Metal is strong．It is much stronger than wood．（More literally，Metal is strong．It surpasses wood in hardness．）（DS2010，cöqueemij）7May2010

Another relatively uncommon construction uses the stative verb Vayaxi measure in a negative form．In example（202）that verb appears as a finite verb，unlike the others in this section．It is also different from other examples in this section in that the standard of comparison is a nonreferential nominal（cmiique person）．
\begin{tabular}{clll}
（202） & Cmaacoj tiquij & tihiij & oo toohit， \\
old．man & MD．CM & RL－remain．seated & DL RL－UO－eat \\
cmiique & hax & yomayaxi． & \\
person & INTNS & DT－N－measure
\end{tabular}
'Ese viejo se quedó comiendo. Es más grande que cualquier persona.'
That old man stayed behind eating. He is bigger than anyone else. (DS2010, quihiii) 7May2010
Finally, examples (203)-(204) illustrate the presentation of more specific information about the measurements in the comparison. These also do not use simple predicative clauses, but a transitive verb that means leave behind, go away from. The first example below uses an objectoriented deverbal noun (see §14.3).
(203) ¿Me hant zó cyaxi cömooix -ya?

2Pro land/year how? SN-? 3IO-2P-ON-go.away.from QM
‘¿Cuántos años tienes más que él?’
How many years older than him are you? (DS2010, quiiix) 7May2010
(204) Hant coocj cohyooix.
land/year SN-two 3IO-1SGS.Tr-Dt-leave.behind
'Tengo dos años más que él/ella.'
I am two years older than him/her. (DS2010, quiiix) 7May2010
See also the use of superlative expressions with quipac discussed at the beginning of chapter 24.

\section*{11. Coreference and disjoint reference in simple clauses}

Coreference between the subject (agent/experiencer/actor) and direct object (patient/theme) of a clause is the hallmark of the canonical reflexive construction (§11.2.1). The reflexive construction is syntactically and morphologically transitive in the typical situation. In all cases it depends on coreference with an agent/experiencer/actor that is also the surface subject except in the passive clause. The target of the reflexive may also be an indirect object.

Coreference between the subject and a possessor merits specific discussion (§11.3). No reflexive pronoun is used in this situation, but coreference may be unambiguous. Complements of postpositions show a similar pattern (§11.4).

A few verbs are semantically reflexive (§18.4.6); the action is one that a person commonly does to herself/himself. No reflexive pronoun occurs with these intransitive verbs.

Situations in which two entities are performing a reciprocal action utilize a transitive construction and a word ( \(\mathbf{p t i}\) ) that is distinct from the reflexive pronoun (§11.5). This same word is used when the action is performed on two or more items, one to another, by a distinct agent.

Before reflexive and reciprocal clauses are presented, however, the referential properties of simple determiner phrases are discussed since these properties relate to the topic of coreference within a clause.

\subsection*{11.1 Determiner phrases}

A determiner phrase typically refers to an entity other than the speaker or hearer, although specific phrases such as he hapi hisoj hipquij I myself, more literally this my very own being (1Pro Intns 1P-self Px-Cm), and me hapi misoj hipquij you yourself (2Pro Intns 2P-self Px-Cm) are obvious exceptions (see §16.1.3).

The use of a phrase such as comcaac coi (person/Seri.Pl the.PL) may refer to a group of people to which the speaker and hearer do not belong. The use of a nominal phrase such as this, however, does not imply that the speaker is excluding himself or herself from that group. The person who utters or hears either of sentences (1)-(2) may or may not be a Seri person.
(1) Comcaac coi Sonora quij iti coii ha. person/Seri.Pl the.Pl the.Cm 3P-on SN-be.Fl.Pl Dcl
'Los seris viven en Sonora.'
The Seris live in Sonora. op_2-07-07_03
(2) \({ }^{\circ}\) Xiica quixaazjoj \({ }^{\circ}\) coi, comcaac coi \({ }^{\circ}\) hehe án \({ }^{\circ}\) com soldiers the.Pl person/Seri.Pl the.PL countryside the.Hz
```

ano toom ma x, cömocaaaxoj.
3P.in Rl-lie DS UT 3IO-Px-follow-PL

```
'Los soldados \({ }_{i}\) perseguían a los seris \(\mathrm{i}_{\mathrm{i},{ }^{*}{ }_{\mathrm{j}}}\) mientras estaban \(\mathrm{i}_{\mathrm{i}}\) en el monte.' The soldiers \({ }_{i}\) chased the Seris \({ }_{i}\) while they \(y_{i,{ }_{j}}\) were in the desert. \({ }^{1}\) op \({ }_{-}-007-07-04\)

Nevertheless, the speaker may explicitly include himself or herself in the group by using the first person pronoun he (§16.1.1) modified by the nominal comcaac, as in (3). (This usage does not have any implication about the hearer.)
(3) He comcaac, he Sonora quij iti coii ha. 1Pro person/Seri.Pl 1Pro the.Cm 3P.on SN-be.Fl.Pl Dcl
'Nosotros los seris vivimos en Sonora.'
We Seris live in Sonora. \({ }^{2}\) op_2-07-07_05
In the same way, the hearer may be included by using the second person pronoun me (§16.1.2) followed by such a nominal. Note that in (4) the verb matooctam carries second person plural subject inflection (ma-), and that in (5) the (irregular) verb hatom is inflected for first person. These examples, then, actually begin with pronouns modified by a relative clause

Figure 11.1: Pronoun with predicate nominal


\footnotetext{
\({ }^{1}\) The referential options are limited by the presence of the Different Subject marker at the end of the dependent clause. See §3.6.
\({ }^{2}\) One consultant repeatedly and unconsciously read this sentence with the pronoun he just before the word iti (OP_2-07-07_06), sometimes omitting it before Sonora. This is important for the analysis of the configuration of sentences with preverbal postpositions. See §5.7.
}
containing a predicate nominal, as diagramed in Figure 11.1 for (4) (see §8.4.1).
Me comcaac izó matooctam?
2Pro person/Seri.Pl how? 2PLS-Rl-look.at-PL
‘¿Cómo lo ven Uds. los seris?'
How do you Seri people view it? op_-0.07-07_08
(5) He comcaac \({ }^{\circ}\) hehe án \({ }^{\circ}\) com ano hatom max, 1Pro person/Seri.Pl countryside the.Hz 3P.in 1 SGS-Rl-lie \({ }^{3}\) DS UT
\({ }^{\circ}\) xiica quixaazjoj \({ }^{\circ}\) coi he mocaaaxoj.
soldiers the.PL 1IO Px-follow-PL
'Cuando nosotros los seris estábamos en el monte, los soldados nos perseguían.'
When we Seris were in the desert, the soldiers chased after us. op_2-07-07_09
This determiner phrase may be postposed as a constituent (§3.12), as in (6).
(6) ... ox hayoomxoj, he comcaac.
thus 1PlS-Dt-say-Pl 1Pro person/Seri.Pl
'.. así lo llamamos, nosotros los seris.'
... that's what we call it, we Seris. (DS2007, xpeezoj 1) RMH_08-04-07_165
Two DPs or pronouns (including null) in the same clause are usually interpreted as not being coreferential (but see \(\S 11.3\) for coreferential possessors and, of course, \(\S 11.2 .1\) about reflexive pronouns). Some of these interpretations are quite marked in the absence of an appropriate context; these interpretations are marked with \(\%\). (On the use of focal demonstrative pronouns after a nominal, as seen in (9), see §16.2.4.)
(7) Cmajiic coi imiiht.
woman.Pl the.PL 3:3-Px-see-PL
'Vieron a las mujeres. / Las mujeres \(\operatorname{lo}(\mathrm{s}) / \mathrm{la}(\mathrm{s})\) vieron. (*Las mujeres se vieron.)'
They saw the women. / The women saw it/her/him/them. (*The women saw
themselves.) Op_2-07-07_10
(8) Taax, cmajiic coi imiiht.

DDP woman.Pl the.Pl 3:3-Px-see-Pl
'Aquéllos encontraron a las mujeres. (*Las mujeres se vieron.)
They found the women. (*The women saw themselves.) Rмн_11-27-07_43a

\footnotetext{
\({ }^{3}\) This is the singular form, and is literally I was lying. The explicitly plural form is hatóoiti. With this irregular verb the audible prefix for first person is ambiguous between singular and plural. The singular form is not uncommon.
}
(9) Cmajiic coi, taax imiiht.
woman.PL the.PL DDP 3:3-Px-see-PL OP_2-07-07_11
'Las mujeres lo(s)/la(s) vieron. / \% Vieron a las mujeres.' (*Las mujeres se vieron.) The women saw them. / \% They saw the women. \({ }^{4}\) (*The women saw themselves.)
(10) Taax cmajiic coi imiiht.

DDP woman.Pl the.PL 3:3-Px-see-Pl
'Las mujeres los/las encontraron. (*Las mujeres se vieron.)
The women saw them. (*The women saw themselves.) RMH_11-27-07_43b
(11) Cmajiic coi cmajiic coi imiiht.
woman.Pl the.PL woman.Pl the.PL 3:3-Px-see-PL
'Las mujeres \({ }_{i}\) vieron a las mujeres \({ }_{j}\). . (*Las mujeres se vieron.)
The women \({ }_{i}\) saw the women \(j_{j}\). (*The women saw themselves.) OP_--07-07_13a
The finite verbs commonly stand alone without pronouns or nominal phrases. Unless the reflexive pronoun is present, the subject and object cannot be interpreted as coreferential in examples like the following:
(12) Imiiho.

3:3-Px-see
'Lo/la/los/las vio.' (*'Se vio.')
S/he/it saw her/him/it/them. (*S/he/it saw himself/herself/itself.) OP_-207-07_13b
(13) Imiiht.

3:3-Px-see-PL
'Lo/la/los/las vieron.' (*‘Se vieron.')
They saw it/her/him/them. (*They saw themselves.) OP_-07-07_16

\subsection*{11.2 Reflexives}

Coreference between two nominals in a simple clause is expressed in different ways. Canonical reflexives utilize reflexive pronouns (§11.2.1) as do reflexives in which the target is an indirect object (§11.2.2). Coreference between a subject and a possessor (§11.3) or the complement of a postposition (§11.4) does not make use of the reflexive pronoun; it may be either unmarked or optionally indicated by an intensifying adverb. Some verbs are inherently reflexive in their semantics but are not reflexive morphologically or syntactically (see §18.4.6).

In all cases, the antecedent of the reflexive is the agent/experiencer/actor of the clause, which is usually also the surface subject of the clause. When the reflexive clause is passive, as in (33), the antecedent is the unexpressed agent/experiencer/actor.

\footnotetext{
\({ }^{4}\) There is no problem with a sentence constructed like this but with a singular subject (reflected in the form of the verb stem): Cmajiic coi, taax imiiho (3:3-PX-see) S/he saw the women. (OP_2-07-07_15)
}

\subsection*{11.2.1 Simple analytic reflexives}

Coreference between subject and object is usually expressed using a reflexive pronoun. A few simple examples are given here.
(14) iIsoi itamsisiin? 3P-self 3:3-RL-love
‘¿Se ama a si mismo?'
Does he love himself? / Does she love herself? op_2-07-07_24
¿Isolca itamsisiije? 3P-self-PL 3:3-RL-love-PL
¿¿Se aman a si mismos?'
Do they love themselves? RMH_09-28-07_165a
(16) Hisoj ihyamsisiin.

1P-self 1SGS.Tr-Dt-love
'Me amo.'
I love myself. RMH_09-28-07_165b
Examples with reflexive pronouns where coreference is not possible (because the features of the subject are not the same as the reflexive pronoun) are ungrammatical. \({ }^{5}\)
```

* ¿Isoj intamsisiin?
3P-self 2SGS-Rl-love
(¿Te amas?) ( Do you love yourself?)

```

The reflexive pronouns are listed in Table 11.1. \({ }^{6}\) The reflexive pronoun is a possessed form of the bound noun stem for body (which also has an extended sense of being in some contexts; see below). This lexeme isoj (his/her/its) body occurs in non-reflexive examples such as:
(18) \begin{tabular}{lllllll} 
Cocazni & com & ilít & quij & cactim & iha & xo \\
rattlesnake & the.CM & 3P-head & the.CM & SN-be.cut & DCL & but
\end{tabular}

\footnotetext{
\({ }^{5}\) See \(\S 10.4 .2\) for a special situation in which the reflexive is always third person despite the semantics of the clause.
\({ }^{6}\) See Table 16.2 for the complete set of personal pronouns.
In addition, see the use of the Intensifier hapi (§24.2.1) without a reflexive pronoun.
Furthermore, the words isoj áa (3P-body/self real) are sometimes used to communicate the idea of the "true" or the "real" item. One example is given below. For more examples, see those on page 265 ff .
}
\begin{tabular}{llll} 
(i) & \begin{tabular}{l} 
hant quih iti \\
place the.FL 3P-on
\end{tabular} & 3P-AON-be.person
\end{tabular}\(\quad \frac{\text { isoj áa }}{\text { 3P-self }}\) real the.LC
```

isoj com cói csiijim oo ha.
3P-body the.Hz still SN-move DL DCL

```
'La cabeza de la víbora de cascabel estaba cortada, pero el cuerpo todavía se movía.' op_2-07-07_17 The head of the rattlesnake was cut off, but its body was still moving. (DS2005, isj)

The plural stem is sometimes used for the plural reflexives, as etymologically suggested, but often the singular form is used there as well, as the examples below illustrate. \({ }^{7}\)

The reflexive pronoun occurs in a special place in the verb phrase (as the term is used in this grammar). It is not a simple direct object since it does not have the syntactic properties of direct objects. See the discussion in \(\S 5.2\) where, most importantly, it is shown that the reflexive pronoun follows verb phrase adverbs, a fact that distinguishes it from typical direct objects. As shown below, the reflexive use of isoj (and its other forms) does not include a determiner. While a simple transitive has the structure shown in (19a), the reflexive has that shown in (19b). \({ }^{8}\)
a. Simple transitive

DP DP VP
Subject Direct Object Verb \({ }_{\text {[with Subject inflection and Direct Object inflection] }}\)
b. Simple reflexive

DP VP
Subject isoj Verb \({ }_{\text {[with Subject inflection, third person Direct Object] }}\)

\subsection*{11.2.1.1 Reflexive pronoun and object inflection}

The following examples show the construction in which there is coreference between a singular subject and the direct object. A reflexive pronoun appears before the verb in lieu of the direct
\begin{tabular}{lrr}
\hline \multicolumn{3}{c}{ Table 11.1: } \\
& Reflexive pronouns & \\
First person & Singular & Plural \\
Second person & hisoj & isolca \\
Third person & misoj & misolca \\
Third person unspecified & isoj & isolca \\
\hline
\end{tabular}

\footnotetext{
\({ }^{7}\) Some reflexives are part of idioms, including those mentioned in \(\S 7.5\).
\({ }^{8}\) A complete analysis of these clauses must be able to account for the transitivity of the construction and the fact that the usual agreement morphology for direct object is not used, although that for indirect object is used (see below).
}
object inflection prefix. \({ }^{9}\) The reflexive pronoun and the object inflection prefix cannot co-occur (20b). If the reflexive pronoun is not used, the sentence is also ungrammatical (except for third person on third person and a non-reflexive reading, of course), as shown in (20c).

The verb itself, taken out of context without the reflexive pronoun, is in each case a wellformed transitive verb in the form that would appear with a third person direct object (morphologically unmarked except when third person acts on third person); hence the word-by-word translation renders these words with third person direct objects.
a. Hisoj ihtaactim ma, ... 1P-self 1SGS.Tr-Rl-cause.be.cut DS
'Me corté, ...'
I cut myself, ... (DS2005, cpajim) OP_2.07-07_18
b. * Hisoj him ihtaactim ma, ... 1P-self 1SGDO 1SGS.Tr-RL-cause.be.cut DS
('Me corté.) (I cut myself.)
c. * Him ihtaactim ma, ...

1SGDO 1SGS.Tr-Rl-cause.be.cut DS
('Me corté.) (I cut myself.)

'El pez infla que estaba en la red se infló y no pudo salir.' op_2-07-07_20
The pufferfish was caught in a net, it inflated itself and couldn't get out. (Ds2005, cahiix)
Ox popacta ta, hipi \(\quad\)\begin{tabular}{l} 
hisoi \\
ihsiih
\end{tabular}\(\quad\) haa hi: ...
thus Ir.Dp-be.in.appearance DS
'Entonces me diré: ...'
Then I will tell myself: ... (Lk 12:19)
OP_2-07-07_21
(23) Hacat com isoi itahaa, yoque. shark the.Hz 3P-self 3:3-Rl-cause.EQ Dt-US-say 'Se hizo tiburón, se dice.'
He changed himself into a shark, it is said. (DS2005, canáa, improved) OP_2-07-07_23

\footnotetext{
\({ }^{9}\) The \(3: 3\) prefix ( \(\S 17.1 .2 .1\) ), which is part of the subject inflection paradigm, appears in the third person reflexive constructions, as in (14). The \(\mathbf{i}\) that sometimes occurs before first and second person subject markers is simply epenthetic for phonological reasons; see §27.1.1.
}
(24) iIsoi itaactim?

3P-self 3:3-RL-cause.be.cut
¿¿Se cortó a si mismo?’
Did he cut himself? / Did she cut herself? \({ }^{10}\) Op_2-07-07_25a
(25) Isoi iyooho.

3P-self 3:3-Dт-see
'Se vio a si mismo.'
She saw herself. / He saw himself. / It saw itself. \({ }^{11}\) OP_2-07-07_25b

\subsection*{11.2.1.2 Plural subjects}

The form of a reflexive construction with a plural subject is somewhat variable. \({ }^{12}\) The judgments in (26) are representative. The words used in these examples are he (first person pronoun, unmarked for number, §16.1.1), the reflexive pronouns hisoj and hisolca, and different forms of the lexeme \(V_{\text {nip }}\) hit (especially with hand): \(\sqrt{ }\) nip (singular subject, perfective), \(\sqrt{\text { nipatim }}\) (singular subject, imperfective), \(\sqrt{ }\) nooptoj (plural subject, perfective), \(\sqrt{n}\) nooptolca (plural subject, imperfective). The deverbal noun requires a modal in a simple sentence ( \(\S 10.1\); the declarative (i)ha (§20.5) is used in the examples here.

It is apparently most appropriate to use a verb inflected for plural subject and a plural reflexive pronoun. Examples \((26 \mathrm{~g}, \mathrm{~h})\) are very well-formed. But examples in which a verb inflected for plural subject is used with a singular reflexive pronoun are also very acceptable; see (26e,f). Examples combining a verb inflected for singular subject and a singular reflexive pronoun were judged ungrammatical; see ( \(26 \mathrm{c}, \mathrm{d}\) ). Those where both the verb and the pronoun are singular require an interpretation in which a single person is acting reflexively.

\footnotetext{
\({ }^{10}\) This expression indicates a voluntary cutting; a different expression is used for an accidental cutting.
\({ }^{11}\) This example is a bit unnatural since, as was explained, one usually looks in a mirror and sees one's face, and therefore would say just that.
\({ }^{12}\) Examples with plural subjects are also a bit more complicated in their interpretation. The primary interpretation of the plural examples is strict reflexive (each one to himself or herself), but for some speakers, at least, a reciprocal reading may be accepted. For most consultants the reciprocal reading is expressed only with the word pti (§11.5). Part of the problem of these examples is choosing an appropriate transitive verb that has well-known and well-accepted plural forms. The verb \(\sqrt{ }\) azt tattoo that appears in some examples in Marlett (1981b) is now somewhat unused and therefore problematic for certain consultants since they feel unsure about the plural forms.
}
\begin{tabular}{llll} 
a. & (He) hisoj & ihyoníp. & (one person acting, reflexive) \\
b. & (He) hisoj & ihyonípatim. & (one person acting, reflexive) \\
c. & * He hisolca & ihyoníp. & [ungrammatical] \\
d. & * He hisolca & ihyonípatim. & [ungrammatical] \\
e. & (He) hisoj & hayonooptoj. & (plural persons, reflexive) \\
f. & (He) hisoj & hayonooptolca. & (plural persons, reflexive) \\
g. & (He) hisolca & hayonooptoj. & (plural persons, reflexive) \\
h. & (He) hisolca & hayonooptolca. & (plural persons, reflexive)
\end{tabular}

RMH_10-15-07_33
(27) Hax cop ah hisoi (~hisolca) cöhamatoaasxaj. water the.VT Foc 1P-self 1P-self-PL 3IO-1PLS-Px-clean-PL
'Nos lavamos con agua.'
We wash ourselves with water. (DS2005, caaisx, improved) LHC_2-8-07_76

\subsection*{11.2.1.3 Transitive clauses}

In the canonical reflexive construction, the verb is inflected as if it had a third person direct object. In the simplest cases with first and second person subjects, no overt morphology occurs, but in cases with third person subjects, the \(3: 3\) prefix \(\mathbf{i}\) - appears, as in (14). The transitivity tests (see Appendix C) are unambiguous: the clauses are transitive. Note that the transitive allomorph of the first person singular subject inflection (h- rather than hp-) appears in (20) and (22), that the transitive allomorph iha- of the infinitive prefix appears in (28), and that the transitive allomorph of the action nominalization \(\mathbf{h}\) - is used in (29). Alternatives, such as an attempt to use the intransitive infinitive prefix ica- in (28) instead of the transitive iha-, which would yield *icaactim, are ungrammatical.

\section*{(28)}

Hisoj ihaactim ihmiimzo.
1P-self Inf.Tr-cause.be.cut 1SGS.Tr-Px-want
'Quiero cortarme.'
I want to cut myself. OP_2-07-07_35
(29) Cmaam ticop misoj mihaactim imiimzo. woman Md-Vt 2P-self 2P-AON-cause.be.cut 3:3-Px-want 'Esa mujer quiere que te cortes.' That woman wants you to cut yourself. OP_2-07-07_36

\subsection*{11.2.1.4 Reflexives in multiclausal situations}

The reflexive pronoun may occur in an infinitival clause, as in (28), with its antecedent being the subject that is the controller of the subject of the infinitive. Only three verbs allow infinitival complements; see \(\S 12.1\). Infinitives do not occur in any other construction. An example with \(\sqrt{ } \mathrm{aCa}\) know (in the sense of be able, see \(\S 12.1 .2\) ) is given in (30).
(30) Miizj isoj ihaacta iyomaa.
well 3P-self Inf.Tr-look.at 3:3-Dt-N-know
'No puede protegerse.'
S/he isn't able to protect himself/herself. RMH_08-04-07_169
The reflexive pronoun occurs in other clauses, including complement clauses headed by deverbal nouns, as in (29), only under the conditions that hold for simple clauses (with the understanding that the possessor of the deverbal noun is the subject of the clause).

Examples (31) and (32), with derived causatives, show that the antecedent of the reflexive can only be the agent/subject of the derived verb, not the nominal that would be the agent of the verb on which the causative verb is based.
(31) Juan cop Pedro quij (hipi) isoj cöiyacohot. the.Vt the.Cm Intns 3P-self 3IO-3:3-Dt-cause.see
'Juan se mostró a Pedro.' (*‘Juan mostró Pedro \({ }_{i}\) a sii mismo.')
Juan showed himself to Pedro. (*Juan showed Pedro \({ }_{i}\) to himselfi.) RмH_08-04-07_166a
```

Juan cop Pedro quij (hipi) isoj cöiyaqueecotol.
the.Vt the.Cm Intns 3P-self 3IO-3:3-Dt-cause.listen
'Juan hizo que Pedro le esuchara.' (*`Juan hizo que Pedro se escuchara.')
Juan}\mp@subsup{i}{i}{made Peter j hear himself}\mp@subsup{f}{i,}{}\mp@subsup{,}{j}{\prime}. RMH_08-04-07_168

```

\subsection*{11.2.1.5 Reflexive and passive}

A reflexive clause may be passive. Passive clauses are possible only if the agent/experiencer/actor is unspecified. If this unspecified agent/experiencer/actor is also coreferential with the patient, the conditions are met for reflexivization, and the reflexive pronoun quisoj oneself is used. \({ }^{13}\) Example (33) was given as a question that one might ask if one was supposed to do some kind of ritual before entering a room.
¿Ouisoi sahníp haa -ya? US-3P-self Ir.Id-Pv-hit Aux QM
'¿Debe uno pegarse?'
Is one supposed to hit oneself? (Offered) LHc_2-23-07_148
(34) Hoox miizj quisoj tompaho ho.

Intns well US-3P-self RL-N-Pv-see Dcl
'Uno no se cuida sólo de si mismo.'
One doesn't only take care of oneself. (offered) RMH_08-21-07_94

\footnotetext{
\({ }^{13}\) See also the analogous examples of quisoj in \(\S 7.5\).
}

\subsection*{11.2.1.6 Lack of determiner with reflexive pronoun}

Despite being a noun etymologically, the reflexive pronoun does not occur with a definite article or demonstrative in the reflexive construction. Since the word isoj means his/her/its body/being, there may be situations where the difference between myself and my body or my being is minimal. Thus one may sometimes find hisoj com (1P-body the.Hz) or hisoj cop (1P-body the.Vт) my body or hisoj quij (1P-body the.Cм) my being (in some slightly less corporeal sense) in near synonymy with hisoj (without an article) myself, but the latter is quite different from the others in more ways than semantics, as shown below. Examples (35)-(37) are not the reflexive construction. Note that in (37) the subject and the person to whom the body belongs may or may not be coreferent and that the sentence specifically means that a body per se is being discussed.
```

(35) ¿Isoj quij itamsisiin?
3P-body the.Cм 3:3-Rl-love
‘¿Ama a su propia vida?’ (su ser y su cuerpo)
Does he love his own life? / Does she love her own life? (offered) Op_2-07-07_37
(36)
¿Isoj com itaactim?
3P-body the.Hz 3:3-Rl-cause.be.cut
'¿Cortó $\mathrm{su}_{\mathrm{i}, \mathrm{j}}$ cuerpo?'
Did s/he $i_{i}$ cut his/her/its ${ }_{i, j}$ body? (Coreference possible.) OP_2-07-07_38
(37) Isoj com iyooho.
3P-body the.Hz 3:3-Dt-see
' $\mathrm{Vio}_{\mathrm{i}} \mathrm{su}_{\mathrm{i}, \mathrm{j}}$ cuerpo.'
S/he $e_{i}$ saw his/her/its $i_{i, j}$ body. ${ }^{14}$ (Coreference possible.) OP_2-07-07_40

```

The reflexive construction is more sharply distinguished from the non-reflexive construction when the verb is not construable as denoting an action to or towards one's body. The following examples are ungrammatical with any determiner present since the determiner would require a corporeal interpretation (compare them with (22) and (23) above).
```

* Hapi hisoj com /quij ihsiih haa hi: ...
IntNS 1P-body the.Hz/the.Cm 1SGS.Tr-Ir.Id-say Aux Dcl
('Me diré: ...') (Then I will tell myself: ...)}\mp@subsup{}{}{15
* Hacat com isoj com / quij iyahaa. shark the.Hz 3P-body the.Hz/the.Cm 3:3-Dt-cause.EQ ('Se hizo tiburón, se dice.') (He changed himself into a shark.)

```

\footnotetext{
\({ }^{14}\) The article would be cop (the.VT) if one were standing in front of a mirror.
\({ }^{15}\) This phrase with quij is grammatical on the reading of telling about oneself (to others).
}

\subsection*{11.2.1.7 Inexact coreference}

In the canonical reflexive construction, the controller is exactly coreferential with the reflexive pronoun. Example (40) was one result of attempts to elicit examples with partial coreference between subject and direct object. Note that the word hisolca is followed by a demonstrative adjective; this indicates that the sentence is not a true reflexive construction. The direct object is an emphatic pronominal phrase of the type discussed in \(\S 16.1 .3\). The lack of the article in (41) makes that example ungrammatical.
(40) Hipi hisolca hizcoi hyooho. Intns 1P-self-Pl Px-PL 1SGS.Tr-Dt-see
'Vi a nosotros.'
I saw us. OP_2-07-07_41
(41) * Hipi hisolca hyooho. Intns 1P-self-Pl 1SGS.Tr-Dt-see
('Vi a nosotros.') (I saw us.)

\subsection*{11.2.2 Reflexive pronoun and indirect object}

The target of reflexivization is most commonly the direct object of the construction, but it may also be the indirect object (§2.3) or an oblique object (§2.4). \({ }^{16}\) The indirect object examples are interesting in that regardless of the presence of the reflexive pronoun, the third person indirect object prefix obligatorily occurs on the verb (indicated by co-/cö-). That is, unlike the situation with the suspension of direct object inflection, in these cases indirect object inflection is not suspended.
\[
\begin{align*}
& \cdots \quad \frac{\text { isoj }}{\text { 3P-self }} \frac{\text { cöitamjc, }}{\text { 3IO-3:3-RL-bring }}  \tag{42}\\
& \text { '... los trajo a si mismo ..., } \\
& \ldots \text { he brought them to himself, ... (M+2:4) OP_2-07-07_28a }
\end{align*}
\]

\footnotetext{
\({ }^{16}\) The generalization can be made that the reflexive pronoun as such is only possible when there is coreference between an agent/experiencer/actor and an object (direct or indirect, regardless of the semantic role it may have).
The examples below have uncertain syntax, but the reflexive pronoun is not obviously related to a patient/direct object. Both of them have indirect object agreement on the verb.
(ii) Hipi hisoj iic cohmqueepe. INTNS 1P-self 3P-toward 3IO-1SGS.TR-PX-like
'Lo quiero para mí.' / I want it for myself. OP_2-07-07_30a
(iii) He hisoj cohyomacooyam.

1Pro 1P-self 3IO-1SGS.Tr-DT-N-honor
'No soy orgulloso.' / I'm not proud. OP_2-07-07_30b
}
(43) Misoi contamjc?

2P-self 3IO-2SGS-Rl-bring
'¿Los trajiste a ti mismo?'
Did you bring them to yourself? LHс_2-05-07_148, OP_2-07-07_28b
(44)

\title{
Jesús cop \({ }^{\circ}\) xiica quih quiistox \({ }^{\circ}\) quih ptiti coii tacoi
} the.Vт people the.Fl together SN-be.Fl.PL Md-Pl
isoj cöiyacooix .
3P-self 3IO-3:3-DT-cause.go.away.from
'Jesús despidió a la gente.'
Jesus sent the crowd of people away (from himself). (MN 15:39) OP_2-07-07_29
The verb \(\sqrt{ }\) aahal means bring/take with, and of course one always brings the item with oneself. Therefore this verb prototypically occurs with a reflexive pronoun as well as a third person indirect object prefix, as noted above.
¿Zixcám ticom misoj consaahal? haa -ya?
fish that.Hz 2P-self 3IO-2SGS-Ir.Id-bring/take Aux QM
‘¿Llevarás ese pescado contigo?’
Are you going to take that fish with you? RMH_11-27-07_05


Other verbs that subcategorize for indirect objects or oblique objects that are people or animals (see \(\S 2.3\) and \(\S 2.4\) ) also allow these to be reflexive pronouns, with the presence of the third person indirect object inflection required as well. Note that it cannot be omitted, as shown in example (48). The verb \(\sqrt{ }\) eeti fetch for, as in example (51), is only used in intransitive clauses; the item fetched must be deduced from the context or expressed in another clause with another verb.

(48) * Eenim cop hisoi ihyacooix . knife the.Vt 1P-self 1SGS.Tr-Dt-remove
('Me quité el cuchillo de mi mismo.') (I grabbed the knife away from myself.)
(49) Haxz cap isoj cöyaaitim. dog the.Vт 3P-self 3IO-Dt-chase 'El perro se está persiguiendo.'
The dog is chasing itself..\(^{17}\) Lнс_2-05-07_150
\begin{tabular}{|c|c|c|c|}
\hline \({ }^{\circ}\) Ziix ihpaatim \({ }^{\circ}\), & hisoj & cohsaaha & ha. \\
\hline thing 1SGS.Tr-Ir.Dp-?-ImpF & \multicolumn{2}{|l|}{1P-self 3IO-1SGS TR} & Aux-Dcl \\
\hline 'Haré la comida, y lo guard & para m & mismo.' & \\
\hline I will make the food, I will & it for & self. (Offered) & \\
\hline
\end{tabular}
(51) Ihpooij,
hipi hisoj cohpseeti
aha.
1SGS.In-Ir.Dp-UO.fetch.water Intns 1P-self 3IO-1SGS.In-Ir.Id-fetch.for AUX-DCL
'Acarrearé agua para mí mismo.'
I will go for water and fetch it for myself. LHс_2-05-07_151b
The verbs \(\sqrt{ }\) acóhot show, cause to see and \(\sqrt{ }\) aqueecotol make listen provide more interesting contexts since one can use mirrors, pictures, and tape recorders to create more complicated situations. \({ }^{18}\) Examples like (52) and (53) — with or without the intensifier hapi — show that only the subject can be the antecedent of the reflexive pronoun. These examples are not ambiguous.

Juan cop Pedro quij (hipi) isoj cöiyacóhot. the.Vt the.Cm Intns 3P-self 3IO-3:3-Dt-cause.see
'Juan se mostró a Pedro.' (*‘Juan mostró Pedro \(_{i}\) a sii mismo.')
Juan showed himself to Pedro. (*Juan showed Pedro \({ }_{i}\) to himselfi.) RмH_08-04-07_166a
Juan cop Pedro quij (hipi) isoj cöiyaqueecotol. the.Vt the.Cm Intns 3P-self 3IO-3:3-Dt-cause.listen
'Juan hizo que Pedro le escuchara.' (*'Juan hizo que Pedro se escuchara.')
Juan \(_{i}\) made \(^{\text {Peter }}{ }_{j}\) hear himself \({ }_{i, *}\). RMH_08-04-07_168
More examples with these verbs are discussed in §11.3.

\footnotetext{
\({ }^{17}\) The chased item is always an indirect object with this verb, which is morphologically intransitive.
\({ }^{18}\) The expression isoj \(\sqrt{ }\) acohot self show has developed, however, a somewhat lexicalized meaning of present self that needs to be recognized.
(iv) Misoj cöhacohot.

2P-self 3IO-IM-cause.see
'Preséntate a él/ella.' / Present yourself to him/her. (Mt 8:4) RMH_08-04-07_167
}

\subsection*{11.3 Coreference between subject and possessor}

No special possessor morphology indicates coreference between a subject and the possessor of a noun. Nevertheless, in many situations there is an strong implication that the two are coreferential. This may be because of the pragmatics of the situation or it may be because of the juxtaposition of one DP before another DP headed by a possessed noun. Thus, while one might think that examples such as (54)-(56) should be construable differently than the readings shown, it was not possible to obtain other interpretations. Alternative readings require, so far as could be determined, the inclusion of some other explicit nominal before the possessed noun.

(55) Ctam tiquij itaamt coi iyoqueepe. man MD-CM 3P-sandal(s) the.Pl 3:3-DT-like
'A ese hombre \({ }_{\mathrm{i}}\) le gusta sus \(_{\mathrm{i},{ }^{*}{ }_{\mathrm{j}}}\) zapatos.'
That man \({ }_{i}\) likes his \({ }_{i, *}{ }^{j}\) shoes. RMH_08-04-07_171 \(^{\prime}\)
(56) Comcaii cop iicto \(^{\circ}\) coi iyahácotim. old.woman the.Vт her.children the.Ре 3:3-Dт-cause.be.covered ‘La anciana \(\mathrm{a}_{\mathrm{i}}\) tapó a sus \(_{\mathrm{i},{ }^{,}{ }_{\mathrm{j}}}\) hijos (como con una cobija).' RMH_08-04-07_172 The old woman \({ }_{i}\) covered up her \(_{i,{ }^{*}{ }_{j}}\) children (as with a blanket). (DS2005, cahácotim)

However, as if there were any doubt about the coreference, one may also indicate coreference between the subject and possessor by the use of the intensifying adverb hapi (or its dialectal variant hipi) before the possessed noun (see §24.2.1). See example (57) and Figure 11.2. Actually, as shown in \(\S 24.2 .1\), the intensifier follows the nominal that it intensifies, in this case a non-overt pronoun. This adverb in essence converts the simple possessor into a reflexive possessor, requiring coreference with the subject (but see the special cases discussed below).

Juan quih \({ }^{\circ} h i z a \operatorname{tacs} x^{\circ}\), hipi yaazi \({ }^{\circ}\) cop iyoocta.
the.FL looked.to.one.side Intns his.child the.VT 3:3-Dt-look.at
'Juan \({ }_{\mathrm{i}}\) miró a su lado y miró a \(\mathrm{su}_{\mathrm{i},{ }^{*}{ }_{\mathrm{j}}}\) hijo/a.'
Juan \({ }_{i}\) looked to his side and looked at his \({ }_{i,{ }^{*}{ }_{j}}\) child. \({ }^{19}\) (DS2005, cacsx) OP_2-07-07_50

\footnotetext{
\({ }^{19}\) This example is unambiguous even without the presence of hipi.
}

The following examples show that when this intensifier is present, there is no ambiguity, despite the presence of another potential antecedent. In (58) the possessor of the blanket could be either the mother or the child; the example is ambiguous. In (59), however, the presence of hipi requires the interpretation given, that it is the mother's blanket.
(58) Cmaam cop iqquet \({ }^{\circ}\) com itexl, isaraapi quih an imfain. woman the.Vт her.child the.Hz 3:3-Rl-take 3P-blanket the.Fl 3P.in 3:3-Px-tie.up 'La mujer tomó su hijo/a y lo/la envolvió en su cobija.' The woman took her child and wrapped him/her in his/her blanket. (ambiguous) LHс_2-05-07_138
(59) Cmaam cap iiquet \(^{\circ}\) com itexl, woman the.VT her.child the.Hz 3:3-Rl-take
\[
\begin{array}{lllll}
\text { hipi } & \text { isaraapi } & \text { quih } & \text { an } & \text { imfain. } \\
\text { INTNS } & \text { 3P-blanket } & \text { the.FL } & 3 \text { P.in } & \text { 3:3-PX-tie.up }
\end{array}
\]
'La mujer \({ }_{\mathrm{i}}\) tomó su hijo/ \(\mathrm{a}_{\mathrm{j}}\) y lo/la envolvió en \(\mathrm{su}_{\mathrm{i},{ }^{*}{ }_{\mathrm{j}}}\) cobija.'

The situation is slightly more complex, however, when the potential antecedent is in the same clause. In the following situations, Juan is causing Pedro to see the body of someone, perhaps in a mirror or in a picture, and causing him to hear someone's voice, perhaps using a tape recorder. The nouns isoj his/her body and ihipon \({ }^{\circ}\) his/her voice are used. In examples (60) and (61), there is ambiguity with respect to the antecedent of the possessor of isoj and ihipon. This is

Figure 11.2: Diagram for final clause of (57)

at least one situation where the antecedent of a third person possessor is not necessarily the nominal phrase immediately preceding it.
(60) Juan cop Pedro quij isoj cop cöiyacohot.
the.VT the.Cm 3P-body the.Vт 3IO-3:3-Dt-cause.see
'Juan \({ }_{i}\) mostró su \(_{\mathrm{i}, \mathrm{j}}\) cuerpo a Pedro \({ }_{\mathrm{j}}\).'
Juan \(_{i}\) showed Pedro \({ }_{j}\) his \(s_{i, j}\) body. (ambiguous) RMH_08-04-07_173a
(61) Juan cop Pedro quij ihipon \({ }^{\circ}\) cop cöiyaqueecotol.
the.Vт the.См his/her.voice the.Vт 3IO-3:3-Dт-cause.listen
'Juan \({ }_{\mathrm{i}}\) hizo que Pedro \(_{\mathrm{j}}{\text { escuchara } \mathrm{su}_{\mathrm{i}, \mathrm{j}} \text { voz.' }}^{\text {. }}\)
Juan \(_{i}\) made Pedro hear his i,j \(_{i, j}\) voice. (ambiguous) RMH_08-04-07_173b
The ambiguity can be removed. The intensifier hapi after Pedro quij makes it unambiguous that it is Pedro's voice. \({ }^{20,21}\)
(62) Juan cop Pedro quij hapi ihipon \({ }^{\circ}\) cop cöiyaqueecotol. the.Vt the.CM Intns his/her.voice the.Vт 3IO-3:3-Dт-cause.listen
'Juan \({ }_{i}\) hizo que Pedro \(_{\mathrm{j}}\) escuchara \(\mathrm{su}_{*_{i, j}}\) voz.'
Juan \(_{i}\) made Pedro \({ }_{j}\) hear his \(*_{i, j}\) voice. RмH_08-04-07_173c
But the ambiguity is removed differently if the phrase ihipon \({ }^{\circ} \boldsymbol{\operatorname { c o p }}\) (with or without hapi) is moved to follow the subject DP.


\subsection*{11.4 Coreference with complement of postposition}

When the complement of a postposition or locational noun is coreferential with the subject, the situation is treated like the cases of possessed nouns shown in the previous section. Postpositions

\footnotetext{
\({ }^{20}\) It is not entirely clear whether hapi actually modifies Pedro quij (the experiencer DP) or a null pronoun in the possessor position of the Patient DP.
\({ }^{21}\) The following example is also grammatical, but the placement of hapi in this case does not resolve the ambiguity, apparently. (Hapi is grouped prosodically with Pedro quij.)
(v) Juan cop hapi Pedro quij ihipon \({ }^{\circ}\) cop cöiyaqueecotol. the.VT InTNS the.CM his/her.voice the.VT 3IO-3:3-DT-cause.listen
'Juan hizo que Pedro escuchara su voz.' (ambiguo)
Juan made Pedro hear his voice. (ambiguous) RMH_10-15-07_34
}
and locational nouns are inflected for possessor; see \(\S 13.4\) and chapter 22 . The presence of hapi in (64b) makes it unambiguous that the person under whom the stones were placed is the one subject of the clause.
a. Hasatoj coi imocaj hac an iyocaaitaxlca.
stone-Pl the.Pl 3P-place.under-Pl the.Lc 3P.in 3:3-Dt-put.Cm-Pl-ImpF
'Pusieron las piedras debajo de ellos / debajo de si mismos.'
They put the stones under them / themselves. (Ambiguous) RMH_11-27-07_45a
b. Hasatoj coi hapi imocaj hac an iyocaaitaxlca. stone-Pl the.Pl Intns 3P-place.under-Pl the.Lc 3P.in 3:3-Dt-put.Cm-Pl-ImpF 'Pusieron las piedras debajo de si mismos.'
They put the stones under themselves. RMH_11-27-07_45b
A reflexive pronoun is not used in cases where the subject is coreferential with the possessor of a body part, unlike in English and Spanish.
\[
\begin{align*}
& \text {..., hinzeet quij iti httaxz, ... }  \tag{65}\\
& \text { 1P-heel the.Cm 3P-on 1SGS.Tr-RL-hit.Hz } \\
& \text { '... me pegué en el talón, ...' } \\
& \text {... I hit myself in the heel, ... (OS2005, cacim) RNH-08-2107-96 }
\end{align*}
\]
(66) * Hinzeet quij iti hisoj ihyoáxz. 1P-heel the.Cм 3 -on 1 -s-self 1 SGS.Tr-Dt-hit.Hz ('Me pegué en el talón.) (I hit myself in the heel.)
\begin{tabular}{llll} 
* Hanzeet quij iti & hisoj & ihyoáxz. \\
ABS-heel the.CM 3P-on & 1P-self & 1SGS.Tr-DT-hit.Hz \\
('Me pegué en el talón.) (I hit myself in the heel.)
\end{tabular}

\subsection*{11.5 Reciprocals}

Reciprocality is expressed using the word pti. In the most common cases, where agent/subjects are acting reciprocally on each other as patient/objects, the word pti displaces both the direct object nominal and the verb morphology associated with it. This word was classified as an adverb in the 2005 dictionary, but it could be viewed (in these examples, at least) as an invariant pronoun; unlike the reflexive pronoun isoj (\$11.2), it does not vary for person or number. The word pti is part of the verb phrase, for which arguments are presented in §5.3. Therefore, instead of a construction like (68a), the construction in (68b) is used.
a. Simple transitive
\begin{tabular}{lll} 
DP & DP & VP \\
Subject & Direct Object & Verb \({ }_{\text {[with Subject Inflection and Direct Object Inflection] }}\)
\end{tabular}
```

b. Simple reciprocal
DP VP
Subject pti Verb [with Subject Inflection, third person Direct Object]

```

The subject person inflection prefix (§17.1.2.1) is plural in the reciprocal construction, as shown in example (69) in which the prefix ha-, first person plural subject inflection, is required rather than \(\mathbf{h}-\), first person singular subject inflection.
(69) a. Hipi pti hasamsisiijc aha.

Intns Rcp 1PlS-Ir.Id-love-Pl Aux-Dcl
'Amémonos uno al otro.'
We should love one another. OP_2-07-07_57 RMH_08-04-07_177a
b. * Hipi pti \(\underset{\text { hsamsisiije }}{\text { 1SGS.Tr-IR.ID-love-PL }}\) aha.
c. Hipi pti hasamsisiin aha. RMH_08-04-07_177b

1PlS-Ir.Id-love
d. * Hipi pti hsamsisiin aha.

Verb stems indicate number of the subject (§17.1.3). Yet in the case of reciprocals, some variability in the verb stem is commonly observed, as indicated by the examples in (69). Either the singular stem may be used or the plural stem. In addition, sometimes an imperfective stem is used, which denotes a difference in meaning. Compare the verb forms in (70) and (71) with the corresponding translations.
(70) Comeaac tacoi pti cnooptoj iha.
person/Seri.Pl Md-Pl RcP SN-Tr-hit-Pl Dcl
'Esos seris estaban pegándose (de vez en cuando).'
Those Seris were hitting each other (once in a while). LHc_2-8-07_74b
(71) Comeaac tacoi pti enooptolea ha.
person/Seri.Pl Md-Pl RcP SN-Tr-hit-Pl-ImpF Dcl
'Esos seris estaban boxeando.'
Those Seris were boxing each other. LHс_2-8-07_74a
Despite the lack of object inflection marking on the verb, the canonical reciprocal construction is transitive and, if the subject is third person, the verb carries the \(3: 3\) prefix (§17.1.2.1), which is part of the subject inflectional apparatus. Neither of these points is immediately obvious, however, since the vowel of pti merges phonetically with the prefix i(3:3). The fact that the \(\mathbf{i}\) - is present is made clear by the epenthetic \(\mathbf{c}([k])\) that appears under the
conditions discussed in §27.1.4. \({ }^{22,23}\)
(72) ¿Pti itconnooptolca?

RCP 3:3-Rl-N-hit-Pl-ImpF
'No se pegaron uno al otro?'
Didn't they hit each other? RMH_08-04-07_178
The transitivity of the construction is also made evident by the choice of the transitive infinitive prefix iha- (§17.2.1).
(73) Comcaac tacoi pti iházitim quimcajc iha.
person/Seri.Pl Md-Pl RCP Inf.Tr-tattoo-ImpF SN-Tr-want-Pl DCL
'Esas personas querían tatuarse uno al otro.'
Those people wanted to tattoo each other. LHc_2-05-07_154
Other examples of reciprocal clauses with simple transitive verbs, including the common transitive verb \(\sqrt{ }\) mis resemble, which has a non-agentive subject, of course:

Pti smis caha.
RCP Ir.ID-resemble Aux.SN-Dcl
'Se van a parecer.'
They are going to resemble each other. (DS2005, cmis) OP_2-07-07_66
(75) Pti hayomahinej.

RCP 1PLS-DT-N-cause.empty
'Éramos compañeros.'
We stayed together. (We were companions.) (DS2005, cahinej) OP_2-07-07_67
Pti iyasaacajam.
RCP 3:3-DT-use.arms.to.support
'Se abrazaron.'
They hugged each other. RMH_05-16-08_36

\footnotetext{
\({ }^{22}\) For this reason, the examples are transcribed here with pti i... despite the lack of direct phonetic evidence for both vowels.
\({ }^{23}\) But the argument here is not quite that easily made. If the morpheme pti is actually part of the verb morphology, then one might claim that the conditions for epenthesis are met without the prefix \(\mathbf{i}\)-. This alternative does not work, however, since it can be shown that pti itself does not provide the context for epenthesis, just as the indirect object agreement prefix co-/cö- does not. The necessary example is one with the portmanteau pte; no epenthesis is induced. The idiom for get along, be friends, iicp pte \(\sqrt{ } \mathbf{i i p e}\), provides the evidence.
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{(vi)} & ... iicp & pte tmiipe & ho. & (* pte tcmiipe) \\
\hline & 3P-toward & RCP \(+3 \mathrm{IO}-\mathrm{RL}\) & DCL & \\
\hline & \multicolumn{4}{|l|}{'... no se llevan bien.'} \\
\hline
\end{tabular}
(77) Cmaacöl cmozimtoj coi pti iyasaacalcam.
old.man-PL SN-drunk-PL the.PL RCP 3:3-DT-use.arms.to.support-PL
'Los viejos borrachos apoyaron uno al otro.' op_2-07-07_68
The drunk old men were walking around with their arms around each other.
(DS2005, casáacajam)
When the reciprocal action holds between something other than subject and direct object, the word pti is still used, but the morphology becomes a bit more complicated, as explained below. \({ }^{24}\)

If the reciprocality is with the complement of a postposition or a locational noun, the morpheme pti precedes the postposition or locational noun (which also occurs in the VP; see §5.8). In fact, the Seri consultants for the 2005 Seri dictionary decided that when the postposition begins with \(\mathbf{i}\), the fusion is more than incidental and asked for the sequence of morphemes to be written as one word in each case. Therefore pti iti (RCP 3P-on) on each other is written ptiti, pti iiqui (RCP 3P-toward) toward each other is written ptiiqui, and pti iihax (RCP 3P-with.SG) with each other is written ptiihax. \({ }^{25}\)
(78) ... hipi ptiti mozám.

Intns Rcp-3P-on Px-UO-put.Vt
'... se pisaban uno al otro.'
...they were stepping on each other. (LK 12:1) RMH_08-04-07_179a
... hipi ptiiqui titooij, ...
Intns Rcp-3P-toward Rl-go.Pl
'... se preguntaban uno al otro, ...'
... they asked each other, ... (MK 4:41) RMH_08-04-07_179b
\(\ldots\) ziix quih hapahit quih \(\underset{\text { ptiihax }}{\text { thing the.FL SN-PV-eat the.FL }}\) RCP-3P-with.SG itaaitoj, \begin{tabular}{l} 
3:3-RL-eat-PL
\end{tabular}
... they ate food with each other, ... (Ac 2:47) RMH_08-04-07_180a
(81) Hasatoj coi ptimocaj hac an iyocaaitax.
stone-Pl the.Pl RcP-3P-place.under the.Lc 3P.in 3:3-Dt-put.Cm-Pl
'Pusieron las piedras, cada uno debajo del otro.'
They put the stones under each other. RMH_08-04-07_1800

\footnotetext{
\({ }^{24}\) My attempt to obtain examples like They ate each other's bread were not wildly successful. Somewhat belatedly I was able to get Siimet yaat \({ }^{\circ}\) quih pti iyooitoj (bread theirs the.FL RCP 3:3-DT-eat-PL).
\({ }^{25}\) The word ptimocaj does not appear in the 2005 dictionary. The word pti and ano (3P.in) also contract to ptino, but this is only found in a couple of idiomatic expressions: ptino \(\sqrt{ }\) ojoz (flee) mill around and ptino \(\sqrt{ }\) oofin (pass) be similar.
}

When the reciprocality is with an indirect object (§2.3) or an oblique object (§2.4), both of which require indirect object inflection, the situation becomes slightly more complicated, as explained in the following section.

\subsection*{11.5.1 Reciprocals and the portmanteau pte}

Sometimes the word pte appears instead of the word pti, but the difference is not a simple phonetic difference nor a dialect variation. The word pte is used instead of \(\mathbf{p t i}\) when the verb is expecting the third person indirect object prefix co-/cö- (§17.1.2.4) as well as pti, replacing both morphemes. That is, pte is a portmanteau that replaces the expected sequence ptico-/cö-. \({ }^{26}\)

In example (82) one expects the third person indirect object prefix since the verb \(\sqrt{ }\) acaato fight with someone for the possession of something subcategorizes for an indirect object. It is not clear which nominal is the direct object and which is the indirect object; with a verb like this one, the morphology is always obscure. If families fight with each other, one expects pti, and yet the verb will take co- to cross-reference either the persons being fought or the thing being fought for. The expected combination pti cö- is displaced by the portmanteau pte, as in the following example.
\begin{tabular}{ll} 
Heme \(^{\circ}\) & quih cooc \\
ABS-home/family the.FL & SN- \\
& \({ }^{\circ}\) ptiicp \\
RCP-3P-side & ixoyai \({ }^{\circ}\). \\
3:-Ем-?
\end{tabular}
'Esas dos familias se están peleando por tierra.'
Those two families were fighting with each other over land. Op_2-07-07_60
A similar explanation accounts for pte in (83); the verb subcategorizes for affectees that are oblique objects (§2.4), which should determine indirect object inflection. Again, the necessary

\footnotetext{
\({ }^{26}\) The sequence pti cö- occurs in only one situation, where the cö- is used because of it being a nominalization (see \(\S 14.4\) ) and not because of any agreement properties. A nominalization of this type occurs in the sentence: ¡Haacöt tacoi pti cöimis(taj) tax! Those houses really resemble each other.

In addition, there is evidence that the merger of the two morphemes does not happen in a mechanical way but rather through some fusion of features. When the adverb pair cói ... ipi yet is used (see §24.2.11), they surround a word, and in this case the result is shown in (vii) where they wrap the word pte; the \(31 O\) prefix cö- is absent from the verb.
(vii) a. Cói pte ipi tmafp ma,...
still RCP +3 IO still RL-N-arrive DS
'Cuando todavía no había tenido relaciones sexuales con ella, ...'
When he still had not yet had sexual relations with her, ... (Mt 1:18) RMH_11-20-07_147
\(\begin{array}{rllll}\text { b. } & \text { Cói } & \text { pti } & \text { ipi } & \text { cötmafp }\end{array} \quad\) ma, ...
}
conditions for the portmanteau pte are present.
\begin{tabular}{lllllll} 
Icaaitim & quih & cmiipla tintica, tiix & hipi & \({ }^{\circ}\) misolca & oo \\
\(3 P-A O N-U S-m a k e-I M P F ~\) & the.FL & SN-bad & MD-AW & DDS & INTNS & 2 2P-self-PL
\end{tabular}
pte mascmaai \({ }^{\circ}\)
aha.
RCP +3 IO-2PLS-Ir.Id-N-put/do.Pl Aux-DCL
'No deben hacer cosas malas uno al otro.'
You shouldn't do bad things to each other. LHc_2-8-07_73
In (84) the intransitive verb \(\sqrt{ }\) aaitim subcategorizes for the object of the chasing, which is an oblique object. Therefore, since the dogs are chasing each other in the situation described in (84), one expects Reciprocal and also the third person indirect object prefix. And as a result, the portmanteau pte occurs.

Haxaca coi hapi pte caaitim iha.
Abs-pet-Pl the.Pl Intns RcP+3IO-SN-chase Dcl
'Los perros están persiguiendo uno al otro.'
The dogs are chasing each other. op_2-07-07_65
Other examples with similar explanations are:
... cmaax iihax \({ }^{\circ}\) pte miistox \({ }^{\circ}\), ... now 3P-with.SG RCP+3IO-Px-have.life-PL
' \(\ldots\). entonces se pusieron de acuerdo, ...'
... then they made an agreement, ... (Viento_Norte_4)
... miistox quih coox com pte masamsisiin aha. 2P-?-PL the.Fl all the.Hz RCP+3IO-2PLS-Ir.Id-love Aux-DCL
'... ámense mucho.'
... love one another earnestly. (1 Pt 4:8) RMH_08-04-07_181
\[
\begin{align*}
& \ldots \quad \text { ox tooza, hipi } \quad \begin{array}{l}
\text { pte immiiitim. } \\
\text { thus RL-speak.PL InTNS } \\
\text { RCP+3IO-3:3-Px-ask-IMPF }
\end{array}  \tag{87}\\
& \text { '... asi dijeron, se preguntaban.' } \\
& \text {... thus they said, they asked each other about it. (Mk 1:27) RMH_-08-04-07_182a }
\end{align*}
\]

The word pte occurs in the following examples because the direct object and the instrument (a cross-referenced oblique object, see \(\S 2.4\) ) are being hit against each other.
(88) Hast cahmác quih pte htaafc ma, ... stone SN-emit.spark the.Fl RcP+3IO-1SGS.Tr-Rl-pound DS
'Golpeé las piedras una contra otra, ...'
When I struck the rocks together, ... (DS2005, hast) RMH_08-04-07_182b
(89) ©Juan quih pte itcmaafc?
the.FL RCP+3IO-3:3-RL-N-pound
'No las golpeó Juan una contra otra?'
Didn't Juan strike them together? RMH_08-04-07_182C
The difference between these two forms is significant in the following expressions, which are presumably formed on the root tazo one.
(90) a. pti Vatazo be on the level (intransitive verb)
b. pte Vatazo make level (transitive verb)

\section*{12. Complement clauses}

Complement clauses occur in different forms. The clause may be headed by an infinitive, a deverbal noun, or a finite verb. Complement clauses with infinitives (§12.1) and deverbal nouns as heads ( \(\S 12.2\) and \(\S 9.1 .2\) ) function clearly as subjects and direct objects of other verbs; they are common types. Complement clauses with finite verbs (§12.3) usually have quite different structures, however, and typically are not true subjects or direct objects. The remaining sections of this chapter present specific verbs, by group, and demonstrate the kinds of complements that occur with them.

Two of the verbs discussed in this chapter, \(\sqrt{ }\) amzo want and \(\sqrt{ }\) aCa with the sense be able (etymologically know) essentially require complement clauses. The verb Vamzo want cannot occur grammatically with a simple object complement noun phrase. \({ }^{1}\)
(1) \(\quad\); Siimet quih intamzo? bread the.FL 2SGS-RL-want ('¿Quieres el pan?) (Do you want the bread?) \({ }^{2}\)

On the other hand, the verb \(\sqrt{ }\) queepe like easily takes noun phrases as direct objects.
(2) Satoj ixoqueepe. mussel(s) 3:3-Em-like
'Le gustan los mejillones.'
S/he likes mussels. хмH_08-15-07_40a
(3) Hap ipxasi quih hxoqueepe. mule.deer 3P-flesh the.Fl 1SGS.Tr-Em-like 'Me gusta la carne de venado bura.'
I like mule deer meat. (DS2005, cqueepe) RMH_05-16-08_37

\footnotetext{
\({ }^{1}\) The verb \(\sqrt{ }\) amzo want rarely occurs without an overt complement, but the following examples are such cases.
(i) Haxz cap max tootar coi iyoocotim, itamzo \(x\). dog the.VT even chicken the.PL 3:3-DT-kill-ImPF 3:3-RL-want UT 'Hasta el perro mató las gallinas si lo quiso hacer.' Even the dog killed chickens if it wanted to. (DS2005, max) XMH_08-15-07_38a
(ii) Impoomzo \(\quad \mathbf{x}\), hin nsahiipet aha.

2SGS-Ir.Dp-want UT 1SGDO 2SGS-Ir.ID-heal AUX-DCL 'Si quieres, puedes sanarme.'
If you wanted to, you could heal me. (M+8:2) XMH_08-15-07_38b
\({ }^{2}\) The grammatical version of this sentence would be something equivalent to Do you want to eat the bread? with the transitive infinitive ihaahit to eat it before the verb intamzo.
}

\subsection*{12.1 Infinitival complements}

Only three verbs (or four, depending on how one counts them) allow infinitival complements. Furthermore, infinitives ( \(\S 17.2 .1\) ) occur in the language only in complement clauses with these verbs. Three of these verbs use a control structure (§12.1.1) and one occurs in a so-called raising structure (§12.1.2).

\subsection*{12.1.1 Control structure}

The three verbs occurring in a control structure are \(\sqrt{ }\) amzo want; \(\sqrt{ }\) aCa know how (to do something) and, by extension in some cases, to be an expert (at something); and \(\sqrt{ }\) queepe like, which allows only intransitive infinitival complements (in addition to deverbal noun complements). \({ }^{3}\) Some very simple examples with three different main verbs are given below and an analysis (for an example with an intransitive complement) is illustrated in Figure 12.1.
(4)
a. Icoos imiimzo.
Inf.In-sing 3:3-Px-want
'Quiere cantar.'
S/he wants to sing. RMH_10-15-07_36a
c. ¿Icoos intamzo?
Inf.In-sing 2SGS-RL-want
‘¿Quieres cantar?
Do you want to sing? RMH_05-16-08_38
(5)
a. Icoos imiya.
Inf.In-sing 3:3-Px-know
'Sabe cantar.'
S/he knows how to sing. RMH_10-15-07_36c
c. ¿Icoos intaa?
Inf.In-sing 2SGS-RL-know
‘¿Sabes cantar?’
Do you know how to sing? RMH_05-16-08_40
b. Icoos ihmiimzo.
Inf.In-sing 1 SGS.Tr-Px-want
'Quiero cantar.'
I want to sing. RMH_10-15-07_366
d. Icoosi hamiimcajc.
Inf.In-sing.PL 1PLS-Px-want-PL
'Queremos cantar.'
We want to sing. RMH_05-16-08_39
b. Icoos ihmiya.
Inf.In-sing 1SGS.Tr-Px-know
'Sé cantar.'
I know how to sing. RMH_10-15-07_36d
d. Icoosi hamiyaj.
Inf.In-sing.PL 1PLS-Px-know.PL 'Sabemos cantar.'
We know how to sing. RMH_05-16-08_41

\footnotetext{
\({ }^{3}\) This is obviously a quirky fact that requires some discussion. See below.
}

\section*{Figure 12.1: Control structure}

(6)
a. Icoos
imqueepe.
Inf.In-sing 3:3-Px-like
'Le gusta cantar.'
S/he likes to sing. RMH_10-15-07_36e
c. ¿Icoos intqueepe?
Inf.In-sing 2SGS-RL-like
¿¿Te gusta cantar?
Do you like to sing? RMH_05-16-08_42
b. Icoos
ihmqueepe.
Inf.In-sing 1SGS.Tr-Px-like
'Me gusta cantar.'
I like to sing. RMH_10-15-07_36f
\(\begin{array}{ll}\text { d. Icoosi } & \text { hamqueept. } \\ \text { InF.In-sing.PL } & \text { 1PLS-Px-like } \\ \text { 'Nos gusta cantar.' } \\ \text { We like to sing. RMH_05-16-08_43 }\end{array}\)
The infinitival complement clause may have a verb with various kinds of verbs, including verbs in the passive voice, but always with coreference between the grammatical subject of that verb and the agent/experiencer/actor of the controlling verb. No negative infinitives exist, however. The next group of examples all have intransitive complements (the infinitives are underscored). \({ }^{4}\)

Intransitive complements of \(\sqrt{\text { amzo }}\) want of various types:
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{4}{*}{(7)} & Hant icahjiit ihyomamzo. & \multirow[t]{4}{*}{(8)} & iIcapazt & ihxoomzo! \\
\hline & land Inf.In-fall 1SGS.Tr-Dt-N-want & & Inf.In-Pv & 1SGS.Tr-Em-want \\
\hline & 'No quiero caerme.' & & 'iQuiero & ado! \\
\hline & I don't want to fall. RMH_10-15-07_37a & & I want to & oed! хмH_08-15-07_35a \\
\hline
\end{tabular}

\footnotetext{
\({ }^{4}\) Attempts with nominalizations or other structures - all ungrammatical - to show that the infinitive is the only way to say these things are not presented here.
}
(9) \({ }^{\circ}\) Hacx icamiih \(^{\circ}\) ihyomamzo.
apart Inf.In-not.be.Fl 1SGS.Tr-Dt-N-want
'No quiero morir.'
I don't want to die. RмH_10-15-07_37b
(10) Icahaapl ihyomamzo.

Inf.In-feel.cold 1SGS.Tr-Dt-N-want
'No quiero tener frío.'
I don't want to feel cold. RMH_10-15-07_37c
(11) Icacozim ihyomamzo.

Inf.In-feel.hot 1 SG S.Tr-Dt-N-want
'No quiero tener calor.'
I don't want to be hot. RMH_10-15-07_37d
(12) Socaaix an iquiih ihyoomzo.

Punta.Chueca 3P.in Inf.In-be.Fl 1SgS.Tr-Dt-want
'Quiero vivir en Punta Chueca.'
I want to live in Punta Chueca. RMH_10-15-0__38Intransitive complements of \(\sqrt{ }\) aCa know:
(13) Zixquisiil \({ }^{\circ}\) quih icacat itcmaa, ...
child the.Fl Inf.In-swim 3:3-RL-N-know
'El niño no sabía nadar, ...'
The child didn't know how to swim, ... (DS2005, ctam) XMH_08-15-07_39e
(14) Icooit quiya ha.

Inf.In-dance SN-Tr-know Dcl
'Sabe bailar bien.'
S/he knows how to dance well. хмН_ \(08-15-07\) _39d
Intransitive complements of \(\sqrt{ }\) queepe like of various types:
(15) i Icacat intqueepe?

Inf.In-swim 2SGS-RL-like
‘¿Te gusta nadar?’
Do you like to swim? xMH_08-15-07_39g
(16) Icoop ixoqueepe

Inf.In-UO-sew.basket 3:3-Em-like
'Le gusta hacer canastas.' \(\times м H_{-} \mathbf{0 8 - 1 5 - 0 7 \_ 3 7 b}\)
S/he likes to make baskets.
(17) Icapazt ihxoqueepe.
Inf.In-Pv-tattoo 1SGS.Tr-Em-like
'Me gusta ser tatuado.'
I like to be tattooed. RMH_10-15-07_40a
(18) Icahahásaquim ihxoqueepe.

Inf.In-Pv-comb.hair.of 1 SGS.Tr-Em-like
'Me gusta que me peinen el cabello.'
I like to have my hair combed. RMH_10-15-07_40c

Transitive complements are possible with the verbs \(\sqrt{\text { amzo }}\) want.
(19) Zixquisiil \({ }^{\circ}\) ctam tintica [ zixcám z ihanaaii] quimzo ha. child male Md-Aw fish a Inf.Tr-catch SN-Tr-want Dcl
'El niño quiere atrapar un pez.'
The boy wants to catch a fish. (HE 21) XMH_08-15-07_39a
(20) \(\quad\) [ [ Ziix \(\quad z \quad\) ihaahit \(]\) intamzo?
thing a Inf.Tr-eat 2SGS-Rl-want
‘¿Quieres comer algo?'
Do you want to eat something? хмн_08-15-07_39b
(21) [Hant ihamihzx ] ihyomamzo. land Inf.Tr-slip.on 1SGS.Tr-Dt-N-want
'No quiero resbalar.'
I don't want to slip. \({ }^{5}\) RMH_10-15-07_39
(22) Comcaii quih [him ihazt ] ixoomzo, ...
old.woman the.FL 1SGDO Inf.Tr-tattoo 3:3-Em-want
'La anciana quiso tatuarme, ...'
The old woman wanted to tattoo me, ... (DS2005, quizt) XMH_08-15-07_39c
When the controlling subject is plural, the infinitive also uses a plural verb stem, just as it would in a simple clause (§17.1.3). (A singular stem in the infinitive is always ungrammatical under these condtions.)
```

a. ..., [ iihax icooza ] hamiimcajc.
3P-with.SG Inf.In-speak.PL 1PLS-Px-want-PL
b. *..., [ iihax icaaitom ] hamiimcajc.
InF.In-speak
'..., queremos conversar con él.'
..., we want to talk with him. (Jn 12:21) XMH_08-15-07_39

```

The agent that controls the subject of the infinitive may be the unexpressed agent of the passive verb (see §9.2.2).
```

..., [cöicahtxima hac *iti cöica }\mp@subsup{}{}{\circ}\mathrm{ ] cöipamzo xaha, ...
3IO-3P-PON-US-rich the.Lc to.be.with 3IO-3P-PON-Pv-want Crd
'... y el deseo de tener riquezas, ...'
... and the desire to have wealth, ... (Mt 13:22) RмH_08-21-07_97

```

\footnotetext{
\({ }^{5}\) This verb is morphologically transitive although it does not have an obvious direct object. If an object is mentioned (such as a rock), the verb is inflected for an oblique/indirect object.
}
(25) [ Icaatax ] popamzo \(\mathbf{x}\), quisoj sahtaaho (a)ha.

Inf.In-go Ir.Dp-Pv-want UT US-3P-self Ir.Id-Pv-make.ready AUX-DCL
'Si uno quiere ir, uno debe prepararse.'
If one wants to go, one should get ready. Rмн_10-15-07_41b
As mentioned above, the verb \(\sqrt{ }\) queepe like may take an intransitive infinitival complement (illustrated by examples (4) and (15) above), but not a transitive one.
* \(\underset{\text { mussel(s) }}{\text { Satoj }}\) (quih) the.FL \begin{tabular}{l} 
ihaahit \(]\) \\
Inf.TR-eat
\end{tabular}\(\quad\)\begin{tabular}{l} 
ixoqueepe. \\
3:3-Em-like
\end{tabular}
('Le gusta comer mejillones.') (She likes to eat mussels.)
```

* [Sooda coopol ihasi ] ixoqueepe.
soda SN-black InF.Tr-drink 3:3-Em-like
('Le gusta tomar cola.') (She likes to drink cola.)

```

Attempts at eliciting a transitive complement always produced either a simple transitive clause with a noun phrase as direct object (as shown in (2) above), or a chained clause construction as shown by the following examples.
(28) Satoj quih itahit \(\mathbf{x}\), ixoqueepe. mussel(s) the.FL 3:3-Rl-eat UT 3:3-Em-like
'Le gusta comer mejillones.'
She likes to eat mussels. ххмH_08-15-07_40b
(29) Sooda coopol quih itasi \(x\), ixoqueepe.
soda SN-black the.Fl 3:3-RL-drink UT 3:3-Em-like
'Le gusta tomar cola.'
She likes to drink cola. хмн__08-15-07_40c
The same chained clause structure may be used with an intransitive verb in lieu of the infinitival complement.
(30) Toop \(\mathbf{x}\), ixoqueepe.

Rl-UO-sew.basket UT 3:3-Em-like
'Le gusta hacer canastas.'
S/he likes to make baskets. хмн_08-15-07_37a

\subsection*{12.1.2 Raising structure with infinitival complement}

The verb \(\sqrt{ } \mathbf{a C a}\), which means know how in control structures, as described in \(\S 12.1 .1\), means be able in other contexts - a very slight change semantically. The latter situations are morphologically identical to the control structures. That is, as it is very important to note, the verb is morphologically transitive just as its historical source is transitive. The understood subject of the infinitive and the explicit subject of the verb \(\sqrt{ } \mathbf{a C a}\) are coreferential.

Intransitive complements of \(\sqrt{ } \mathbf{a C a}\) in the sense of be able:
(31) Miizj iquiim ihyomaa.
well Inf.In-sleep 1SGS.Tr-DT-N-know
'No pude dormir bien.'
I couldn't sleep well. RMH_09-28-07_116f
(32) Iquihehe himaa ha.

Inf.In-rule 1P-PON-N-know DCL
'No puedo ser gobernador.'
I can't be governor. RMH_09-28-07_116h
(33) Iquihehe hscmaa ha

Inf.In-rule 1SGS.Tr-Ir.Id-N-know DCL
'No podré ser gobernador.'
I won't be able to be governor. RMH_09-28-07_116i
(34) Icaticpan iyomaa.

Inf.IN-work 3:3-DT-N-know
'No puede/pudo trabajar.'
S/he can't/couldn't work. (lacked time, or had a physical impediment) RMH_10-15-07_42
(35) Icaticpan imaa ha.

Inf.In-work SN-Tr-N-know DCL
'No puede trabajar.'
S/he can't work. RMH_10-15-07_45d RMH_09-28-07_116b
(36) Tcooo, icaalx itcmaaj,

RL-all Inf.In-go-PL 3:3-Dt-N-know-PL
'Ninguno de ellos pudo caminar, ...'
None of them could walk, ... (Viaje_Tiburon_46) XMH_08-15-07_39h
Transitive complements of \(\sqrt{ } \mathbf{a C a}\) in the sense of be able:
(37) Miizj ihaaho hyomaa.
well Inf.Tr-see 1SGS.Tr-Dt-N-know
'No pude verlo bien.'
I couldn't see it well. RMH_09-28-07_116c
(38) Miizj isoj ihaacta iyomaa.
well 3P-self Inf.Tr-look.at 3:3-Dt-N-know
'No puede protegerse.'
S/he isn't able to protect himself/herself. RMH_08-04-07_169
Unlike the examples with the verbs discussed in the preceding section, however, the subject of \(\sqrt{ } \mathbf{a C a}\) (as well as the complement clause) is not necessarily an agentive, sentient or even a living being, as the following examples show. These suggest that the verb \(\sqrt{ } \mathbf{a C} \mathbf{a}\) is functioning as
a raising verb.
\(\begin{array}{llll}\text { (39) } & \text { Trooqui quij } & \text { iquiisaxim } & \text { iyomaa. } \\ & \text { vehicle } & \text { the.CM } & \text { InF.In-have.life-IMPF }\end{array}\) 3:3-DT-N-
'El carro no pudo arrancar.'
The car couldn't start. RMH_10-15-07_43a
(40) Zaah quij icazaahox iyomaa.
sun the.Cm Inf.In-shine 3:3-Dt-N-know
'El sol no pudo brillar.'
The sun couldn't shine. RMH_10-15-07_43b
(41) Haaco ticop icooxp siya caha.

Abs.house Md-Vt Inf.In-white Ir.Id-know Aux.SN-Dcl
'Esa casa puede ser blanca.'
That house can be white. (it's physically possible, says a painter) RмН_10-15-07_43c
(42) Trooqui quij iquiipe iyomaa.
vehicle the.Cm Inf.In-good 3:3-DT-N-know
'No se pudo reparar el carro.'
The car couldn't be fixed. RMH_10-15-07_44a
(43) ¿Trooqui quij iquiipe quiya -ya? vehicle the.Cm Inf.In-good SN-Tr-know QM ‘¿Se puede reparar el carro?’
Can the car be fixed? (Lit., Can the car be good?) RмH_10-15-07_44a
\(\begin{array}{lll}{ }^{\circ} \text { Hapaha quis } & \text { coi icaatxo } & \text { iyomaa, } \\ \text { flour } & \text { the.PL InF.In-much } & 3: 3-\text { Dт-N-know }\end{array}\)
\begin{tabular}{lllllll} 
ziix & an & isoii & ha & zo & tompaho & ma. \\
thing & 3P.in & 3P-Ir.ID-be.Fl.PL & AUX & a & RL-N-PV-see & DS
\end{tabular}
'No era posible que hubiera mucha harina.' RMH_09-28-07_116j It wasn't possible for there to be much flour. (because the recipient was small)
(45) Hamiime com icooil smaa caha, sky the.Hz Inf.In-blue Ir.Id-N-know Aux.SN-Dcl hamcaaxat quih pootxo ta \(x\). smoke the.FL Ir.Dp-much DS UT
'El cielo no puede ser azul si hay mucho humo.'
The sky can't be blue if there is a lot of smoke. RMH_09-28-07_116k
(46) Quisiil \({ }^{\circ}\) ctam quih icám icaacösxaj iyomaa. child male the.Fl 3P-PON-alive Inf.In-long/tall 3:3-Dt-N-know
'La vida del muchacho no pudo ser larga.'
The life of the boy couldn't be long. RMH_09-28-07_116|
The embedded clause may be passive.
(47) i Cafee pac icapasi quiya -ya?
coffee some Inf.In-Pv-drink SN-Tr-know QM
¿¿Hay café para tomar?’
Is there any coffee that can be drunk? xмH_08-15-07_35d (Also: Can coffee be drunk?)
Zixcám com icapahit iyomaa.
fish the.Hz Inf.In-Pv-eat 3:3-Dt-N-know
'No se pudo comer el pescado.'
The fish couldn't be eaten. (bad flavor, too many bones, etc.) RMH_10-15-07_44c
(49) Imxomotet. Icahsanj intemaa ho.

2SGS-Em-heavy Inf.In-Pv-carry.on.back 2SGS-Rl-N-know DcL
'Pesas mucho. No puedes ser llevado en la espalda.'
You're heavy. You can't be carried. RmH_11-27-07_46
A schematic analysis for (42) is given in Figure 12.2 although it does not clearly show that the verb know in this case does not subcategorize for the surface DP subject that it shows syntactically.

When the grammatical subject of the complement clause is unspecified, the passive form of \(\sqrt{ } \mathbf{a C a}\) know must be used since transitive verbs cannot have an unspecified grammatical subject (see \(\S 17.1 .5\) ). But this change also prompts the use of a deverbal noun in the complement clause rather than an infinitive in this particular construction. (The difference between the deverbal noun and the infinitive is non-existent phonetically in some cases, but very clear in others. The deverbal noun ipási in (51) contrasts clearly with the corresponding passive infinitive icapási, whereas the deverbal noun icoopis in (50) is coincidentally phonetically identical to the corresponding infinitive icoopis.)
\begin{tabular}{|c|c|c|c|}
\hline a. & ¿Icoopis & hapaa & -ya? \\
\hline & 3P-PON-US-UO-smoke & SN-Pv-know & QM \\
\hline b. & \begin{tabular}{l}
* iIcoopis \\
(ungrammatical on this r
\end{tabular} & \begin{tabular}{l}
quiya \\
reading) \({ }^{6}\)
\end{tabular} & -ya? \\
\hline & uede fumar?' & & \\
\hline & ne smoke? \(\mathrm{xMH}_{1}\) 08-15-07_35 & & \\
\hline
\end{tabular}

\footnotetext{
\({ }^{6}\) The (b) example here is grammatical on the readings Does s/he know how to smoke? and Can s/he smoke?
}
(51) iCafee pac ipasi hapaa -ya? coffee some 3P-PON-Pv-drink SN-Pv-know QM ‘¿Se permite tomar café?’ Is it possible (permitted) to drink coffee? хмн_08-15-07_35e

In at least some cases with an embedded idiom, the subject of the higher verb is the person of the possessor in the idiom.
(52) \({ }^{\circ}\) Hiisax hant icooit \(^{\circ}\) ihyomaa.
1P-? land Inf.In-arrive 1SGS.Tr-DT-N-know
'No puedo estar feliz.'
I can't be happy. RмH_10-15-07_45a
(53) \({ }^{\circ}\) Mimoz icameet \({ }^{\circ}\) inscmaa ha.

2P-heart Inf.In-? 2SGS-Ir.Id-N-know Aux-DCL
'No puedes estar triste.'
You can't be sad. RMH_10-15-07_45b
Other cases of raising are discussed in §9.1.2 and §12.3.

\subsection*{12.1.2.1 Pro-complement}

The verb \(\sqrt{\mathbf{a C a}}\) know in the sense of be able is the only verb that can take a complement consisting of the word seehe. The word seehe, glossed to do (it) here, perhaps may be best analyzed as a pro-complement. It has no other usage in the language. When seehe is the comple-

Figure 12.2: Analysis of the raising structure in (42)

ment, the verb \(\sqrt{ } \mathbf{a C a}\) is almost always inflected for third person indirect/oblique object for no
obvious reason. Some simple examples with the complement clause seehe are given below. The antecedent of seehe is inferred from the linguistic or situational context.
(54) Seehe cohyomaa.
to.do.(it) 3IO-1SGS.Tr-Dt-N-know
'No puedo/pude.' / 'No puedo/pude hacerlo.'
I can't/couldn't. / I can't/couldn't do it. RMH_10-15-07_46a
¿Seehe contaa?
to.do.(it) 3IO-2SGS-RL-know
‘¿Puedes/pudiste?/' / ‘¿Puedes/pudiste hacerlo?’
Can/could you? / Can/could you do it? RNH_10-15-07_46b
(56) Seehe cösiya caha.
to.do.(it) 3IO-Ir.Id-know Aux.SN-DCL
'Podrá.' / 'Podrá hacerlo'
S/he will be able. / S/he will be able to do it. RмH_10-15-07_46c
(57) Hitóaa cop tapxölim ma, seehe cohyomaa.

1P-foot/leg the.Vt Rl-broken.Hz DS to.do.(it) 3IO-1SGS.Tr-Dt-N-know
Porque está quebrada mi pierna, no puedo/pude.
(Because my leg is broken, I can't/couldn't.) (offered) RMH_10-15-07_46d
(58) Seehe xah itcmaa, iyoocatx. to.do.(it) - 3:3-RL-N-know 3:3-DT-release
'No pudo y lo dejó.'
He couldn't and just gave up. (offered) RMH_10-15-07_46e
\begin{tabular}{lllllll}
\({ }^{\circ}\) Xiica quih quiistox & quih & xepe & com & iti & caticpan & quih \\
people & the.FL sea & the. Hz & \(3 \mathrm{P}-\mathrm{on}\) & SN -work & the.FL
\end{tabular}
\({ }^{\circ}\) haai cahipt \({ }^{\circ}\) isolca com, taax 00
experts 3P-body.Pl the.Hz DDP DL
seehe cöocoaaj iha, cöisooxi hac.
to.do.(it) 3IO-3P-ON-know-PL DCL 3IO-3P-Ir.ID-die the.LC
'Las personas que son pescadores expertos pueden hacerlo, con respecto a su ser matado.'
People who are expert fishermen can do it, with respect to their (flounders) being caught. (ES2007, caasquim 9)
(60) Moosni zo hataht, seehe cöhatcmaai ma, sea.turtle a 1PLS-RL-see-Pl to.do.(it) 3IO-1PLS-RL-N-know-PL DS

Pedro quih hizi yaaicot.
the.FL 1PLDO DT-help.kill RMH_10-15-07_47
'Vimos una caguama y no la pudimos matar, entonces Pedro nos ayudó a matarla.' We saw a turtle and we couldn't kill it, so Pedro helped us kill it. (DS2005, caaioot)
(61) Seehe compomaa ta \(\mathbf{x}\), sahmees yatoiilcam tacoi to.do.(it) 3IO-2SGS-Ir.Dp-N-know DS UT orange(s) 3P-ON-distribute-PL Md-PL pac ma hsacooomot aha. some 2 SGDO 1SGS.Tr-Ir.Id-request.for AUX-DCL
'Si tú no puedes, voy a pedir algunas de esas naranjas por ti.' \({ }^{\text {RMH_10-15-07_48 }}\) If you aren't able, I will ask for some of those oranges for you. (DS2005, cacóoomot)

The word seehe typically subsitutes for a complement headed by a verb that is active and volitional, but the complement need not be of that type. If someone were to suggest that one should be governor, for example, one might answer with:
\begin{tabular}{ll} 
Seehe cohtcmaa & ho. \\
to.do.(it) & \(3 I O-1 S G S . T R-R L-N-k n o w ~\)
\end{tabular}\(\quad\) DCL

As a pro-complement, the word seehe is typically not accompanied by a nominal complement. It does not easily occur with a direct object complement at all. If it were a pro-infinitive rather than a pro-clause, this is an unexpected fact. In response to the question You should eat that fish, one might answer with (54), or one might answer with the more elaborated, and less common, (63). \({ }^{7}\)
\begin{tabular}{lllll} 
Zixcám ticom cöipahit & hac & seehe & cohyomaa. \\
fish \(\quad \mathrm{Md}-\mathrm{Hz}\) & 3IO-3P-PON-PV-eat & the.LC & to.do.(it) & 3IO-1SGS.TR-DT-N-know \\
'No puedo/pude con respecto al comer de ese pescado.' \\
I can't/couldn't with respect to the eating of that fish. (offered) & RMH_10-15-07_50
\end{tabular}

Attempts to recast the preceding sentence without the words cöipahit hac in them were not successful. This would support the proposal that seehe is a pro-complement and not a proinfinitive.

Nevertheless, a few examples are observed or elicited in which seehe is preceded by a simple nominal phrase that is the topic. These are perhaps best analyzed as slightly stripped back versions of the examples with deverbal nominal oblique objects just seen; they are translated in this way in some cases.

\footnotetext{
\({ }^{7}\) It is possible that the type of topic as oblique object shown here, with a deverbal noun as head, is implicit in all examples with seehe. This would account for the use of the indirect/oblique object inflection (see \(\S 2.4\) on oblique objects).
}
(64) Ziix ihmaa zo seehe cöimaa ha. thing other a to.do.(it) 3IO-SN-Tr-N-know DCL
'No puede/pudo hacer otra cosa.'
S/he can't/couldn't do anything else. (DS2005, cö|quiya) RMH_10-15-07_51a
(65) Ihmaa zo seehe cohyomaa.
other a to.do.(it) 3IO-1SGS.Tr-Dt-N-know
'No puedo/pude con respecto a otro.'
I can't/couldn't with respect to another. RMH_10-15-07_51b
(66) Siimet ihmaa zo seehe cohyomaa. bread other a to.do.(it) 3IO-1SGS.Tr-Dt-N-know
'No puedo/pude con respecto a otro pan.'
I can't/couldn't with respect to another roll / piece of bread. RMH_10-15-07_51c
(67) Zixcám ticom seehe cohyomaa. Xomótet.
fish Md-Hz to.do.(it) 3IO-1SGS.Tr-Dt-N-know Em-heavy
'No puedo/pude con respecto a ESE pescado. Es pesado.'
I can't/couldn't with respect to THAT fish. It is heavy. RMH_10-15-07_51d
(68) Ee \({ }^{\circ}\) ziix quih coox cah \(^{\circ}\) seehe cöitaa camoz iha. 3Pro everything to.do.(it) 3IO-3:3-RL-know SN-think DCL
'ÉL/ELLA Piensa que puede hacer cualquier cosa.'
S/HE thinks that s/he can do anything. op_2-2-07_074
(69) Taax seehe cöhimaa ha.

DDP to.do.(it) 3IO-1P-PON-N-know DCL
'No puedo hacer ESO.'
I can't do THAT. (Ac 10:14) RMH_10-15-07_51e
(70) ¿Taax seehe contaa?

DDP to.do.(it) 3IO-2SGS-RL-know
‘¿Puedes hacer ESO?’
Can you do THAT? (contrastive focus) RMH_10-15-07_51f
The following example shows that a clause headed by the deverbal noun cöhapaa can be used as a relative clause in the sense of possible.
(71) \({ }^{\circ}\) Heme cöiquiin \({ }^{\circ}\) hac, ziix quih hayaa quih hipi one's.engagement the.LC thing the.Fl SN-Pv-own the.Fl Intns
\begin{tabular}{lllll}
\({ }^{\circ}\) seehe & cöhapaa \({ }^{\circ}\), & taax oo & speque & (a)ha. \\
to.do.(it) & \(3 I O-S N-P V-k n o w ~\) & DDP DL & Ir.ID-Pv-give.gift & AUx-DCL
\end{tabular}
'Cuando uno está de novio, puede regalar cualquier cosa que está a su alcance.' When one is asking for someone in marriage, any kind of gift can be given that is available. (DS2005, quique improved) RMH_07-11-07_30b

\subsection*{12.2 Deverbal noun complements}

A few verbs take complement clauses in which the main verb is a deverbal noun (§14.4). Object complements are presented in \(\S 12.2 .1\) and subject complements in \(\S 12.2 .2\). Some complements of verbs that appear to be functioning as raising verbs are presented in \(\S 12.2 .3\). Others are discussed in §9.1.2.

\subsection*{12.2.1 Object complements}

Different verbs have different conditions for when the object complement must appear as with a deverbal noun as head.

\subsection*{12.2.1.1 Vamzo want}

The verb \(\sqrt{\text { amzo }}\) want requires deverbal noun-headed complement clauses when its subject does \(\underline{n o t}\) control that of the complement clause agent/experiencer/actor-subject. (See §12.1.1 for the use of infinitival complements when control is involved.)
(72) [ Ana quih iitax ] hoomzo ha. the.FL 3P-PON-go 1P-ON-want DCL
'Quiero que Ana vaya.'
I want Ana to go. хмН_08-15-07_41
(73) [ Yas ] oomzo ha.

3P-PON-sing 3P-ON-want DcL
'Quiere que cante.'
S/he wants him/her to sing. RMH_08-24-07_94c
\(\left[\begin{array}{lll}\text { Hilít } & \text { quih } & \text { iicöla }]\end{array} \quad \begin{array}{l}\text { hyoomzo. } \\ \text { 1P-hair/head the.FL }\end{array}\right.\)
3P-PON-long/tall
'Quiero tener pelo largo.'
I want to have long hair.
(75) [ Cöipanzx hac ihiha ] hyoomzo. 3IO-3P-PON-run the.Lc 3P-PON-fast 1SGS.Tr-DT-want
'Quise que corriera rápido.' хмн_ \(08-15-07 \_42 a\)
I wanted him/her to run fast. (literally, I wanted his/her running to be fast.)
(76) [ Hant miisaquim ] ihmiimzo. land 2P-PON-brush 1SGS.Tr-Px-want
'Quiero que barras el piso/suelo.'
I want you to sweep the floor/ground. (DS2005, quisaquim) XMH_08-15-07_42b
(77) [ Iifp ] impoomzo, ... 3P-PON-arrive 2SGS-Ir.Dp-want
'Si quieres que llegue, ...'
If you want him/her/it to arrive, ... хмН_08-15-07_42c
The following example has a passive infinitive and a passive form of \(\sqrt{ }\) amzo want since this is required when the subject is unspecified. The example is literally If coffee's being drunk is wanted, ....
(78) [Cafee pac ipasi ] popamzo ta \(\mathbf{x}\), ...
coffee some 3P-PON-Pv-drink Ir.Dp-Pv-want DS UT
'Si se quiere tomar café, ...'
If one wants to drink coffee, ... \({ }^{8}\) (Overheard) XMH_08-15-07_35b

\subsection*{12.2.1.2 \(\sqrt{\text { aCa }}\) know}

The verb \(\sqrt{ } \mathbf{a C a}\) know (with the literal meaning know and not with the meaning be able or know how) always takes a deverbal noun-headed complement when the complement is clausal. Ambiguity is routine in such examples with third person subject since coreference or disjoint reference is not signaled in any way. The complements of this verb tend to be marked with the (locative) definite article hac (§21.2.5), unlike the complements of want, shown above, which have no articles. \({ }^{9}\) Furthermore, realis complements are inflected (for no obvious reason) with

\footnotetext{
\({ }^{8}\) This unfinished sentence (a rhetorical device) is a polite way to ask the question.
\({ }^{9}\) Action/oblique deverbal nouns with quih the or zo \(a\) refer to a specific aspect of the clause (time or location, for example) but not to the proposition itself.


The preceding examples illustrate the invariant phrase contita ma as an indicator of unspecified time.
third person indirect/oblique object inflection (co-, cö-, see \(\S 17.1 .2 .4\) ). As documented below, some complements may also be presented without the indirect/oblique object inflection and with the (flexible) definite article quih (§21.2.4) instead; the difference in meaning is apparently very slight.
(79) [ Cöhimoqueepe hac ], tiix imaa ha. 3IO-1P-PON-sick the.LC DDS SN-Tr-N-know DCL
'No sabía que yo estaba enfermo.'
S/he didn't know that I was sick. XmH_08-15-07_42e
(80) [ He hapi cöhimoqueepe hac ] hocoaa ha.

1Pro Intns 3IO-1P-PON-sick the.Lc 1P-ON-know DCL
'Sé que estoy enfermo.'
I know that I am sick. хмH_-08-15-07_42f
(81) [ Cömihiim hac] ihyoaa. 3IO-2P-PON-sleep the.LC 1SGS.Tr-Dt-know
'Sé/sabía que estabas durmiendo.'
I know/knew that you were sleeping. хмH_08-15-07_42h
(82) a. Ihmiya, [ eenim quih me cömicooz hac ].

1SGS.Tr-Px-know knife the.Fl 2Pro 3IO-2P-PON-steal the.LC
b. [Eenim quih me cömicooz hac] ihmiya. knife the.Fl 2Pro 3IO-2P-PON-steal the.Lc 1SGS.Tr-Px-know
'Yo sé que le robaste el cuchillo.'
I know that you stole the knife from him/her. RMH_08-24-07_96
\begin{tabular}{lclll} 
a. & {\(\left[\begin{array}{ll}\text { Cöimoqueepe } & \text { hac }]\end{array}\right.\)} & \begin{tabular}{l} 
quiya
\end{tabular} & ha. \\
3IO-3P-PON-sick & the.LC & \begin{tabular}{l} 
SN-TR-know
\end{tabular} & DCL
\end{tabular}
'Sabía que estaba enfermo/a.'
S/he knew that s/he was sick. [ambiguous] (a) RMH_11-27-07_47 (b)RMH_08-24-07_95
\begin{tabular}{llll} 
a. \(\quad\left[\begin{array}{ll}\text { Cömiroocö } & \text { hac }]\end{array}\right.\) & \begin{tabular}{l} 
ihmiya.
\end{tabular} \\
3IO-2P-PON-crazy & the.LC & 1SGS.Tr-Px-know
\end{tabular}
'Sé que estás/eres loco.'
I know you're crazy. (a) RMH_11-27-07_48 (b) RMH_08-24-07_97b
The complement may be in the irrealis mood, in which case an auxiliary instead of an article
may be used. (The full range of facts here has not been studied.)
a. [ \(\left.\begin{array}{ll}\text { Misiitax } & \text { ha }\end{array}\right]\), taax ihtcmaa
ho. 2P-Ir.Id-go AUX DDP 1SGS.Tr-Rl-N-know DCL
b. [ Misiitax ha ] htemaa ho. 2P-Ir.Id-go Aux 1SGS.Tr-Rl-N-know DCl
c. *[ Misiitax ta \(]\) htemaa ho. 2P-Ir.Id-go Aux.Rl 1SGS.Tr-Rl-N-know Dcl
'Yo no sabía que tú ibas a ir.'
I didn't know that you were going. (a) XMH _08-15-07_42g (b) RMH_10-15-07_52b
(86) [Cmiique zo miscmaho hac ] ihmiya. person/Seri a 2P-Ir.ID-N-see the.LC 1SGS.Tr-Px-know
'Yo sabía que no verías a nadie.'
I knew that you wouldn't see anyone. хмн_08-15-07_43d
(87) \({ }^{\circ}\) Hant pofii ta \({ }^{\circ}\), [ isiifp hac ] hocóaa ha. tomorrow 3P-Ir.ID-arrive the.LC 1P-ON-know DCL
'Sé que vendrá mañana.'
I know that he will come tomorrow. хмн_08-15-07_43e
[ Hapiistox oo, hant hac hiseaaxoj ha ], 1PlS-Ir.Dp-have.life-PlDL place the.Lc 1PlS-Ir.Id-go.away.from Aux
taax himaaj iha.
'No pensábamos que saldríamos con vida.'
We didn't think that we would leave the place alive. хмн_08-15-07_43f
; [ \({ }^{\circ}\) Hiihax isaai \({ }^{\circ}\) ha taax intemaa?
1P-with.SG 3P-Ir.ID-make AUX DDP 2SGS-RL-N-know
‘¿No sabes que me ayudará?’
Don't you know that he will help me? хмн_ \(08-15-07 \_43 \mathrm{~g}\)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline a. & [ Cmiique person/Seri & & \[
\begin{equation*}
\frac{\text { iscmáho }}{\text { 3P-Ir.Id-N-see }} \tag{90}
\end{equation*}
\] & \[
\begin{aligned}
& \text { hac ] } \\
& \text { the.LC }
\end{aligned}
\] & \begin{tabular}{l}
quiya \\
SN-Tr-know
\end{tabular} & \begin{tabular}{l}
ha. \\
DCL
\end{tabular} \\
\hline \multirow[t]{2}{*}{b.} & [ Cmiique & z & iscmáho & ta ] & quiya & ha. \\
\hline & & & 3:3-Ir.Id-N-see & Aux.RL & & \\
\hline \multicolumn{7}{|l|}{'Sabía que no vería/encontraría a nadie.'} \\
\hline \multicolumn{7}{|l|}{\(S / h e_{i}\) knew that s/he \(e_{i, j}\) wouldn't see/find anyone. (a) XMH_08-15-07_43b (b) XMH_08-15-07_43c \({ }^{10}\)} \\
\hline
\end{tabular}

\footnotetext{
\({ }^{10}\) There is reportedly a slight difference between these two examples. With the auxiliary ta the person in question went anyway, but with ha perhaps the trip was canceled.
}
(91) [Cmiique \(z\) iscmaho ha quih ] quiya ha. person/Seri a 3P-Ir.Id-N-see Aux the.Fl SN-Tr-know Dcl 'Sabía que nadie lo iba a ir/encontrar.' S/he knew that no one would see/find him/her/it. RMH_11-27-07_49
(92) [Juan quih mihaa quih ] hmiya.
the.Fl 2P-PON-EQ the.Fl 1SGS.Tr-Px-know
'Sé que tú eres Juan.'
I know you are John. RMH_11-28p-07_40
The preceding examples with deverbal complements contrast with the following examples, which have finite (dependent) irrealis clauses or an irrealis auxiliary preceding the verb \(\sqrt{ } \mathbf{a C a}\) know. These, presumably, are not complement clauses in a strict sense at all.
(93) Paticpan imaa ha. Ir.Dp-work SN-TR-N-know DCL
'No trabaja.'
S/he doesn't work. (for whatever reason - \(\mathrm{s} / \mathrm{he}\) has never worked, \(\mathrm{s} /\) he doesn't know how to work, \(\mathrm{s} /\) he doesn't have experience working) RMH_10-15-07_45C RMH_09-28-07_116a
(94) Ihpooho htemaa ho.

1SGS.Tr-Ir.Dp-see 1SGS.Tr-Rl-N-know Dcl
'Nunca lo/la he visto. (No lo reconozco.)' RмH_10-15-07_-57a RMH_09-28-07_116d I've never seen him/her before. (I don't recognize him/her.)
(95) Zo hpooho htemaa ho.
a/one 1SGS.Tr-Ir.Dp-see 1SGS.Tr-Rl-N-know Dcl
'Nunca he visto uno.'
I've never seen one. RмH_09-28-07_116e
(96) \(\quad\) María quih \({ }^{\circ}\) hiihax isaai \({ }^{\circ} \quad\) pi ta ntcmaa?
the.Fl 1P-with.SG 3:3-Ir.Id-make Aux.Ir DS 2SGS-Rl-N-know
‘¿No sabes si María me ayudará?’
Don't you know if María will help me? RMH_08-24-07_97a

\subsection*{12.2.1.3 Vqueepe like}

The verb \(\sqrt{ }\) queepe like requires deverbal noun-headed complement clauses when the higher subject does not control that of the complement clause's agent/experiencer/actor-subject or when the complement clause has a transitive verb. (See \(\S 12.1 .1\) for the cases of control.) The realis deverbal nouns, like those of \(\sqrt{ } \mathbf{a C a}\) want, are inflected for third person indirect/oblique objects and take the article hac.
(97) [ Conveenj hac ] ihtcomqueepe ho.

3IO-2P-PON-UO-yell.at the.LC 1SGS.Tr-Rl-N-like DCL
'No me gusta que grites.'
I don't like you to yell. RMH_08-24-07_99
(98) [Anxö conyahamoc hac ] ihtcomqueepe ho. Intns 3IO-2P-PON-stay.late the.Lc 1SGS.Tr-Rl-N-like Dcl
'No me gusta que regreses muy noche.'
I don't like you to come home late at night. RMH_08-24-07_100a
[ Cöicoopis hac ] ihyomqueepe. 3IO-3P-PON-US-UO-smoke the.Lc 1SGS.Tr-Dt-N-like
'No me gusta que uno fume.'
I don't like people to smoke. \(\quad\) XMH_08-15-07_44c
(100) [ Ziix ipxasi quih cöipahit hac] ihyomqueepe. meat 3P-flesh the.Fl 3IO-3P-PON-Pv-eat the.LC 1SGS.Tr-DT-N-like
'No me gusta que se coma carne.'
I don't like the eating of meat. ххмH_08-15-07_44d
\(\left[\begin{array}{lllll}\text { Ziix } & \text { ipxasi } & \text { quih } & \text { cöhiihit } & \text { hac ] } \\ \text { meat } & \text { 3P-flesh } & \text { ihyomqueepe. } \\ \text { the.FL } & \text { 3IO-1P-PON-eat } & \text { the.LC } & \text { 1SGS.Tr-DT-N-like }\end{array}\right.\)
'No tengo ganas de comer carne.'
I don't feel like eating meat. (e.g. I'm tired of it)

\subsection*{12.2.1.4 Vaho see \({ }^{11}\)}

Sentential complements of the verb \(\sqrt{ }\) aho see are of two types although both have deverbal noun heads: (1) those with article hac and third person indirect object inflection co-/cö- (as seen above with other verbs), and (2) those with the simple deverbal noun form. When the complement has the latter form, the meaning is somehow "more direct". \({ }^{12}\)
[ Cöipanzx hac] ihyooho. 3IO-3P-PON-run the.LC 1SGS.Tr-DT-see
‘Lo/la vi cuando corrió.'
I saw when s/he/it ran. XMH_08-15-07_44b
\begin{tabular}{|c|c|c|c|c|}
\hline Ipanzx ] & ihyooho. & (104) & [ Miitax ] & ihyooho. \\
\hline \(3 \mathrm{P}-\mathrm{PON}-\mathrm{run}\) & 1SGS.Tr-DT-see & & 2P-PON-go & 1SGS.Tr-Dt-see \\
\hline 'Lo/la vi corre & & & 'Te vi ir.' & \\
\hline I saw him/her/it & run. RMH_08-24-07_100e & & I saw you go. & RMH_08-24-07_101a \\
\hline
\end{tabular}

\footnotetext{
\({ }^{11}\) The most common way to express perception of an event seems to be a chained clause structure of the type \(x\) happened, y saw it. The seeing or hearing is of the event; therefore the expression is you were talking, I heard it and not you were talking, I heard you.
\({ }^{12}\) This topic has not been explored to any depth.
}
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{3}{*}{(105)} & \begin{tabular}{l}
[ Eenim cop \\
knife the.VT
\end{tabular} & \[
\frac{\text { icooz ] }}{3 \text { P-PON-steal }}
\] & ihmiiho. 1SGS.Tr-Px-se \\
\hline & \multicolumn{3}{|l|}{'Lo vi robar el cuchillo.'} \\
\hline & \multicolumn{3}{|l|}{I saw him/her steal the knife. RMH_08-24-07_101b} \\
\hline \multirow[t]{4}{*}{(106)} & \multicolumn{3}{|l|}{[ Hihizil ] int} \\
\hline & \multicolumn{3}{|l|}{1P-PON-small.PL 2SGS-RL-see} \\
\hline & \multicolumn{3}{|l|}{‘¿Nos viste cuando éramos niños?’} \\
\hline & \multicolumn{3}{|l|}{Did you see us when we were little? RMH_08-24-07_1010} \\
\hline
\end{tabular}

\subsection*{12.2.1.5 hax Voocta and hax \(\sqrt{ }\) Cimoz think (opine)}

The verbs \(\sqrt{ }\) oocta look at and \(\sqrt{ } \mathbf{C i m o z}\) think are used with special complement clauses and the adverb hax just to express opinion or belief. The form of the complement is special in more than one way. First of all, when the complement is realis and transitive, the verb of the complement occurs in the special (and odd) subject-inflected subject-oriented deverbal noun form (§14.2).
(107) [Juan quih sahmees quih iquihit] hax ihmoocta. the.Fl orange(s) the.Fl 3:3-SN-Tr-eat just 1SGS.Tr-Px-look.at
'Creo que Juan comió la naranja.'
I think that Juan ate the orange. (Offered) RMH_08-24-07_102c
Realis intransitive complements have deverbal nouns that look just like subject-oriented deverbal nouns although these are arguably the same special form illustrated in the previous example but without \(\mathbf{i}\) - at the beginning because a third person subject of intransitive verbs is not overtly marked.
(108) [ Cafee cop cmati, ] hax ihmoocta.
coffee the.Vt SN-hot just 1SGS.Tr-Px-look.at
'Creo que el café está caliente.'
I think the coffee is hot. RMH_08-24-07_101e
The complement may also have a simple predicate nominal construction (§10.1) without a modal.
(109) [ Hipiix staci, ] hax maaimoz.

DPS rock.oyster just Px-1Em.S.TR-think
'Éste es un ostión, creo.'
This is a rock oyster, I think. LHс_2-06-07_163d
Irrealis complements use the article quih after them but the verb form is morphologically the finite irrealis. (Note the lack of possessor morphology and, when appropriate, the presence of overt subject person inflection morphology.)
(110) [ Cösihiimat quih] hax ihmoocta.

3IO-Ir.ID-be.lie the.Fl just 1SGS.Tr-Px-look.at
'Siento que va a ser mentira.'
I think it will be a lie. хмH_08-15-07_45a
(111) Hatee [siitax quih] hax maacta.

1Еm.Pro Ir.Id-go the.Fl just Px-1Em.S.Tr-look.at
'A mí me parece que se va a ir.'
I think that she's going. RMH_08-24-07_101d
(112) [ Hatee seehe conscmaa quih] hax maacta.

1Em.Pro to.do.(it) 3IO-2SGS-Ir.Id-N-know the.Fl just Px-1Em.S.Tr-look.at
'Me parece que no podrás.'
I don't think you will be able. хмH_-08-15-07_45b
(113) [ Ihpsiitax quih ] hax imoocta. 1SGS.In-Ir.Id-go the.Fl just 3:3-Px-look.at
'Piensa que voy a ir.'
She thinks that I'm going. RMH_08-24-07_101f
(114) [ Insiitax quih ] hax imoocta. 2SGS-Ir.Id-go the.Fl just 3:3-Px-look.at
'Piensa que vas a ir.'
S/he thinks that you're going. RMH_08-24-07_101g
(115) [Sahmees hipquij ihsiihit quih] hax ihmoocta. orange(s) Px-Cm 1SGS.Tr-Ir.Id-eat the.Fl just 1SGS.Tr-Px-look.at
'Creo que comeré esta naranja.'
I think I will eat this orange. (Offered) RMH_08-24-07_102b
The complement may also be a clause with a predicate nominal (without a modal, see §10.1).
(116) [ Me roocö] hax ihmoocta. 2Pro crazy just 1SgS.Tr-Px-look.at
'Creo que estás loco.'
I think you're crazy. RMH_08-24-07_102a

\subsection*{12.2.1.6 hax \(\sqrt{ } V\) soj \(\sqrt{ }\) Cii think}

The transitive verb \(\sqrt{ } \mathbf{C i i} f e e l\) occurs in an expression with the adverb hax just and the (inflected) reflexive pronoun to mean think. Apparently a statement with this expression indicates the harboring of some considerable doubt about the veracity of the proposition. (The complement clause might not, in fact, strictly be a complement of this verb if the reflexive pronoun corresponds to its direct object.) The forms of the verb for the complement of this expression exactly parallel those of the expression for hax \(V\) oocta think discussed in the preceding section.

(123) [ Isiihit quih ] hax misoj inttii? 3:3-Ir.Id-eat the.Fl just 2P-self 2SGS-Rl-feel
‘¿Crees que lo comerá?’
Do you think that s/he will eat it? RMH_08-24.07_102f
(124) [ Roocö] hax misoj inttii? crazy just 2 P -self 2 SGS-Rl-feel
'Crees que está loco/a?'
Do you think that s/he is crazy? RMH_08-24-07_102e

\subsection*{12.2.1.7 hax \(V\) ahii seem}

The expression hax \(\sqrt{ }\) ahii it seems, a passive form based on the verb \(\sqrt{ }\) Cii sense, feel, takes the same kind of complements as the transitive verb. It is often followed by a phrase such as hax taa ma (just Rl-be DS). Since the expression is at least morphologically passive, the construction is then typically one in which the complement clause is a subject complement.
[... halx iquiixiim ] \({ }^{\circ}\) hax tahii \({ }^{\circ}\) hax taa ma, ... Atten 3:3-SN-Tr-fear it.seems just Rl-be DS
'.. parece que le tuvo algo de miedo, ...'
... it seems that he was a bit scared of him, ... (Conejo_Coyote_32)
Cói matiiima oo, [hiza macoii] \({ }^{\circ}\) hax mahii \({ }^{\circ}\) s.
still 2PlS-Rl-sleep-Pl Dl here 2PlS-SN-be.Fl.Pl it.seemed Cert
'Parece que están aquí todavía durmiendo.'
It seems like you are here still sleeping. (Mk 14:41) XмH_08-15-07_46a
... [taax icmís ] \({ }^{\circ}\) hax pahii \({ }^{\circ}\) hax paa ta \(\mathbf{x}\), ... DDP 3:3-SN-Tr-resemble it.will.seem just Ir.Dp-be DS UT
‘... será como eso, ...'
... it will be like that, ... (nt 3:12) XмH_08-15-07_46b
... [ \({ }^{\circ}\) ziix quih canoj \({ }^{\circ}\) quih caaixaj timoca iquiht ] light the.FL SN-strong Md-Twd 3:3-SN-Tr-see-PL
\({ }^{\circ}\) hax pahii \({ }^{\circ}\) hax saa ha.
it.will.seem Intns Ir.Id-be Aux-DCL
'... será como han visto una luz fuerte.'
... it will be like they have seen a strong light. (M44:16) XMH_08-15-07_46c
\(\ldots\) [ cohcacooix \(\quad\) xah \(]^{\circ}\) hax pahii \({ }^{\circ}\) hax paa ta \(\mathbf{x}\), ... 3IO-1SGS.Tr-SN-remove - it.will.seem just Ir.Dp-be DS UT
'... será como les quitaré [las cargas pesadas] ...'
... it will be like I will remove [the heavy loads] ... (Mt 11:28) XMH_08-15-07_47a
... [ \({ }^{\circ} h a n t\) ihpcooca \({ }^{\circ}\) ] \({ }^{\circ}\) hax pahii \({ }^{\circ}\) hax paa ta,
I.will.rest it.will.seem just Ir.Dp-be DS
'.. parece que descansaré, ...'
... it seems that I will rest, ...(LL 12:19) XMH_08-15-07_47b

... (and) it will be like you will have good eyesight, ... (Rv3:18) XMH_08-15-07_47d

\subsection*{12.2.1.8 Viixim fear}

When the verb \(\sqrt{ }\) iixim fear takes a clausal complement, that complement is headed by a deverbal noun and is followed by an article. A realis form uses the article is cop (erect, typical of
abstractions (see §21.2.3)), and irrealis complements use the article hac.
(133) \(\left[{ }^{\circ}\right.\) Psaac \(\underline{\text { icooxi }}^{\circ}\) cop \(]\) ihtemiixim iho.
hunger 3P-PON-US-die the.VT 1SGS.Tr-RL-N-fear DCL
'No tengo miedo de hambre.'
I am not afraid of hunger. XMH_08-15-07_45d
(134) \(\left[{ }^{\circ}\right.\) Hacx icamiih \({ }^{\circ}\) cop \(]\) ihtcmiixim iho. apart 3P-PON-US-not.be.Fl the.VT 1SGS.Tr-Rl-N-fear DCL
'No tengo miedo de morir.'
I'm not afraid to die. / I'm not afraid of dying/death. RMH_08-24-07_103c
(135) [ Ziix quih cjizi cop] ihtcmiixim iho.
thing the.Fl SN-painful the.VT 1SGS.Tr-Rl-N-fear Dcl
'No tengo miedo de dolor.'
I'm not afraid of pain. RMH_10-15-07_53a
(136) [ Xepe com iiqui cöhisiin hac ] ihtcmiixim iho. sea the.Hz 3P-toward 3IO-1P-Ir.Id-go the.LC 1SGS.Tr-Rl-N-fear Dcl
'No tiengo miedo de ir en el mar.'
I'm not afraid to go out on the sea. RMH_10-15-07_53b
(137) [ Cöhisoos hac ] ihtemiixim iho.

3IO-1p-Ir.Id-sing the.LC 1SGS.Tr-RL-N-fear DCL
'No tengo miedo de cantar [p.ej., en este evento].
I'm not afraid to sing [e.g., in this event]. RMH_10-15-07_53c
(138) [ Cöiscoos hac ] ihtcmixim iho.

3IO-3P-Ir.Id-US-sing the.Lc 1SGS.Tr-Rl-N-fear Dcl
'No tengo miedo de cantar [en general].'
I'm not afraid of singing [in general]. RMH_10-15-07_53d RMH_10-15-07_54
(139) [ Ziix ccap quij ano cöhisiij hac ] ihtcmiixim iho. thing SN-fly the.Cm 3P.in 3IO-1P-Ir.Id-sit the.LC 1SGS.Tr-Rl-N-fear Dcl
'No tengo miedo de viajar en avión.'
I'm not afraid to fly in a plane. RMH_10-15-07_53e
A striking fact about these complements is that they are all intransitive. Attempts to elicit transitive complements were rejected in favor of passive versions of the same, as the following examples illustrate.
[ Cöispahit hac ] ihtemiixim iho.

3IO-3P-PON-Pv-eat the.Lc 1SgS.Tr-Rl-N-fear DcL
'No tengo miedo de comerlo.'
I'm not afraid to eat it. (literally, ... of its being eaten.) RMH_08-24-07_103d
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{(141)} & [ \({ }^{\circ}\) Ziix ccap \({ }^{\circ}\) & quij & cöisahcaatax & hac ] & ihtemiixim \\
\hline & airplane & the.См & 3IO-3P-Ir.Id-Py & the.LC & 1SGS.Tr-R \\
\hline & \multicolumn{5}{|l|}{'No tengo miedo de pilotear un avión.'} \\
\hline & I'm not afrai & do fly a & plane. (literall & flow & RMH_10-15-07 \\
\hline
\end{tabular}

\subsection*{12.2.2 Subject complements}

In one sense, subject complements are very common. The clause headed by the deverbal noun cöipanxz his/her/its running in (75), repeated as (142), is the subject complement of the deverbal noun ihiha its being fast.
(142) [ [ Cöipanzx hac] ihíha ]] hyoomzo. 3IO-3P-PON-run the.Lc 3P-PON-fast 1SGS.Tr-DT-want
'Quise que corriera rápido.' хмн__08-15-07_42a
I wanted him/her to run fast. (literally, I wanted his/her running to be fast.)
Verbs that routinely subcategorize for subject complement clauses are very uncommon, however. \({ }^{13}\) The expressions for necessary are the most salient and they all take deverbal nounheaded complements.

\subsection*{12.2.2.1 iic co- Viipe necessary}

This expression is an idiom: iic co- \(\sqrt{\text { iipe }}\) (3P-toward 3IO- good). The examples that illustrate its usage all have realis complements presented without any article.
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{4}{*}{(143)} & [ Miisi ] & \multicolumn{3}{|l|}{\({ }^{\text {iiicp cöquiipe }}{ }^{\circ}\) ha.} \\
\hline & 2P-PON-drink & necessary & \multicolumn{2}{|l|}{DcL} \\
\hline & \multicolumn{4}{|l|}{'Es necesario que lo tomes.'} \\
\hline & \multicolumn{4}{|l|}{It is necessary for you to drink it. RMH_08-24-07_104a} \\
\hline \multirow[t]{4}{*}{(144)} & [ Iti nyaaspo & \({ }^{\text {iicp }} \mathbf{c}\) cö & iipe \({ }^{\circ}\) & ha. \\
\hline & 3P-on 2P-PON- & write necessary & & DCL \\
\hline & 'Es necesario que & lo escribas.' & & \\
\hline & You have to write & it. RMH_08-24-07_10 & & \\
\hline
\end{tabular}

\footnotetext{
\({ }^{13}\) As mentioned in \(\S 2.7\), one way to express the length of time of an event, or how long ago it took place, is with a clause that has a deverbal noun followed by an expression of time. While these might be subject complements, the fact that the verb agrees in number with the unit of time, these are taken here as adjunct clauses that are not cross-referenced on the verb.
}
(vii) \(\frac{\text { Juan quih hacx imiih }{ }^{\circ} \text { quih }}{\text { the.FL 3P-PON-die }}\) hant moocj.
the.FL year Px-two
'Juan falleció hace dos años.'
Juan died two years ago. XMH_08-15-07_45e
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{4}{*}{(145)} & [ Hezitmisoj quij contmiiha ] & \({ }^{\circ}\) iicp cöquiipe \({ }^{\circ}\) ha. \\
\hline & Hermosillo the.Cm 3IO-Aw-2P-PON-move & necessary DcL \\
\hline & 'Es necesario que vayas a Hermosillo.' & \\
\hline & You have to go to Hermosillo. RMH_08-24-07_104c & \\
\hline \multirow[t]{4}{*}{(146)} & [ Imcaatax ] \({ }^{\text {iicp cöquiipe }}{ }^{\circ} \mathrm{ha}\). & \\
\hline & 3P-PON-N-US-go necessary Dcl & \\
\hline & 'No es necesario que uno vaya.' rMH_08-24-07_104d & \\
\hline & It isn't necessary that one go. (More literally, & It is necessary that on \\
\hline
\end{tabular}

\subsection*{12.2.2.2 haa Vahca necessary}

This expression is an idiom: haa \(\sqrt{ }\) ahca (there be.located). The example here has an irrealis deverbal complement and the article quih.
```

(147) [ Hisiitax xah quih ] ${ }^{\circ}$ haa caahca ${ }^{\circ}$ ha.
1P-Ir.ID-go - the.Fl necessary DCL
'Es necesario que yo vaya, me parece.'
I will have to go, I guess. RMH_08-24-07_104e

```

\subsection*{12.2.2.3 toc co- \(\sqrt{ }\) ahca necessary}

This expression is an idiom: toc co- \(\sqrt{ }\) ahca (there 3IO- be.located). The complements in the following examples are with irrealis deverbal complements and the article hac.
 cöisahaaix hac ] oo \({ }^{\circ}\) toc cöcahca \({ }^{\circ}\) ha. 3IO-3P-Ir.Id-Pv-take the.Lc DL necessary DcL
'Es necesario llevar a un médico a la persona con disentería.'
It is necessary to take a person who has dysentery to a doctor. RMH_08-24-07_104f
(149) [ Isiitax hac ih ] \({ }^{\circ}\) toc cöcahca \({ }^{\circ}\) ha.

3P-Ir.Id-go the.Lc Foc necessary DcL
'Es necesario que vaya.'
It is necessary for him/her to go. RMH_10-15-07_55

\subsection*{12.2.3 Deverbal noun complements of phasal verbs}

The phasal verbs discussed in detail in \(\S 12.3\) below may also occur with complements headed by realis deverbal nouns. They are more complicated than the examples discussed in the preceding sections in that they are raising constructions just like the examples with finite complements discussed in \(\S 12.3\). Evidence for the raising analysis is presented in \(\S 12.3\).
```

(150) ..., [ hai cop cói iixai ] oo cötajöc ma, ...
wind the.VT still 3P-PON-strong DL 3IO-RL-continually DS
'... el viento seguía siendo fuerte, ...'
... the wind continued to be strong ... (Ac 27:18) RMH_05-16-08_44
¿[ Inyáhitim ] intaxi?
2P-PON-UO-eat-ImpF 2SGS-Rl-finish
‘¿Has terminado de comer?’
Have you finished eating? RMH_05-16.08_45

```

\subsection*{12.3 Finite complements of phasal verbs}

Three verbs are used as phasal verbs: \(\sqrt{\text { axi }}\) finish (elsewhere used to mean make, create (an object); Vácatx stop (elsewhere used to mean release, set free, let go, let loose, abandon; and \(\sqrt{ } \mathbf{a j o ̈ c}\) continually be or do (not used outside of this phasal construction). \({ }^{14}\) These verbs are unusual in that the complement that they take is identical to a dependent clause, either with irrealis po- (§17.1.1.1) or realis \(\mathbf{t}-(\S 17.1 .1 .5) .{ }^{15}\) And, oversimplifying a bit for the moment, the subject of the phasal verb is coreferential with the subject of the complement clause. The complement clause is bracketed in the following examples and the overt indicators (if any) of subject person inflection are underscored.

\section*{With the verb \(\sqrt{ }\) axi finish}
... [ tiix ihtíp ] ihtaxi, ... DDS 1SGS.Tr-Rl-straighten 1SGS.Tr-Rl-finish
‘... cuando terminé de enderezarla, ...'
... when I finished straightening that one, ... (DS2005, quiip) RMH_07-11-07_105
[ Ox tee ] itaxi, ... thus RL-say 3:3-RL-finish
‘Cuando terminó de decir así, ...'
When he finished saying thus, ... (Conejo_Puma_11.1) RMH_05-17-08_233
[ Zo hpoohit ] ihpooxi, ...
a/one 1 SGS.Tr-Ir.Dp-eat 1 SGS.Tr-Ir.Dp-finish
'Cuando termino de comer una [cabeza], ...'
When I finish eating one [head], ... (Conejo_Puma_13.1)

\footnotetext{
\({ }^{14}\) It seems reasonable to propose that this construction has resulted from the reanalysis of a chained clause construction. The dependent clause is now a finite clause embedded under raising verbs that indicate phasal aspect. The newly formed phasal verbs are identical in form to the verbs that gave origin to them. However, the syntax of these phasal verbs no longer matches their morphology in that the two that are etymologically and morphologically transitive are functioning as intransitive phasal verbs
\({ }^{15}\) This section reprises an analysis that was first presented in Marlett (2008d).
}
(155) [ Taax hapafitlam ] hapoox, DDP 1PLS-Ir.Dp-pull-Pl 1PLS-Ir.Dp-finish-Pl
cmaax hasaaitoj aha.
now 1PlS-Ir.Id-fish-Pl Aux-DCL
'Cuando terminamos de jalarlos, iremos de pesca.'
When we finish pulling them in, then we will go fishing. (Fishing_Conversation_4) RMH_07-11-07_107
(156) [ Xiica quipxa hoeenec tacoi hataaitoj] hatáx, thing.Pl SN-few 1P-ON-carry.Pl Md-Pl 1PlS-Rl-eat-Pl 1PLS-Rl-finish-Pl
‘Cuando terminamos de comer las pocas cosas que habíamos llevado, ...' Rмн_о5-
When we had finished eating the few things that we had taken along, ... (Future_-ishing_56)
(157) [ Ihpásaquim ]
ihpooxi,
1SGS.In-Ir.Dp-comb.one's.hair 1SGS.Tr-Ir.Dp-finish
'Cuando termine de cepillarme el cabello, ...'
When I finish combing my hair, ... (DS2005, casaquim) RMH_07-11-07_108
(158) [ Iscám com itaacöim ] itaxi, ...

3P-reed.boat the.Hz 3:3-RL-make.balsa.ready 3:3-RL-finish
'Terminó de preparar su balsa, ...'
S/he finished readying his/her reed boat, ... (DS2005, caacoim) XMH_08-08-07_279
(159) [ Mooin quij impoom] \(\underline{\text { impooxi }}\)

2P-ON-have.in.cheek.of.mouth the.Cm 2SGS-Ir.Dp-swallow 2SgS-Ir.Dp-finish
'Cuando terminas de tragar ese bocado, ...'
When you finish swallowing that mouthful, ... (DS2005, quiin) RMH_07-11-07_109
(160) [ Haptco toos] iyooxi. already RL-sing 3:3-DT-finish
'Ya ha terminado de cantar.'
S/he has already finished singing. RMH_07-27-07_15c
(161) [ Ihtahit ] ihyooxi.

1SGS.Tr-Rl-eat 1 SGS.Tr-Dt-finished
'Terminé de comerlo.'
I finished eating it. RMH_07-27-07_15d

\section*{With the verb \(\sqrt{\text { ácatx }}\) release/stop}
(162) [ Tapca ] ítácatx ma \(x\), xepe com xiimj.

RL-rain 3:3-RL-release DS UT sea the.Hz Em-clear
'Cuando deja de llover, el mar está claro.'
When the rain stops, the sea is clear. (DS2005, quimi) (RNH_07-27-07-13a)
..., [ quihehe \({ }^{\circ}\) caacoj quij itzaxö ] itácatx ma, ... ruler \(\quad \mathrm{SN}\)-big the.Cм 3:3-RL-discuss 3:3-RL-release DS
‘... cuando dejó de hablarle el rey, ...'
... when the king stopped speaking to him, ... (Mt 2:9, NTT) RMH_07-27-07-140
¿ \(^{\circ}\) Zó tpacta ma \({ }^{\circ}\) [taaitom x\(]\) itcmácatx, ctam tiquij? why? RL-speak UT 3:3-RL-N-release man Md-Cm
‘¿Por qué no deja de hablar ese hombre?’
Why doesn't that man stop talking? хмн_08-08-07_281
(165) [ Haptco toos] iyoocatx. already RL-sing 3:3-DT-release
'Ya ha dejado de cantar.'
S/he has already stopped singing. RMH_07-27-07_15e
With the verb \(\sqrt{ }\) ajöc continually be or do
[ Hax ihpooitom ] cohpoojöc oo, ...
just 1SGS.In-Ir.Dp-talk 3IO-1SGS.In-Ir.Dp-continually DL
'Aunque yo platique continuamente ...'
Even if I talk continually, ... (DS2005, cöcajö) RMH_07-11-07_106
[ Taax taa oo cöpopacta] cöpoojöc \(\quad\) oo \(\quad\) x, DDP DDP DL 3IO-Ir.Dp-be.in.appearance 3IO-Ir.Dp-continually DL UT
toc cösoii
caha.
there 3IO-Ir.Id-be.Fl.Pl Aux.SN-DcL
'Así serán siempre.'
They will forever be like that. (He 10:14, NTT) RMH_07-27-07-14d
(168) [ He hptiim ] cohptajöc oo toc cöhamom.

1Pro 1SGS.In-Rl-sleep 3IO-1SGS.In-Rl-continually Dl there 3IO-1SGS-Px-lie
'Yo estaba allí durmiendo todo el tiempo.'
I was there sleeping all the time. RMH_07-27-07-14e
[ Tooha ] cötajöc oo x, hant com iti quiihtim iha. Rl-cry 3IO-Rl-continually DL UT land the.Hz 3P-on SN-be.Fl-ImpF DcL 'Siempre anda llorando.'
She is continually going around crying. (ES2007, acaam ccaa 10)
\begin{tabular}{cllll} 
[ Hant hizac & tcomca ] & cöcajöc & oo & ha. \\
place this.LOC & RL-noisy & 3IO-SN-continually & DL & DCL
\end{tabular}
'Este lugar siempre está ruidoso.'
This place is always noisy. XмH_08-08-07_280


The material preceding the phasal verb is analyzed here as a subject complement of the phasal verb. It is proposed, furthermore, that the subject of the complement raises to be the subject of the phasal verb. The resulting structure is diagrammed in Figure 12.3.

It is a general fact about chained clauses that the mood of the series of clauses is harmonized except in very special situations. This is true in the preceding examples with the phasal verb complements as well; the complement mood is realis if the phasal verb is realis and it is irrealis if the phasal verb is irrealis.

One of the situations in which a "disharmony" occurs is when the irrealis is required in the complement clause because the phasal verb \(\sqrt{ }\) ajöc is negated.
(174) a. [Cmaam tiquij paha] cöyomajöc oo. woman Md-CM Ir.Dp-cry 3IO-Dt-N-continually DL
b. \(*\left[\begin{array}{ll}\text { Cmaam tiquij } & \begin{array}{l}\text { tooha }] \\ \text { RL-cry }\end{array}\end{array}\right.\) cöyomajöc 00.
'Esa mujer no está siempre llorando.'
That woman isn 't always crying. RMH_07-11-07_110
(175) a. [ Adolfo quih pas ] cöyomajöc 00. the.Fl Ir.Dp-sing 3IO-Dt-N-continually DL
b. *[ Adolfo quih \(\begin{array}{ll}\text { toos }] \\ \text { RL-sing }\end{array} \quad\) cöyomajöc \(\quad\) oo.
'Adolfo no siempre cantaba.'
Adolfo wasn't always singing. XMH _08-08-07_275
Irrealis morphology is not used if the other phasal verbs are negated.
(176) [ Ihptásaquim ] ihtcmaxi ipi ma.

1SGS.In-RL-comb.one's.hair 1SGS.Tr-Rl-N-finish still DS
\begin{tabular}{lllll} 
zaah & quij & áno & yoozquim. \\
sun & the.CM & 3P.in & DT-enter
\end{tabular}
'No terminé de peinarme antes de que se pusiera el sol.'
I didn't finish combing my hair before the sun set. XMH_08-08-07_274
a. [ Adolfo \begin{tabular}{lllll} 
quih & \(\left.\begin{array}{ll}\text { toos } & \mathbf{x}\end{array}\right]\) & \begin{tabular}{l} 
iyomácatx.
\end{tabular} \\
& the.FL & \begin{tabular}{ll} 
RL-sing & UT
\end{tabular} & 3:3-DT-N-release
\end{tabular}
b. *[Adolfo quih pas \(x\), iyomácatx.
'Adolfo no deja de cantar., \({ }^{16}\)
Adolfo doesn't stop singing. хмН__08-08-07_276
The analysis of these finite clauses as complements predicts that it should be difficult to interpose robust material between the (complement) clause and the phasal verb. This is true, as the following examples illustrate.
\begin{tabular}{llll}
\(*\) & Toos & tiix & cöyoojöc
\end{tabular}
('Siempre estaba cantando.') (S/he was always singing.)
* Toos Pedro quij cöyoojöc oo. RL-sing the.Cm 3IO-Dt-continually DL ('Pedro siempre estaba cantando.') (Pedro was always singing.)

Figure 12.3: Raising analysis for phasal verbs (cf. (172))


\footnotetext{
\({ }^{16}\) According to René Montaño Herrera, this sentence has only a habitual reading. If one is referrring to a specific situation, the deverbal noun complement is used: Adolfo quih yas iyomacatx.
}
\[
\begin{array}{ll}
\text { * Haptco toos } & \text { María quii }  \tag{180}\\
\text { the.CM } & \text { iyooxi. } \\
\text { already RL-sing } & \text { 3:3-DT-finish } \\
\text { ('Ya María ha terminado de cantar.') (María has already finished singing.) }
\end{array}
\]

This fact distinguishes these clauses from the general chained clause construction. While the usual situation in Seri discourse is for a nominal to be introduced as early as possible in the sentence (see §4.4.2), the violation of this stylistic principle (only found in purposefully elicited material) renders the examples as awkward or unnatural but not sharply ungrammatical as the preceding examples with phasal verbs.
\%/* Ø Inol cop itipje, Pedro cop imafitot.
3P-hand the.VT 3:3-RL-grab the.VT 3:3-Px-help.stand
Highly problematic or impossible reading: 'Tomándole la mano, Pedro le ayudó ponerse de pie.' Taking his/her \({ }_{i}\) hand, Pedro helped him/her \({ }_{i}\) stand up.

More possible reading (except for incongruity with the article cop, which indicates that Pedro is already standing): 'Tomándole la mano, le ayudó a Pedro ponerse de pie.' Taking his hand, s/he helped Pedro stand up.
(182) \% Toos, cmaam quij toc cöquiij iha. Rl-sing woman the.Cm there 3IO-SN-sit Dcl
'La mujer estaba allí cantando.'
The woman was there singing. хМН_-08-08-07_271
(183) \(\%{ }^{\circ}\) Iistox theemloj \({ }^{\circ}\), ctamcö coi toc cöcoii ha. 3P-?-PL RL-stink-Pl man-Pl the.Pl there 3IO-SN-be.Fl.PL DCL
'Los hombres estaban enojados.'
The men were angry. хмн_08-08-07_272
Nevertheless, apparently at least some adverbs may appear before the phasal verb in the phasal verb construction, and the enclitic \(\mathbf{x}\) (UT, §3.6.3) may appear at the end of the complement (perhaps completely unsurprisingly). The following examples are all elicited; the examples from texts of this construction do not have adverbs in them. Some consultants found the presence of certain adverbs odd enough to give less-than-acceptable judgments.
\begin{tabular}{lllll} 
Ihptoos & haptco & htaxi, & hizac & hihiij \\
1SGS.In-RL-sing & already & iSGS.TR-RL-finish & here & 1P-PON-sit \\
DCL
\end{tabular}
(185) \% iImpás \(\underline{x}\) xaa nsiixi haa -ya?

2SGS-Ir.Dp-sing UT soon 2SGS-Ir.Id-finish Aux QM
¿¿Vas a terminar de cantar pronto?’
Are you going to finish singing soon? RMH_07-27-07_16a
\% ¿Impás \(\underline{x}\) zímiöc insiixi haa -ya? 2SGS-Ir.Dp-sing UT when? 2SGS-Ir.Id-finish Aux QM
‘¿Cuándo vas a terminar de cantar?'
When are you going to finish singing? RMH_07-27-07_16b
Toos \(\underline{x}\) cöyoojöc oo, hant quih iti tiij \(\mathbf{x}\).

RL-sing UT 3IO-DT-continually DL land the.FL 3P-on RL-sit UT
'Siempre estaba allí cantando.'
S/he was always there singing. RMH_07-27-07_160
(188) Ihptoos hax ihtaxi hax ta hpyaanpx.

1SgS.In-Rl-sing Intns 1SGS.Tr-Rl-finish Intns Aux.Rl 1SgS.In-Dt-go.home
'En cuanto terminé de cantar, regresé a casa.'
Right as soon as I finished singing, I went home. RMH_07-27-07_16d
(189) Ihptaticpan hax ihtácatx, hax ta ma, hin yaaipot.

1SGS.In-Rl-work Intns 1SGS.Tr-Rl-release Intns Aux.Rl DS 1SGDO Dt-pay
'En cuanto terminé de trabajar, me pagó.'
As soon as I finished working, s/he paid me. RMH_07-27-07_16e
With regard to the prosodic aspects of this construction, it is important to consider examples that occur in spontaneous discourse since marked differences can be observed between such examples and those that are read, even by very competent readers. There may in fact be structural ambiguity for at least some examples - as common chained clauses and as the phasal verb construction per se. The phasal verb construction is more likely than typical chained clauses to be pronounced with no pause between the clauses in question, and the words of the complement clause are spoken at a slightly faster rate in the phasal verb construction that comparable clauses in the common chained clause construction. Speakers are demonstrably aware of these timing differences. \({ }^{17}\)

A sentence with clause chaining allows a clause to be postposed to final position, as shown in §3.7. While such sentences are only occasionally found in texts, they are not considered at all deviant. On the other hand, sentences with a postposed complement clause are decidedly ungrammatical even if the nominals are kept in initial position.
```

a. [ Tiix toos ] cöyoojöc oo.
DDS RL-sing 3IO-DT-continually DL
b. * Cöyoojöc 00, tiix toos.
c. * Tiix cöyoojöc oo, toos.

```

\footnotetext{
\({ }^{17}\) The difference between a chained clause construction and this construction is made orthographically by using a comma between clauses in the latter but not in the former.
}
'Siempre estaba cantando.'
S/he was always singing. RMH_07-11-07_113b
It has been mentioned that the subject of the phasal verb construction may be non-agentive. This is an important fact to understand since the transitive verbs Vaxi finish and Vacatx release/stop must have agentive subjects when they are not used as phasal verbs. \({ }^{18}\) Some examples with non-agentive subjects:

(194) Áno tooit ma tapca itácatx ma, ...

3P.in RL-arrive DS RL-rain 3:3-RL-release DS
'Dejó de llover en la tarde.'
It stopped raining in the afternoon. RMH_05-16-08_49
(195) Hamiime com tooil cöcajöc oo ha.
sky the.Hz Rl-blue 3IO-SN-continually DL DCL
'El cielo siempre es azul.'
The sky is always blue. = (171)

\footnotetext{
\({ }^{18}\) Recall that \(\sqrt{ }\) ajöc be/do continually is only used as a phasal verb.
\({ }^{19}\) This example is unusual in that the phasal verb inexplicably does not have the same subject as the complement clauses, unlike virtually all of the other examples found or elicited.
}
(196) Xepe com íti toom \(x\) cöcajöc oo ha. sea the.Hz 3P-on Rl-lie UT 3IO-SN-continually Dl DCL
'El mar siempre está encima de él.'
The sea is always over [covering] it. (ES2007, satoj_hasaitaj 15)
... hoocala com cötaanim cötajöc oo ma, cloud(s) the.Hz 3IO-RL-cause.covered 3IO-RL-continually DL DS
toc cömiihca.
there 3IO-Px-be.located
‘... siempre estaba nublado.'
... it was always cloudy. (Ac 27:20) RMH_05-16-08_50
(198) He hptooxnij cohptajöc oo, toc cöhamom.

1PRo 1SGS.In-RL-snore 3IO-1SGS.In-Rl-continually Dl there 3IO-1SGS-Px-lie
'Yo estaba allí roncando todo el tiempo.'
I was there snoring the whole time. RMH_05-16-08_51
Moreover, the subject of the phasal verb construction may be non-referential.
(199) Tapca itácatx ma \(x\), xepe com xiimj.

Rl.rain 3:3-Rl-release DS UT sea the.Hz Em-clear
'Cuando deja de llover, el mar está muy claro.'
When the rain stops, the sea is clear. (Ds2005, quimi) (= 162)
(200) Tapca \(\mathbf{x}\), iyomácatx.

Rl.rain UT 3:3-DT-N-release
'No deja de llover.'
It doesn't stop raining. \({ }^{20}\) хмН_08-08-07_277
(201) Tanloj cöcajöc oo ha.

RL-thunder-ImpF 3IO-SN-continually DL DcL
'Siempre está tronando.'
It's always thundering. XMH_08-08-07_282
(202) Ttamjö itácatx ma \(x\), yoonloj.

RL-lightning 3:3-RL-release DS UT Dt-thunder-ImpF
'Cuando dejó de relampaguear, tronó.'
When it stopped lightning, it thundered. (offered) RMH_11-20-07_149

\footnotetext{
\({ }^{20}\) According to René Montaño Herrera, this sentence has only a habitual reading. If one is referrring to a specific situation, the deverbal noun complement is used: Iipca iyomácatx.
}
(203) Hant hizac tcozim cöyoojöc oo.
place this.Loc RL-hot.(weather) 3IO-Dt-continually DL
'Siempre hace calor aquí.'
It is always hot here. хмн_08-08-07_283
These facts provide the motivation for analyzing these structures as raising rather than simple control structures.

A few more details regarding the question of the subject of the phasal verb should be pointed out, however. The following examples show the interaction of the phasal verb construction with idioms; the "literal" subject is relevant for the inflection of the phasal verb. These are not problematic for the raising analysis.
```

¿ $^{\circ}$ Miisax hant tooit ${ }^{\circ}$ cötajöc oo?
2P-? land RL-arrive 3IO-RL-continually DL
¿¿Estás siempre feliz?’
Are you always happy? RMH_10-16-07_01a
¿ $^{\circ}$ Miisax theemt ${ }^{\circ}$ cötajöc oo?
2P-? RL-stink 3IO-RL-continually DL
‘¿Estás siempre enojado/a?’
Are you always angry? RMH_10-16-07_01b

```

Other facts, however, show that the analysis is more complicated than imagined by the examples presented so far. These facts are reminiscent of the types of complication presented by passive clauses for the Different Subject marking (see §9.1.1). Consider the following three variations on a sentence in which "your" hair is being combed by someone else. The free translations give fairly literal renditions of these three sentences. In all three the complement clause is passive "you are having your hair combed". In (206a) the surface subject ("you") of the complement clause is the subject of \(\sqrt{ }\) ajöc continually. Such a sentence follows the pattern of what has been shown above. In (206b) the subject of \(\sqrt{ }\) ajöc is "unspecified subject", which indicates that the "deep" subject of \(\sqrt{ }\) ahásaquim has raised. Since all of the examples previously seen have had active complement clauses, such facts as seen here have not been presented. Finally, in (206c) the subject of \(\sqrt{ }\) ajöc is third person, as if no raising at all had taken place.

\footnotetext{
a. Intahahásaquim contajöc oo, ...

2SGS-RL-Pv-AUG-comb.one's.hair 3IO-2SGS-RL-continually DL
'Estás siempre siendo peinado/a, ...'
You are always having your hair combed, ... RMH_10-16-07_12c
}
```

b. Intahahásaquim cötcaajöc oo,...
2SGS-RL-Pv-AUG-comb.one's.hair 3IO-RL-US-continually DL
`Alguien siempre está peinándote, ...'     Someone is always combing your hair, ... RMH_10-16-07_12b c. Intahahásaquim cötajöc oo, ...     2SGS-RL-Pv-AUG-comb.one's.hair 3IO-RL-continually DL     `Estás siempre siendo peinado/a, ...'
You are always having your hair combed, ... RMH_10-16-07_12a

```

In the following example, the unspecified agent/subject raises and provokes passive voice on the (morphologically transitive) phasal verb \(\sqrt{ }\) axi finish (since unspecified subject cannot be the grammatical subject of a transitive verb, see §17.1.5).
```

*}\mathrm{ Zaxt quisil }\mp@subsup{}{}{\circ}\mathrm{ cmaam quij tahahásaquim tpaxi ma,
child female the.Cm Rl-Pv-Aug-comb.one's.hair RL-Pv-finish DS
zaah quij áno yoozquim.
sun the.Cm 3P.in DT-enter

```
'Cuando la muchacha terminó de ser peinada, se puso el sol.'
When the girl finished having her hair combed, the sun set. RMH_10-16-07_03b
Finally, the following three examples show variations on a sentence with a passive complement; one is of questionable grammaticality, one is robustly acceptable, and one is ungrammatical. These facts indicate the need for more research in this area, both descriptive and analytical.
a. ? Intahahásaquim ma,

2SGS-RL-Pv-AUG-comb.one's.hair 2SGS-RL-Pv-finish DS
\begin{tabular}{llll} 
zaah & quij & áno & yoozquim. \\
sun & the.См & 3P.in & DT-enter
\end{tabular}
b. Intahahásaquim tpaxi ma,

2SGS-RL-PV-AUG-comb.one's.hair RL-Pv-finish DS
zaah quij áno yoozquim.
c. * Intahahásaquim \(\underline{\text { intaxi ma, }}\)

2SGS-Rl-Pv-Aug-comb.one's.hair 2SGS-Rl-finish DS
zaah quij áno yoozquim.
‘Cuando terminaste de ser peinado/a, se puso el sol.’ (b) RMH_10-16-07_03c
When you finished having your hair combed, the sun set. (a) RмH_10-16-07_04

\subsection*{12.4 Indirect speech}

Indirect speech is presented in a sentence ending with a verb of saying. The verb of saying is either the morphologically intransitive irregular (stress-retracting) verb \(\sqrt{ } \mathbf{e}_{\text {Irreg }}\) say or the transitive verb (with addressee as direct object) \(\sqrt{ }\) ah tell (plural stem \(\sqrt{ }\) aii). Three simple examples:
\begin{tabular}{|c|c|}
\hline \multirow[t]{4}{*}{(209)} & [ Inaail quih itacl tintica iiqui tjizi, ] \\
\hline & 3P-skin the.Fl 3P-surface Md-Aw even Rl-painful \\
\hline & 'Dijo que hasta le duele la piel.' \\
\hline & S/he said that even his/her skin hurt. RMH_08-24-07_108b \\
\hline \multirow[t]{4}{*}{(210)} & [ Tmoqueepe, ] imiii. \\
\hline & RL-sick 3:3-Px-say-PL \\
\hline & 'Le(s) dijeron que estaba enfermo/a.' \\
\hline & They told him/her/them that s/he was sick. RMH_07-11-07_104a \\
\hline \multirow[t]{3}{*}{(211)} & [Pedro quih tmoqueepe,] imiih. the.Fl Rl.sick 3:3-Px-say \\
\hline & 'Le(s) dijo que Pedro estaba enfermo.' \\
\hline & S/he told him/her/them that Pedro was sick. RMH_07-11-07_1 \\
\hline
\end{tabular}

It is assumed that these clauses have a structure something like that shown in Figure 12.4. The emedded clause is not the grammatical direct object of the verb of saying, however, since the verb \(\sqrt{ } \mathbf{e}_{\text {Irreg }}\) say is morphologically intransitive and the direct object of the verb \(\sqrt{ } \mathbf{a h}\) tell is a person who hears the message. \({ }^{21}\)

\subsection*{12.4.1 Morphology of the embedded clause}

If the last clause of the indirect speech is finite and realis, it must be in the dependent realis form (§17.1.1.2).
\begin{tabular}{|c|c|c|c|c|c|}
\hline (212) & a. & [ Ziix thing & \[
\begin{aligned}
& \text { zo } \\
& \text { a }
\end{aligned}
\] & \begin{tabular}{l}
ntizi, ] \\
2SGS-RL-defeat
\end{tabular} & meye.
2SGS-Dt-say \\
\hline & b. & \begin{tabular}{l}
* [ Ziix \\
thing
\end{tabular} & zo & \begin{tabular}{l}
nyizi, ] \\
2SGS-DT-defeat
\end{tabular} & meye.
2SGS-Dt-say \\
\hline & c. & \[
\underset{\text { thing }}{[\mathbf{Z i i x}}
\] & \[
\begin{aligned}
& \text { zo } \\
& \mathrm{a}
\end{aligned}
\] & \begin{tabular}{l}
nxizi, ] \\
2SGS-Em-defeat
\end{tabular} & meye.
2SGS-Dt-say \\
\hline & d. & \begin{tabular}{l}
* [ Ziix \\
thing
\end{tabular} & \[
\begin{aligned}
& \text { zo } \\
& \text { a }
\end{aligned}
\] & \[
\begin{aligned}
& \text { mmizi, ] } \\
& \text { 2SGS-PX-defeat }
\end{aligned}
\] & meye.
2SGS-Dt-say \\
\hline
\end{tabular}

\footnotetext{
\({ }^{21}\) The verb \(\sqrt{ }\) ah say is not listed with this usage clearly in the 2005 dictionary. In common sentences, the direct object of this verb is third person and therefore unmarked. It is not until more complicated examples were elicited that the true picture about this verb in this usage came into view.
}
'Dijiste que habías vencido a alguien o que habías ganado algo.'
You said that you defeated someone or that you had won something. (Ds2005, teeque;
Apostador_203) XMH_08-15-07_49a
Different Subject marking (§3.6) does not occur between the embedded indirect speech and the verb of saying.
\begin{tabular}{|c|c|c|c|c|}
\hline [ Icoos & itaa & (*ma), ] & teete, & \(\cdots\) \\
\hline Inf.In-sing & 3:3-RL-know & DS & RL-say & \\
\hline \multicolumn{5}{|l|}{'Dice que sabe cantar, ...'} \\
\hline S/he says tha & /he knows how & ow to sing & ... (DS200 & ac) x \\
\hline
\end{tabular}
(214) [Intmoqueepe (*ma), ma miih.

2SGS-RL-sick DS 2SGDO Px-say
'Te dijo que estabas enfermo/a.'
S/he told you that you were sick. RMH_07-11-07_104b
(215)
[ Intmoqueepe (*ma), ] him miih. 2SGS-Rl-sick DS 1SGDO Px-say
'Me dijo que estabas enfermo/a.'
S/he told me that you were sick. RMH_07-11-07_104b
[ Tmoqueepe (*ma), ] imiii. RL-sick DS 3:3-Px-say-PL
'Le(s) dijeron que estaba enfermo/a.'
They told him/her/them that s/he was sick. RMH_07-11-07_104a
(217) [ Ihptmoqueepe (*ma), ] him miii.

1SGS.In-RL-sick DS 1SGDO Px-say.PL
'Me dijeron que yo estaba enfermo/a.'
They told me that I was sick. RMH_07-11-07_104c
If the case of a predicate nominal ( \(\$ 10.1\) ), the modal that is required in simple sentences is omitted when embedded as indirect speech.
(218) [ Ctam cacösxaj (*iha), ] yoque.
man SN-tall/long DCL DT-US-say
'Era un hombre alto, se dice.'
He was a tall man, it is said. LHC_2-06-07_160d, XMH_08-15-07_50b
A finite irrealis complement appears with a verb in the finite independent irrealis form followed by the auxiliary ha (but no modal) or by the realis auxiliary ta. Both types of complements generally (but not always) indicate a sense of obligation.
(219) [ Insaticpan ha ] teeme.

2SGS-Ir.ID-work Aux Px-say
'Dijo que trabajaras.'
S/he said that you should work. RMH_11-28p-07_02
(220) Hita quij [somcapjoee ha, ] teeme.

1P-mother the.Cm Ir.Id-N-US-gossip Aux Px-say
'Mi madre dijo que no chismeara.'
My mother said that one should not gossip. (DS2005, capjoee) XMH_08-15-07_49c
(221) Ihyaaco cop ano tafp, hin yatolec, 1P-house the.Vt 3P.in RL-arrive 1SGDO Dt-ask.for.help
[ ihpsiij 1SGS.In-IR.Id-UO.fetch.water AUX RL-say
'Llegó a mi casa y me pidió que le ayudara y que acarreara agua.'
S/he arrived at my house and asked me to help him/her by fetching water (said that
I should help fetch water). (DS2005, teeque) XMH_08-15-07_49d
Him caazi quij [ihpsaticpan ta ] him miih.
1SgDO SN-Tr-carry the.Cm 1SgS.In-Ir.Id-work Aux.Rl 1SgDO Px-say
'Mi padre me dijo que trabajara.'
My father told me to work (told me that I should work). хмН_08-15-07_49e, RMH_08-24-07_106d
[Poyaam ta, isexl ha] teeme.
Ir.Dp-later DS 3:3-Ir.Id-buy Aux Px-say
'Dijo que lo(s) comprará más tarde.' o 'Dijo que lo(s) comprara más tarde.'
S/he said that s/he will buy it/them later. or S/he said that s/he should buy it/them
later. RMH_08-24-07_107b

Figure 12.4: Analysis of simple indirect speech examples

(224) [ Ox somquee ha] teeme.
thus Ir.Id-N-US-say Aux Px-say
'Dijo que uno no debería hablar así.'
S/he said that one should not talk like that. RmH_08-24-07_108a
[ Hasocoozx xah ta ] hemyo.
1PlS-Ir.Id-UO-steal-Pl - Aux.Rl 1PlS-Px-say-Pl
'Dijimos que robáramos.'
We said that we should rob. RMH_08-24-07_108d
[Siifp (quih) ha ] teepe \(x\), siifp aha
Ir.Id-arrive the.Fl Aux Ir.Dp-say UT Ir.Id-arrive Aux-DCl
'Si dijo que iba a llegar, llegará.'
If s/he said s/he was coming, she will come. RMH_08-24-07_108c RMH_05-16-08_52
\begin{tabular}{lllll} 
Zixcám com & insiimjc & ha ] & teeme. \\
fish & the.Hz & 2SGS-IR.ID-bring AUX & PX-say
\end{tabular}
'Dijo que trajeras el pescado.'
S/he said for you to bring the fish. RMH_11-28p-07_04

If the irrealis complement occurs in a stripped irrealis form (§14.5) followed by the auxiliary ca (§20.2.2), the sense is simple reported speech and not obligation.
\begin{tabular}{clll}
{\(\left[\begin{array}{lll}\text { Pac } & \text { siifp } & \text { ca }]\end{array}\right.\)} & teeme. \\
some & Ir.ID-arrive & AUX.SN & PX-Say
\end{tabular}
'Dijo que algunos vienen.'
S/he said that some are coming. RMH_08-24-07_107a
(229) [ Me saticpan ca ] teeme.

2Pro Ir.Id-work Aux.SN Px-say
'Dijo que vas a trabajar.'
S/he said that you are going to work. RMH_11-88p-07_01
(230) [ Me zixcám zo siimjc ca ] teeme.

2Pro fish the.Hz Ir.Id-bring Aux.SN Px-say
'Dijo que vas a traer un pescado.'
S/he said that you are going to bring a fish. RMH_11-28p-07_03
(231) [ Me zixcám zo siiho ca] teeme.

2Pro fish a Ir.Id-see Aux.SN Px-say
'Dijo que verás un pescado.'
S/he said that you will see a fish. RMH_11-28p-07_05

\subsection*{12.4.2 Position of the subject phrases}

If the verb of speech has an explicit phrasal subject, that subject appears either before the embedded indirect quote, as in (232)-(235), or it is postposed to follow the verb of speech, as in
(236)-(237). The analysis depicted in Figure 12.4, with the possibility of postposing discussed in §3.12, accounts for these facts.
(232) Pedro quih, [ cmaam, tiix tmoqueepe, ] imiih.
the.FL woman DDS RL.sick 3:3-Px-say
'Pedro le(s) dijo que ESA MUJER está/estaba enferma.'
Pedro told him/her/them that THAT WOMAN is/was sick. RMH_07-11-07_112a
(233) Pedro quih [Juana quih tmoqueepe, ] imiih.
the.FL the.FL RL.sick 3:3-Px-say
'Pedro le(s) dijo que Juana estaba enferma.'
Pedro told him/her/them that Juana was sick.
(no ambiguity: *Juana told him/her/them that Pedro was sick.) RMH_07-11-07_111a
(234) Comcaac himcoi [trooqui zo htcooz,] him miii.
person/Seri.Pl DT-Pl vehicle a 1SGS.Tr-Rl-steal 1SGDO Px-say.Pl
'Esas personas me acusaron de haber robado un carro.'
Those people accused me of having stolen a car. RMH_07-27-07_10
(235) Cmaam, tiix [Pedro quih tmoqueepe,] imiih.
woman DDS the.Fl Rl.sick 3:3-Px-say
'ESA MUJER le(s) dijo que Pedro está/estaba enfermo.'
THAT WOMAN told him/her/them that Pedro is/was sick. RMH_07-11-07_112b
(236) [ Tmoqueepe, ] imiih, Pedro quih. Rl.sick 3:3-Px-say the.FL
'Pedro le(s) dijo que estaba enfermo/a.'
Pedro told him/her/them that s/he was sick. RMH_07-11-07_111b
(237) [Cmaam, tiix tmoqueepe, ] imiih, Pedro quih. woman DDS RL.sick 3:3-Px-say the.FL
'Pedro le(s) dijo que ESA MUJER está/estaba enferma.'
Pedro told him/her/them that THAT WOMAN is/was sick. RMH_07-11-07_112c
(238) [ Trooqui zo htcooz, ] him miii, comcaac himcoi. vehicle a 1SGS.Tr-Rl-steal 1SGDO Px-say.Pl person/Seri.Pl DT-PL
'Esas personas me acusaron de haber robado un carro.'
Those people accused me of having stolen a car. RMH_10-16-07_02
As suggested by the analysis shown in Figure 12.4, the subject of the verb of saying cannot appear between the complement and the verb of speech.
* [Tmoqueepe, ] Pedro quih imiih. RL.sick the.FL 3:3-Px-say
('Pedro le(s) dijo que estaba enfermo/a.')
(Pedro told him/her/them that s/he was sick.)
```

* [Cmaam, tiix tmoqueepe,] Pedro quih imiih.
woman DDS Rl.sick the.FL 3:3-Px-say
('Pedro le(s) dijo que ESA MUJER estaba enferma.')
(Pedro told him/her/them that THAT WOMAN was sick.)

```
* [ Trooqui zo htcooz, ] comcaac himcoi him miii. vehicle a 1SGS.Tr-Rl-steal person/Seri.Pl Dt-Pl 1SGDO Px-say.Pl
('Esas personas me acusaron de haber robado un carro.')
(Those people accused me of having stolen a car.)
Nor can the embedded indirect speech be postposed.
```

* Cmaam tiquij imiih, [(Pedro com)_tmoqueepe ].
woman Md-Cm 3:3-Px-say the.Hz Rl.sick
('Esa mujer le(s) dijo que (Pedro) estaba enfermo.')
(That woman told him/her/them that he (Pedro) was sick.)

```

The subject of the verb of the embedded indirect discourse (at least in a simple example) may also be postposed following the verb of saying. In the following case, the postposed DP is likely to be taken as the subject of the verb tmoqueepe \(s / h e\) was sick because of the demonstrative ticom denoting that the referent of cmaam woman is in a horizontal position.
\begin{tabular}{llll} 
[ Tmoqueepe, ] & imiih, & cmaam & ticom. \\
RL.sick & 3:3-Px-say & woman & the. Hz
\end{tabular}
'Le(s) dijo que esa mujer estaba enferma.'
S/he told him/her/them that that woman was sick. [Some other readings are also possible here.] RмH_05-16-08_53

\subsection*{12.4.3 The use of yoque}

The unspecified subject form of the irregular verb \(\sqrt{ } \mathbf{e}_{\text {Irreg }}\) say - yoque (DT-US-say) - is commonly used as the verb of saying to indicate that the information expressed in the complement is not based on direct observation or personal knowledge. Therefore traditional stories are liberally peppered with the word yoque. In such texts the word is typically unstressed and often reduced phonologically to the point of being practically inaudible, and in fact may be omitted entirely in fast speech. In cases of the latter, one is clued to the elision of yoque by the fact that the sentence ends prosodically with a dependent clause and the absence of an independent clause anywhere.
..., hant \({ }^{\circ}\) iiqui itasnan \(^{\circ} \mathrm{ma}\), toc cotom, yoque. land 3P-toward 3:3-RL-? DS there 3IO-Rl-lie DT-US-say
'... lo apretó hacia la tierra, allí estaba, se dice.'
..., he (Puma) held him (Rabbit) against the ground, he (Rabbit) was there, it is said. (Conejo_Puma_5.3)
(245) Iscmáhitim ta, itáh, yoque.

3:3-Ir.Id-N-eat-Impf Aux.Rl 3:3-Rl-tell Dt-US-say
'Le dijo que no lo comiera, se dice.'
She told him that he should not be eating it, it is said. (ES2007, acaam_ccaa 014)
(246) Tal cah itaaitoj, yoque.
embers the.Fl-Foc 3:3-RL-eat.PL Dt-US-say
'Comieron brasas, se dice.'
They ate embers, it is said. (Apostador_48) RMH_08-24-07_106a
(247) Hant Xnit, taax contita, yoque.
place DDP 3IO-Aw-Rl-move Dt-US-say
'Fue a Xnit, se dice.'
He went to Xnit, it is said. (Dos_Hermanos_65.1) RMH_08-24-07_106b

\subsection*{12.5 Indirect thought}

The intransitive verb \(\sqrt{\text { amoz }}\) think is used to present indirect thoughts and to express beliefs, intentions, and pretentions. The word xah appears after or near the end of the complement clause, with the appearance of demarcating the complement. \({ }^{22}\)
[ Tiim haa toom xah ] hpmiimoz.
Rl-sleep there Rl-lie - 1SGS.In-Px-think
'Pensé que estaba allí durmiendo / dormido/a.'
I thought that s/he was there sleeping. (DS2005, camoz) \(\times\) MHH_08-15-07_51a
(249) [ Tiim haa toom xah] miimoz. Rl-sleep there Rl-lie - Px-think
'Pensó que estaba durmiendo / dormido/a.'
S/he thought that s/he was asleep ... хмн_08-15-07_51b
(250) Hita [ he \({ }^{\circ}\) hacx smiih \({ }^{\circ}\) ca xah ] yoomoz.

1P-mother 1 Pro will.die Aux.SN - Dt-think
'Mi madre pensó que yo iba a morir.'
My mother thought that I was going to die. (DS2005, cqueemi) XMH_08-15-07_51e
(251) [ Ee yaa \({ }^{\circ}\) xah] yoomoz.

3Pro his/hers - Dt-think
'Él/ella pensó (incorrectamente) que era el dueño.'
S/he (incorrectly) thought that s/he was the owner of it. (offered) RMH_05-16-08_54

\footnotetext{
\({ }^{22}\) This word is elsewhere an attenuating adverb (§24.6.1) and a coordinator (§25.1).
}
(252) [Isyaa xah ta ] yoomoz.

3:3-Ir.ID-own — Aux.Rl Dt-think
'Tuvo la intención de ser dueño de ello.'
S/he intended to take possession of it. XMH_08-15-07_-51f
[Ihpsiifp xah ta] camoz iha.

1SGS.In-Ir.Id-arrive - Aux.Rl SN-think Dcl
'Pensó que yo iba a llegar.'

Verbless predicate nominals are presented without a modal (chapter 10) when embedded.
\begin{tabular}{|c|c|c|}
\hline Oot & cop haxz xah ] & hpyoomoz. \\
\hline coyote & the.Vt dog & 1SGS.In-Dt-think \\
\hline \multicolumn{3}{|l|}{'Creí que el coyote era un perro.'} \\
\hline \multicolumn{3}{|l|}{I thought that the coyote was a dog. (DS2005, camoz) XMH_08-15-07_50} \\
\hline
\end{tabular}
[ Ctam ticop ziix icocooz
man MD-VT thing Inf.In-UO-steal
quiya
'Creí que ese hombre era un ladrón.' xah ] \begin{tabular}{l} 
hpyoomoz. \\
I thought that man was a robber. xnH_08-15-07_50d
\end{tabular}

The same restriction against using a name as a predicate nominal in verbless construction ( \(\$ 10.1 .1\) ) holds in these cases as well.
(256) *[Ctam ticop Juan xah ] hpyoomoz.
man Md-Vt - 1SGS.In-Dt-think
('Creí que ese hombre era Juan.') (I thought that man was Juan.)
Setences with this verb tend toward the meaning of intention in some cases.
[ Ihpsiitax xah ta ] hpyoomoz.
1SGS.IN-IR.ID-go - AUX.RL 1 SGS.IN-DT-think
'Estabensando ir,
'Estaba pensando en ir.'
I was thinking about going / intending to go. (DS2005, camoz) XMH_08-15-07_51c
```

[ Ihsiihit xah ta ] hpyoomoz.
1SGS.Tr-Ir.ID-eat - Aux.Rl 1SGS.In-Dt-think
'Pensé que yo lo/la comería.'
I thought I would eat it. RMH_11-27-07_55

```
(259) i Me [áz saai ta] camoz -ya? \({ }^{23}\)

2Pro what? Ir.Id-make Aux.Rl SN-think QM
¿Qué piensas hacer?’
What are you planning to make? хмн_-88-15-07_51h
It also has the idea of pretending in some cases.
(260)
[ Itcmajíz
xah ] yoomoz.
3:3-RL-N-feel.pain - DT-think
'Está fingiendo que no le duele.'
S/he is pretending that it doesn't hurt her/him. (DS2005, camoz) XMH_08-15-07_51d
(261) [ Itemaa xah] yoomoz.
3:3-RL-N-know - DT-think
'Fingió que no lo sabía.'
S/he pretended that s/he didn't know it. RMH_11-27-07_50
(262) [ Ihtcmii
xah ] hpyoomoz.
1SGS.Tr-Rl-N-hear - 1SGS.In-Dt-think
'Fingí que no lo/la oía.'
I pretended not to hear it/him/her. RMH_11-27-07_51

\subsection*{12.6 Expectation and intention}

Several other verbs and idioms are used to express thoughts and intentions.

\subsection*{12.6.1.1 ox \(\sqrt{\text { imoz expect }}\)}

The verb \(\sqrt{ } \mathrm{imoz}\) (generally conjugated as a morphological intransitive, derived from have heart) used with the adverb \(\mathbf{0 x}\) thus, can be used to express expectations.
[ Inscmaai ta / pi ] ox inscmimoz aha. 2SGS-Ir.Id-N-make Aux.Rl/ Aux.Ir thus 2SGS-Ir.Id-N-think Aux-Dcl
'No pienses que no lo vayas a hacer.'
Don't expect that you will not do it. \(\quad\) XMH_08-15-07_52a
(264) [ Insiihit ta/pi] ox inscmimoz aha.

2SGS-Ir.Id-eat Aux.Rl/Aux.Ir thus 2SGS-Ir.Id-N-think Aux-Dcl
'No pienses que lo vayas a comer.'
Don't expect to eat it. RMH_08-24-07_109a

\footnotetext{
\({ }^{23}\) This kind of question can have the word xah just before \(\mathbf{t a}\), and the meaning in that case is a bit different. The sentence without xah is a more open question (which might even be rhetorical) while the sentence with xah implies that the range of answer is pragmatically restricted by something in the context (items on the table, for example); the second sentence could not be rhetorical.
}
[ Insiitax pi ] ox inscmimoz aha.
2SGS-Ir.Id-go Aux.Ir thus 2SGS-Ir.Id-N-think Aux-DcL
'No pienses que vayas a ir.'
Don't expect to go. RMH_08-24-07_109b
Tiix [ oyacj quih isiihit ta ] ox yimoz.
DDS 3P-ON-call.sibling the.FL 3:3-IR.ID-eat Aux.RL thus Dt-think
'Pensaba que su hermano/a lo comería.'
S/he expected that her brother would eat it. RMH_11-27-07_52
[ Hapi isiihit (xah) ta ] ox yimoz. Intns 3:3-Ir.Id-eat - Aux.RL thus Dt-think
'Tenía la esperanza de comerlo él/ella mismo/a.'
S/he expected to eat it her/himself. RMH_11-27-07_53 RMH_11-27-07_54

\subsection*{12.6.1.2 \(\sqrt{ }\) amoz try, expect}

The intransitive verb \(\sqrt{ }\) amoz think has the meanings try, intend and even want and expect with clausal complements. The complements may have a range of morphological forms, but they include the complementizer-like word xah.
'Intentamos buscar langostas del mar.'
We tried to hunt for lobsters. RMH_05-16-08_55
\(\left[\begin{array}{lll}\text { Ptcamn com hamcaat } & \text { xah }] & \text { hamiimjöc. } \\ \text { lobster the.Hz 1PLS-Px-look.for-PL } & - & \text { 1PLS-Px-think-PL } \\ \text { 'Intentamos buscar langostas del mar.' } & \\ \text { We tried to hunt for lobsters. RMH_-05-16-08_56 }\end{array}\right.\)
[Ptcamn com hapocaat xah] hasiimjöc aha. lobster the.Hz 1PLS-Ir.Dp-look.for-Pl- 1PLS-Ir.ID- think-PL Aux-Dcl
'Intentaremos buscar langostas del mar.'
We will try to hunt for lobsters. RMH_08-24-07_110a
[Ptcamn com he scaat xah ta] camjöc iha. lobster the.Hz 1Pro Ir.Id-look.for-Pl — Aux.Rl SN-think-Pl Dcl 'Decidimos intentar buscar langostas del mar.' We decided to try to hunt for lobsters RMH_08-24-07_110b
[ Insiihit xah ta ] ntamoz?
2SGS-Ir.ID-eat - Aux.Rl 2SGS-Rl-think
'¿Pensabas que lo/la ibas a comer?'
Did you expect to eat it? RмН_11-27-07_58

\subsection*{12.6.1.3 V \(C\) imoz think, try}

The transitive verb \(\sqrt{ }\) Cimoz can take a realis complement clause and mean think in some situations.
\begin{tabular}{ccll} 
(273) & Taalim & xah \(]\) & oímjöc
\end{tabular}\(\quad\) iha..

The same verb means try with complements that have a subject that is coreferential with the subject of \(\sqrt{ }\) Cimoz.
(274) [ Isiiptajc xah ta ] immimjöc. 3:3-Ir.Id-pull.out - Aux.RL 3:3-Px-think-PL
'Intentaron sacarlo/la.'
They tried to pull it out. RMH_08-24.07_110c
(275) [ Ihsiihit xah ta ] hyoímoz.

1SgS.Tr-Ir.Id-eat - Aux.Rl 1SgS.Tr-Dt-think
'Intenté comerlo/la.'
I tried to eat it. RMH_11-27-07_56
(276) [ Insiihit xah ta ] nttimoz?

2SGS-Ir.Id-eat - Aux.Rl 2SGS-Rl-think
‘¿Intentaste comerlo/la?’
Did you try to eat it? RMH_11-27-07_57

\subsection*{12.7 Direct quotations}

Direct quotations are typically expressed with a verb of saying before or after the quotation. These verbs of saying are either the morphologically-intransitive verb \(\sqrt{ }\) ee (plural \(\sqrt{\text { ooza) say }}\) or the transitive verb \(\sqrt{ }\) ai (plural \(\sqrt{ }\) aaam) \({ }^{24}\) tell (someone) (which is not used with indirect quotations). The adverb ox thus or the word xah occurs directly before these verbs when it is used to report direct speech. Examples of direct quotations with other verbs such as ones meaning whisper or shout have not been found.
(277) Himoz quij cohpseepit aha - ox mee, \({ }^{\circ}\) ziix coosyat \({ }^{\circ}\) quih. 1P-heart the.Cm 3IO-1SGS.In-Ir.Id-? Aux-Dcl thus Px-say giant the.Fl
'Apostaré mi corazón —dijo el gigante.'
"I will bet my heart," said the giant. (DS2005, queepit) XMH_08-15-07_53a

\footnotetext{
\({ }^{24}\) The plural stem begins with the same short low vowel as the singular stem (important to know for conjugation purposes) followed by a long vowel (as the result of the ablaut that indicates plural).
}
(278) Ziix hipxahcop haa, poho - ox tee, yoque. thing Px---Vt SN.EQ Doubt thus Rl-say Dt-US-say '¿Tal vez es éste? - preguntó, se dice.'
"Might this be him/her/it?" s/he asked, it is said. (DS2005, poho) LHC_2-06-07_190
(279) Cocazni \(^{\circ}\) hi. Cocazni \({ }^{\circ}\) hi - ox mee.
rattlesnake Foc rattlesnake Foc thus Px-say
‘¡Víbora de cascabel! ¡Víbora de cascabel!- gritó.’
"Rattlesnake! Rattlesnake!", she yelled. RMH_05-16-08_57
(280) Xazoj cop ox tee, yoque: [...] ox itai, yoque. puma the.Vt thus Rl-say Dt-US-say thus 3:3-Rl-tell Dt-US-say 'Puma dijo— [...] -le dijo, se dice.'
Puma said, "... ", he told him, it is said. (Puma_Conjo 6.1,2-7.1)
... quisil quij ctam oyacj quij ox itai, yoque: SN-small the.Cm man 3P-ON-call.sibling the.Cm thus 3:3-RL-tell DT-US-say
[...] ox tee, yoque. thus RL-say Dt-US-say
'... el menor le dijo a su hermano- [...] -dijo, se dice.'
The younger one said to his brother: "...", he said, it is said. (Dos_Hermanos_2.2-3.2)
Most of the preceding examples show that the quoted material is exactly as it would appear as spoken by the original speaker, including with final modals. The following examples also have direct quotations followed by \(\mathbf{x a h}\) and an intransitive verb of saying.
(282) [ Cmaa scaatax ha] xah teemyo.
now Ir.Id-1Em.S.In-go Aux - Px-say-Pl
'Dijeron- ¡Vamos de una vez!'
They said, "Let's go right away!" RMH_08-24-07_105a
[ \({ }^{\circ}\) Hant pofii ta \({ }^{\circ}\), hatemalx ] xah hemyo. tomorrow 1PLS-RL-N-go.Pl - 1PLS-Px-say-Pl
'Dijimos- Podemos ir MAÑANA.'
We said, "We can go TOMORROW." RMH_08-24-07_105b
[ Xaa haa hapoozcam
soon there \(\quad\) 1PLS-Ir.DP-arrive.PL
UT thing a
xah mee.
'Llegaremos pronto, y comeros algo - dijo.'
"We will arrive soon, we will eat something," she said. (Topete_111) RMH_05-20-08_06
Direct expressions of thought are identical in structure except that they use the intransitive
verb \(\sqrt{ }\) amoz think: Ox miimoz:


\subsection*{12.8 Non-complements}

In some cases the Seri equivalents of what are expressed as complement clauses in other languages are not complement clauses at all in Seri. The structure of the sentence is simply chained clauses (see chapter 3). This is true for the biclausal periphrastic causative construction, which is much less commonly used than the morphological causative constructions described in §19.5. The morphological causative and the periphrastic causative are contrasted in the following two examples.
(286) Direct causative (morphological)
¿Cafee cop intahoaatjö?
coffee the.VT 2SGS-RL-cause.sweet
‘¿Endulzaste el café?’
Did you sweeten the coffee? RMH_05-16-08_60
(287) Indirect causative (periphrastic construction with chained clauses)
¿Cafee cop me oo ntah ma, coaatjö -ya?
coffee the.Vt 2Pro - 2SGS-Rl-do DS SN-sweet QM
‘¿Endulzaste el café?’ (o ‘¿Endulzaste TÚ el café?’ o ‘¿Hiciste que el café se endulzara?’
Did you sweeten the coffee? (or Did YOU sweeten the coffee?, or Did you have the coffee sweetened? RmH_05-20-08_07

As shown by the glosses, there is a bit more flexibility in the interpretation of the periphrastic causative (also caused by the presence of the overt pronoun in this example). The action may be indirectly effected.

More examples of the periphrastic causative are given below. In some cases the periphrastic causative is necessary because the event caused is expressed with a negative - a situation that is unexpressable with the morphological causative.
(288) He hipi ma ma htah homperi homperi

1Pro Intns Dl 2SGDO 1SGS.Tr-Rl-do DS 2SGS-RL-N-Pv-defeat DCL
'Yo te hice invencible.'
I MYSELF made you be invincible. RMH_10-15-07_56
(289) Me oo hin ntah ma, ma htemaho ho.

2Pro Dl 1SGDO 2SGS-Rl-do DS 2SGDO 1SGS.Tr-Rl-N-see Dcl
'Tú lo hizo para que no te viera.'
You caused it such that I could not see you. (Apostador_324-325) RMH_05-16-08_61
¿Juan quih me oo ntah ma, coos -ya?
the.Fl 2Pro Dl 2SgS-Rl-do DS SN-sing QM
'¿Hiciste que Juan cantara?'
Did you have Juan sing? RMH_05-16-08_62
(291) He hipi hisoj hipquij Yooz quij oo hin tah ma,

1Pro Intns 1P-self Px-Cm God the.Cm Dl 1SgDO Rl-do DS
he hiz cömoca ha.
1Pro here 3IO-Twd-SN-move DcL
'He venido porque Dios me mandó.'
I have come here because God caused it. (Lk 11:30) OP_2-2-07_028
The same kind of chained clause structure is used for some other sentences that may be expressed with complements in English. A few examples are given here to illustrate.
\begin{tabular}{lllll} 
Oot zo & hantaxl & cötiihtim & ma, & ittiix, \\
\hline coyote a near & 3IO-RL-be.FL-IMPF & DS & 3:3-RL-feel-PL \\
'Sintieron que un coyote estaba cerca, ...' \\
They sensed that a coyote was nearby, ... (More literally, A coyote was nearby, \\
they sensed it, ...)
\end{tabular}

Tiix pohaa ta htcmaa ho.
DDS Ir.Dp-EQ DS 1SGS.Tr-Rl-N-know Dcl
'No sé si es él/ella.'
I don't know whether it's him or not. (More literally, If that will be him/her, I don't
know it.) XMH_08-15-07_53c
Ihpooho htemaa ho.
1SGS.Tr-Ir.Dp-see 1SGS.Tr-Rl-N-know Dcl
'Lo dezconozco.' RMH_10-15-07_57a
I don't know him/her. (More literally, If I see him/her, I don't know him/her/it.)
(295)

Zaah zo haquix piij ta htemaa ho.
sun a there Ir.Dp-sit DS 1SGS.Tr-Rl-N-know Dcl
'No sé si hay un sol.'
I don't know whether there is a sun or not. (More literally, If there is a sun, I don't
know it.) хмн_08-15-07_54

\section*{13. Nouns}

Nouns are a robust class of words in Seri. The basic common nouns generally refer to items of nature. Some examples include azoj star, hant land, xepe sea, hai wind, air, hap mule deer, hast stone, mountain, xazoj puma, and zaah sun. But such nouns also include a few tools such as pac deer bone awl, heectim mesquite club for killing fish and sea turtles, and peen carrying pole. Obligatorily possessed nouns are used for body parts, family relations, a few personal items, and a few expressions of location.

Work on plants and animals in the culture has revealed only a few classificatory basic nouns, such as cootaj ant, hehe plant (of any type), conee grass (of any type), ziic bird, hacat shark, hapaj octopus, haquiimet small lizard, \({ }^{1}\) seenel butterfly. There is no simple term for bush, tree, cactus, animal, clam, snail, snake, or insect, for example. The expression for animal is a lexicalized phrase, however - ziix ccam, thing SN-alive - and this expression is also used for insect, as well as evidently being the historical source of the word zixcám \({ }^{\circ}\) fish. The expression for person, human being (ziix quiisax, thing SN-have.life is well established, although Cmiique Seri person is sometimes used with the same meaning. \({ }^{2}\) In some cases a specific term is now being extended in use as a class term: haquiimet is sometimes used to refer to all lizards (big and small) despite its apparent original meaning as only the class of small lizards, and coiimaj whipsnake is sometimes used to refer to all non-venomous snakes.

The use of various words for taxonomical purposes has only been cursorily investigated. For example, recent interviews have revealed that the term ziic bird does in fact also include the bats. The term zixcám \({ }^{\circ}\) fish has more than one use in the taxonomical system. It may refer to the true class of fish, it may refer to a larger class of sea life that is basically fish and sharks, and it may refer to a much larger class of life that includes all sea life, whether animal or plant.

Some nouns display expected semantic extensions. Iizax moon also means month, zaah sun also means day (and clock), hant land also means year. Others display even broader semantic range: hast means everything from pebble to stone to rock to mountain just as hehe can refer to virtually any kind of plant, cactus, tree, bush, stick, or post. Distinct primary-term names for different species of plants and animals are very common (although more complex names are also used for many): iiz (synyonym ziij) blue palo verde tree (Cercidium floridum), snapxöl (variant

\footnotetext{
\({ }^{1}\) See Felger \& M. Moser (1985).
\({ }^{2}\) The word Cmiique usually stands in contrast to other specific group members such as Cocsar non-Indian
Mexican, Yequim Yaqui, and Hápats Apache. There are contexts, however, in which its meaning is clearly not to be found in opposition to another ethnic group but rather in contrast to non-human entities. See the example at the beginning of chapter 8 , for example.
}
znapxöl) Mexican palo verde tree (Parkinsonia aculeata), ziipxöl foothill palo verde tree (Cercidium microphyllum); tacj Pacific bottlenosed dolphin (Tursiops truncatus), xahamat common dolphin (Delphinus capensis); haxt Crassostrea corteziensis oyster, teexoj (synyonym iimox) purple-lip rock oyster (Spondylus calcifer), stacj Saccostrea palmula rock oyster.

Expressions based on deverbal nouns (see chapter 14) have been developed to refer to invented and new items to the culture, although the same have been a common strategy for dealing with vocabulary change due to avoidance taboos. \({ }^{3}\) Therefore even common items of nature may have elaborate lexical expressions for them, which sometimes coexist alongside somewhat disused simpler terms. Examples include ziix haasax ano quiij pack rat (thing pack.rat.nest 3P.in SN-sit, thing that sits in pack rat nest) (compare with less common if not archaic word xpos) and ziix an ihahaapl refrigerator (thing 3P.in 3P-PON-AUG-cold, in which something is cooled). These expressions are discussed in \(\S 13.5\). Nouns for concepts are also commonly used derived from verbs; examples: icamatj (3P-PON-US-hot) fever, icozim (3P-PONhot.weather) summer, icapitol (3P-PON-US-bloated) indigestion, ihapii (3P-PON-AUG-taste) its flavor, hihisil (1P-PON-small) my childhood.

This chapter looks at classes of nouns based on morphology (possession and pluralization, \(\S 13.1\) ), the count/mass noun distinction (§13.1.3), as well as noun classes that are developing around the choice of determiner (§13.3). The details of the morphology of possessive marking and pluralization are presented (§13.2). Locational nouns - nouns that are used to indicate spatial relationships - are presented in §13.4.

\subsection*{13.1 Morphological classes}

Nouns are subdivided into classes by various criteria. Two important morphological criteria are the possibility of inflecting for possessor (§13.1.1) and the possibility of inflecting for absolute (§13.1.2), which is an overt marker of unspecified possessor; see Table 13.1. Cross-cutting these classes is the criterion of count noun vs. mass noun (§13.1.3)

\subsection*{13.1.1 Possessive marking}

Names, subject-oriented deverbal nouns, and most common nouns do not and cannot inflect for possessor in general usage. \({ }^{4}\) The examples in (1) illustrate the possibility or impossibility of inflecting for first person possessor hi-.

\footnotetext{
\({ }^{3}\) M. Moser (2003).
\({ }^{4}\) Subject-oriented deverbal nouns carry possessor marking in a single very marked context; see \(\S 14.2\).
}
\begin{tabular}{lcc}
\hline \multicolumn{4}{c}{ Table 13::1: Morphological characteristics of noun subclasses } \\
& Inflect for possessor & Inflect for absolutive \\
Majority of common nouns & - & - \\
Small set of common nouns & \(\checkmark\) & - \\
Names & - & - \\
Deverbal nouns (subject-oriented) & - & - \\
Deverbal nouns (object-, propositionoblique- & \(\checkmark\) & - \\
oriented) & \(\checkmark\) & \\
Kinship terms & \(\checkmark\) & \(\checkmark\) \\
Body parts & \(\checkmark\) & \(\checkmark\) \\
Personal items (some) & \(\checkmark\) & \(\checkmark\) \\
Locational nouns & - \\
\hline
\end{tabular}
(1)
a. Name (see chapter 15)
\begin{tabular}{llll} 
Socaaix & Punta Chueca & *hi-Socaaix & (my Punta Chueca) \\
Adolfo & Adolfo & *hi-Adolfo & (my Adolfo)
\end{tabular}
b. Subject-oriented realis deverbal noun (see \(\S 14.1\) )
\begin{tabular}{|c|c|c|c|}
\hline caticpan & worker, one who works & *hi-caticpan & (my worker) \\
\hline \multicolumn{4}{|l|}{SN-work} \\
\hline caaspoj & one who writes & *hi-caaspoj & (my writer) \\
\hline \multicolumn{4}{|l|}{SN-write} \\
\hline hapaspoj \({ }^{\circ}\) & paper, what was written & *hi-hapaspoj & (my paper) \\
\hline \multicolumn{4}{|l|}{SN-PV-write} \\
\hline \({ }_{\text {¢ }}{ }^{\text {apapaspoj }}{ }^{\circ}\) & hanoocaj」 book & *hi-hapaspoj & hanoocaj (my \\
\hline SN-Pv-write & SN-Pv-carry.under.arms & & \\
\hline
\end{tabular}
c. Common noun
\begin{tabular}{llll} 
hast & stone & *hi-hást & (my stone) \\
hehe & tree, plant, stick & *hi-hehe & (my tree, plant, stick)
\end{tabular}

One caveat about the inability of common nouns to be inflected for possessor: apparently it is theoretically possible for any common noun to be so inflected, although in a very limited context. The names of certain species of animal and plant life - typically some insignificant species in comparison with others - are literally translated coyote's \(X\), where X is some common noun that is obviously inflected for third person possessor. Some examples:
(2)
a. oot izamt
a species of small swimming crab (Cronius ruber)
coyote 3P-zamt (cf. zamt, blue swimming crab (Callinectes bellicosus))
b. oot icaanj soapfish (Rypticus spp.)
coyote 3P-caanj (cf. caanj, Gulf grouper (Mycteroperca jordani))

\title{
c. oot ijoeene a desert passion vine (Passiflora arida) coyote 3P-joeene (cf. joeene, edible Passiflora palmeri)
}
e. oot ipyooque an unidentified sun star (starfish) coyote 3P-pyooque (cf. pyooque, a sun star (Heliaster kubiniji))

Large specimens of the giant Panamic cockle Laevicardium elatum xtiip were referred to as xpacaao ixtiip (mermaid 3P-xtiip). \({ }^{5}\) The noun zaah sun, day is possessed to mean birthday: mizaah your birthday. Possessed forms of common nouns are not otherwise attested. See §16.1.6 for information on how possession of common nouns is indicated syntactically.

Nouns that may be inflected for possessor are kinship terms, \({ }^{6}\) body part nouns, \({ }^{7}\) personal items, locational nouns, and deverbal nouns other than those that are subject-oriented. A few common nouns also may be inflected for possessor. The ungrammatical items in the first column of some subgroups in (3) are meant to indicate that the bare root - if such can be determined \({ }^{8}\) - cannot stand alone.
a. Kinship term
*camaz (daughter-in-law) hicamaz my daughter-in-law
1P-daughter.in.law

\footnotetext{
\({ }^{5}\) See the text "xtiip" in ES2007, by René Montaño Herrera.
\({ }^{6}\) One can observe today the use of Spanish loanwords for the kinship terms, by young and older people alike. These loanwords are also used as possessed nouns. Examples include himama my mother, and hinana my grandmother.
\({ }^{7}\) Body part nouns may also be parts of plants as well as of humans and animals, of course. Examples include istj (3P-leaf) its leaf and ixaai (3P-root) its root. These nouns are always used with third person possessor in normal contexts, of course, and so the morphological structure is proposed by analogy and because of similarity in form (i- for third person possessor). Some body part nouns may be used with inanimate nouns to indicate something similar: \(\sqrt{ }\) sxap top of the head is roof when used with a noun such as haaco house (see haaco cop isxap (ABS.house the.VT 3P-top).
These "part" terms are most felicitously used, in most cases, with a "whole" that is very conspicuous in the context. This means that when the "whole" is not first or second person, the preference is for the "whole" to be explicitly expressed if not contextually salient. Thus one usually does not talk about a leaf, but rather a plant's leaf: hehe istj (plant 3P-leaf); nor about a bone, but rather a thing's bone: ziix itac (thing 3P-bone); nor about meat, but rather a thing's meat: ziix ipxasi (thing 3P-flesh).
(i) ..., hehe quih istj quih cacat quih imiihit. plant the.FL 3P-leaf the.FL SN-bitter the.FL 3:3-PX-eat
'..., come las hojas amargas.'
..., it eats bitter leaves. (ES2007, acaam_ccaa 5b)
\({ }^{8}\) See §13.2.3 for a discussion of the putative underlying forms.
}
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{2}{|r|}{\multirow[t]{2}{*}{*ta}} & (mother) & hita \(\quad m\) & \multirow[t]{2}{*}{my mother} \\
\hline & & & 1P-mother & \\
\hline \multirow[t]{5}{*}{b.} & Body part & & & \\
\hline & *lit & (head) & hilít \(\quad m\) & my head, my hair \\
\hline & & & 1P-head/hair & \\
\hline & \multirow[t]{2}{*}{*f} & \multirow[t]{2}{*}{(nose)} & hiif \(n\) & \multirow[t]{2}{*}{my nose} \\
\hline & & & 1P-nose & \\
\hline \multirow[t]{9}{*}{c.} & \multicolumn{2}{|l|}{Personal item} & & \multirow{3}{*}{my sandal, my shoe} \\
\hline & *taamt & (sandal) & hitaamt m & \\
\hline & & & 1P-sandal & \\
\hline & \multirow[t]{2}{*}{*onam} & \multirow[t]{2}{*}{(hat)} & hiionam \(n\) & \multirow[t]{2}{*}{my hat} \\
\hline & & & 1P-hat & \\
\hline & \multirow[t]{2}{*}{*xz} & \multirow[t]{2}{*}{(pet)} & hiixz \(\quad m\) & \multirow[t]{2}{*}{my pet} \\
\hline & & & 1P-pet & \\
\hline & \multirow[t]{2}{*}{*spaaya} & \multirow[t]{2}{*}{(sword)} & hispaaya \(m\) & \multirow[t]{2}{*}{my sword \({ }^{9}\)} \\
\hline & & & 1P-sword & \\
\hline \multirow[t]{5}{*}{d.} & \multicolumn{4}{|l|}{Locational noun} \\
\hline & \multirow[t]{2}{*}{*mocl} & \multirow[t]{2}{*}{(under)} & himocl \(u\) & \multirow[t]{2}{*}{under me} \\
\hline & & & 1P-place.under & \\
\hline & \multirow[t]{2}{*}{*pac} & \multirow[t]{2}{*}{(behind)} & hipac b & \multirow[t]{2}{*}{behind me} \\
\hline & & & 1P-place.behind & \\
\hline \multirow[t]{5}{*}{e.} & \multicolumn{4}{|l|}{Deverbal noun (object-oriented, \(\S 14.3\) ) \({ }^{10}\)} \\
\hline & oohit & what s/he/it ate & hoohit & \multirow[t]{2}{*}{what I ate, my food} \\
\hline & \multicolumn{2}{|l|}{3P-ON-EAT} & 1P-ON-eat & \\
\hline & 00m & what s/he swallowed & hoom & what I swallowed \\
\hline & \multicolumn{2}{|l|}{3P-ON-swallow} & \multicolumn{2}{|l|}{1P-ON-swallow} \\
\hline \multirow[t]{5}{*}{f.} & \multicolumn{4}{|l|}{Deverbal noun (proposition/oblique-oriented, §14.4)} \\
\hline & *hisil & (childhood) & hihisil \(\quad\) & when I was little, \\
\hline & & & 1P-PON-small \(m\) & my childhood \\
\hline & yas & his/her singing & ihyás & my singing \\
\hline & 3P-PON-sing & & 1P-PON-sing & \\
\hline
\end{tabular}

\footnotetext{
\({ }^{9}\) The Spanish word espada has been borrowed as haspaaya, which has been obviously re-analyzed as ha-spaaya (ABS-sword), and so ispaaya is simply \(\mathbf{i}\) - (3P) plus the bound root \(\sqrt{ }\) spaaya.
\({ }^{10}\) Sometimes when no overt possessor prefix appears in these deverbal forms, it is because a phonological rule deleting the first of two vowels (across morpheme boundaries) has deleted the vowel of the third person possessor \(\mathbf{i}\)-, or a rule has deleted possessive \(\mathbf{i}\) before \(\mathbf{y}\). See §13.2.3.
}
g. Common noun (small subset of loanwords)
\begin{tabular}{llll} 
eenim & knife & \begin{tabular}{l} 
heenim \\
1P-knife
\end{tabular} & my knife \\
tom & money & \begin{tabular}{l} 
hitóm \\
1P-money
\end{tabular} & my money \\
& & hicaamiz & my shirt \\
caamiz & shirt & 1P-shirt & \\
cápota & jacket & hicápota & my jacket \\
& & 1P-jacket & \\
saaco & long blouse & \begin{tabular}{l} 
hisaaco
\end{tabular} & my long blouse \\
& & 1P-long.blouse
\end{tabular}

In §13.2.3 it is shown that possessed noun classes are further distinguished by the particular set of possessive prefixes that they take; kinship terms are different from the other classes.

The reasons for considering the possessive morphemes \(\mathbf{h i}, \mathbf{m i}\) and \(\mathbf{i}\) to be prefixes is briefly reviewed here. First, their order with respect to the nominal stems is invariant; they cannot be postposed: hitóm my money, but *tom hi. Second, the possessive morphemes cannot separated from the nominal stem by a pause: *hi .... tom. Third, there is phonological interaction between the possessive prefix and the nominal stem: the vowel \(\mathbf{i}\) is deleted before a nominal stem beginning with a vowel or with \(\mathbf{y}\) : heenim my knife, yeen his/her face (from underlying \{iyeen \(\}\) ). In some cases the fusion of the possessor with the stem results in a single syllable: hiif my nose. Fourth, the possessive prefix cannot be stressed for emphasis: *HIlít (with extra stress on the syllable hi) (MY hair/head). Fifth, the possessive prefix cannot be separated from the nominal stem by any other word: *hi caacoj eenim my big knife. Sixth, the possessive prefix occurs even if an overt noun phrase possessor occurs and the phrase is ungrammatical without it: Juan quij ilít Juan's head/hair, *Juan quij lit.

Nouns that are not body part nouns, personal items, or kinship terms cannot have the "possessor" expressed directly using the possessive prefixes. And if the noun is not actually possessed, the possessive pronoun (§16.1.6) is also not felicitous. Consider the examples in (4)(11):
\begin{tabular}{lll} 
a. comcaac \(\llcorner\) hantx mocat」 & ancestors \\
b. \(\quad\) Hicomcaac hantx mocat & (our ancestors) \\
c. & * comcaac hantx mocat hoyaat & (our ancestors)
\end{tabular}
(5)
a. hapaaal

SN-Pv-order
employee
b. * hihapaaal
1P-SN-Pv-order
(my employee)


\footnotetext{
\({ }^{11}\) The word hamt, which usually means loose soil, has a possessed form (previously unrecorded) ihamt, which means his or her native land.
}
```

c．＊comcaac ihant Seri people＇s land 3P－land
d．comcaac quih hant yaat ${ }^{\circ}$ Seri people＇s land（Seri territory）
Seri．people the．Fl land their
（ or hant comcaac quih yaat）

```

Expression of a relationship with these nouns is done with either an extra deverbal noun or a proper form of the deverbal noun that is the core of the expression，as shown in（12）－（19）．
（12）comcaac เhantx mocat」 เiyat cöhayacp」
Seri．people ancestors from．whom．we．have．descended
＇nuestros antepasados＇
our ancestors（the ancestors from whom we have descended）（siete＿filos 52）
（13）hoaal
1P－ON－order
my employee（lit．，the one whom I order）
（14）him queaal
1SGDO SN－Tr－order
my boss（lit．，the one who orders me）
（15）เhapaspoj \({ }^{\circ}\) he cacoaat
paper 1 IO SN－cause．know
my school teacher（lit．，the one who causes me to know paper）
（16）\hapaspoj \({ }^{\circ}\) cohyacoaat」
paper 3IO－1P－PON－cause．know
my student（lit．，the one whom I cause to know paper）
（17）thehe iti hyahitim」
plant／wood 3P－on 1P－PON－UO－eat－IMPF
my table（lit．，the wood that I eat on）
（18）hinol hocaaix
1P－finger 1P－ON－put．CM
my ring（lit．，what I put on my finger）
（19）comcaac quih hant iti yaii
person／Seri．PL the．Fl land 3P－on 3P－PON－be．Fl．PL
Seri territory（lit．，the land where the Seri people live）

\section*{13．1．2 Absolute marking}

Another important morphological characteristic that divides nouns into classes is the absolute prefix，which is the prefix that occurs when no possessive prefix is present．（See §13．2．3．2 about
the use of this form.) Nouns either do or do not occur with this prefix. Only kinship terms, body parts and some personal items have absolute forms. As shown in \(\S 13.2 .4\), absolute morphology has a few complications in form that are ignored here. The starred forms in the first column in (20) are meant to indicate that the root for the noun cannot occur without some prefix.
(20) a. Kinship term
\begin{tabular}{|c|c|c|c|}
\hline *camaz & (daughter-in-law) & \begin{tabular}{l}
hacamaz \\
ABS-daugh
\end{tabular} & \begin{tabular}{l}
daughter-in-law \\
n.law
\end{tabular} \\
\hline * ta, te & (mother) & hapete & mother \\
\hline & & \multicolumn{2}{|l|}{ABS-mother} \\
\hline
\end{tabular}
b. Body part
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{2}{*}{*lit} & \multirow[t]{2}{*}{(head)} & halít & \multirow[t]{2}{*}{head, hair} \\
\hline & & Abs-head & \\
\hline \multirow[t]{2}{*}{*f} & \multirow[t]{2}{*}{(nose)} & haaf & \multirow[t]{2}{*}{nose} \\
\hline & & Abs-nose & \\
\hline \multicolumn{4}{|l|}{Personal item} \\
\hline \multirow[t]{2}{*}{*taamt} & \multirow[t]{2}{*}{(sandal)} & hataamt & \multirow[t]{2}{*}{sandal, shoe} \\
\hline & & ABS-sandal & \\
\hline \multirow[t]{2}{*}{*onam} & (hat) & haaonam & hat \\
\hline & & Abs-hat & \\
\hline
\end{tabular}

The examples in (21) show the impossibility of inflecting other nouns for absolute.
(21)
a. Name

Socaaix Punta Chueca *haSocaaix (Punta Chueca)
b. Locational noun \({ }^{12}\)
\begin{tabular}{llll} 
*mocl & \begin{tabular}{l} 
(under) \\
*pac
\end{tabular} & \begin{tabular}{l} 
*hamocl \\
(behind)
\end{tabular} & \begin{tabular}{l} 
(under) \\
(behind)
\end{tabular} \\
Common noun & & \\
hast & stone & *hahast & (stone) \\
hehe & tree, plant, stick & *hahehe & (tree, plant, stick)
\end{tabular}
d. Deverbal noun (subject-oriented realis)
caticpan worker, one who works *hacaticpan (worker)
SN-work
 recorded for the first time in May 2008. See note 49 in this chapter.
hapaspoj \({ }^{\circ}\) paper, what was written *hahapaspoj (paper)
SN-Pv-write
e. Deverbal noun (object-oriented realis)
\begin{tabular}{llll}
\begin{tabular}{l} 
oohit \\
3P-ON-eat
\end{tabular} & what s/helit ate & *hapoohit & (food) \\
\begin{tabular}{l} 
ocoaa \\
3P-ON-know
\end{tabular} & what s/he knows & *hapocoaa & (knowledge)
\end{tabular}
f. Deverbal noun (proposition/oblique-oriented realis)
\begin{tabular}{llll} 
ihisil his/her childhood & *hahisil & (childhood) \\
yaticpan his/her working & *hayaticpan \({ }^{13}\) (working) \\
3P-PON-work
\end{tabular}
g. Common noun (small subset of loanwords)
\begin{tabular}{llll} 
eenim & knife & *hapeenim & (knife) \\
tom & money & *hatóm & (money) \\
cápota & jacket & *hacápota & (jacket) \\
saaco & long blouse & *hasaaco & (long blouse)
\end{tabular}

All of these classes of nouns commonly have plural forms as shown in §13.2.1.
The word for blood is unusual in that that the stem (haait) is the same as the absolute form of the word itself (haait). Compare hihaait (1P-blood) my blood.

A few nouns have two stems that are essentially suppletive although they are similar. One stem is used when the noun is possessed and the other stem is used when there is no possessor and without an absolute prefix (viz., it is the absolute form). See the examples in (22). (Note that in the case of two of these examples, the standard interpretations of the absolute and possessed forms are slightly different.) \({ }^{14}\)
\begin{tabular}{llllll} 
& Absolute & Possessed stem & Possessed example \\
a. & haaco & house & \(\sqrt{ }\) yaaco & inyaaco & your house \\
b. & haacni & bow & \(\sqrt{\text { yaacni }}\) & inyaacni & your bow \\
c. & hasaj & flat basket & \(\sqrt{ } V V \mathbf{s j}\) & miisj & your flat basket \\
d. & haxz \(^{\circ}\) & dog & \(\sqrt{ } V V \mathbf{x z}\) & miixz & your pet \\
e. & hax & water & \(\sqrt{ } \mathbf{V x}\) & ix & its liquid, its sap
\end{tabular}

\footnotetext{
\({ }^{13}\) The word hayaticpan is grammatical as the finite verb form we worked (1PS-DT-work).
\({ }^{14}\) Some noun pairs are functionally similar to these but are in fact quite different structurally. The word for road is haaho, but the possessed noun yahaaho its trail (of animal) is an object-oriented deverbal noun based on the derived verb \(\sqrt{ }\) ahaaho make road. Similarly, the noun Yooz (Judaeo-Christian) God cannot be possessed. To indicate a relationship to God, for example, one uses the object-oriented deverbal noun based on the derived verb \(\sqrt{\text { ayooz }}\) worship; hence hayayoozxam (1P-ON-worship-PL) our God, literally the one that we worship. See (44).
}

\subsection*{13.1.3 Plural marking and count/mass noun status}

Many nouns display plural forms (see §13.2.1); plurality is generally indicated by a suffix. The existence of a plural form correlates fairly well with the distinction between count noun and mass noun. Count nouns typically (but not always) have distinct plural forms while mass nouns do not. Count nouns also have other properties, as shown in (23), whereas mass nouns are different in all these points.
(23) Count nouns:
a. may be pluralized;
b. may occur with a number modifier;
c. may occur with the singular indefinite article zo \(a\), \(a n\);
d. may occur with a singular positional article (see §21.2);
e. may occur with the verb \(\sqrt{ }\) aazi carry instead of \(\sqrt{ }\) oon carry (plural items).

A prototypical count noun is the noun haxz \({ }^{\circ}\) dog. This may be contrasted with two prototypical mass nouns: hamt loose soil, sand and hax water. See the data in (24). (Note that these refer to powder-type or liquid-type items.) These nouns contrast very clearly in the characteristics just presented.
\(\left.\begin{array}{llll} & \begin{array}{l}\text { log }\end{array} & \begin{array}{l}\text { sand } \\ \text { hamt } \\ \text { Singular }\end{array} & \text { haxz }^{\circ}\end{array} \begin{array}{l}\text { water } \\ \text { hax }\end{array}\right)\)

Mass nouns like hamt soil, sand are distinguished from those like hax water both semantically and formally. Those like hamt are composed of distinguishable individual pieces, whereas those like hax are not, either because they are liquid or they are solid mass. Those like hamt commonly occur with the plural article coi, unlike those like hax water (which occurs with cop). Some examples of mass nouns with individuated parts are given in (25).
\({ }^{15}\) This might occur in a negative construction, but negation induces the indefinite article in special ways (§21.1.8) that should not confuse us regarding the basic situation. See, for example,
(ii) \(\ldots\) tom zo mapomoonec,...
money a 2PLS-IR.Dp-N-carry.items-PL
'... ni lleves dinero, ...' / ... and don't take money, ... (NTT, Lk 10:4) RMH_5-20-08_41
\({ }^{16}\) This occurs in a negative construction (see the preceding footnote):
(iii) Hax zo hxomaho.
water a 1SGS.Tr-EM-N-see
'No tengo agua.' / I don't have any water. (DS2010, quiho) RMH_08-24-07_76c
(25) a. hamt coi the sand
\begin{tabular}{ll} 
b. xiica an icaai coi & the sugar \\
c. hilít coi & my hair \\
d. tom coi & the money
\end{tabular}

The group of mass nouns in Seri does not include solid objects (except when they are viewed as composed of powdery/grainy substances). For example, the meat would be ziix ipxasi quih (thing 3P-flesh the.FL) or ziix ipxasi coi, the latter indicated multiple pieces.

\subsection*{13.2 Inflectional morphology of nouns}

The inflectional morphology of nouns is limited to number and possessor/absolute.
Count nouns typically have some morphology for showing the singular/plural distinction, \({ }^{17}\) although it is not always exploited (see \(\S 9.3\) ). Some kinship terms are a bit more complicated in this regard in that they also indicate the singular/plural distinction of the "possessor".

The morphological trappings for plurality vary, but they most typically involve a suffix and may involve a change in the stem (loss of a vowel or infixation). A simple example is noosi mourning dove, noosilc mourning doves. The details of pluralization morphology, which is considerably more complicated than is apparent by this example, are given in §13.2.1.

Possessive and absolute morphology is prefixal except for some odd suffixal material that absolute forms sometimes include in addition to the prefix. Details are given in \(\S 13.2 .3\) and §13.2.4.

Anticipating one detail about "unspecified possessor" explained in §13.2.3, the inflectional morphology for nouns is summarized in Figure 13.1. \({ }^{18}\) Some simple examples illustrating these patterns, with morpheme breaks shown, are given in Table 13.2.

\subsection*{13.2.1 Details about plural morphology}

Count nouns that do not have a distinct plural form include (but are by no means limited to): cacajöc a bagworm moth, cacni wood ibis, cam a bark boring beetle, cama big skate, capoclim chiton, catápora robber fly, haan smooth Pacific venus clam, haaxt walkingstick (insect), hacözj sea catfish, ptcamn lobster, sahmees orange, and satoj mussel.

\footnotetext{
\({ }^{17}\) This topic is treated in detail in E. Moser \& M. Moser (1976), Marlett (1981b, chapter 4), and Marlett (1990).
\({ }^{18}\) This formula is slightly different with deverbal nouns; the unspecified subject/possessor prefix follows the
possessor in those forms, whereas it precedes the possessor in nouns based on noun roots. See §14.4.
}
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Table 13.2: Examples of nouns and inflectional morphology} \\
\hline Unspecified Possessor & Absolutive/ Possessor & Root & Plural & Extra absolutive material & Gloss \\
\hline & & noosi noosi & -lc & & mourning dove mourning doves \\
\hline \multirow{4}{*}{qu-} & hi- & lít & & & my head/hair \\
\hline & i- & lít & -coj & & their heads \\
\hline & i- & lít & & & one's head/hair \\
\hline & ha- & lít & & & head/hair \\
\hline & hi- & ntaac & & & my younger maternal aunt \\
\hline & ha- & ntaaca & & -t & younger maternal aunt \\
\hline & a- & ntaac & -la & & his/her/their younger maternal aunts \\
\hline
\end{tabular}

Singular and plural forms are sometimes suppletive forms, although the examples of such are not numerous. \({ }^{19}\) See the examples in (26).


Some nouns simply add a suffix to form the plural. The putative morpheme breaks are indicated in the following examples. (The possibility of underlying forms is ignored here; this presentation looks at superficial forms.) In some cases, the pattern shown is attested by only one or two words, whereas in others the pattern is more robustly attested. See the examples in (27).

\footnotetext{
\({ }^{19}\) Campbell \& Goddard (1990:20-21) suggest that some kind of ablaut pattern functioning over the "consonantal frame" is common between the singular form cmiique and the plural form comcaac, but this does not seem to be a productive hypothesis (which was based in part on incorrect data).
\({ }^{20}\) The etymology of the plural form ixaap is known: it is the proposition/oblique deverbal noun form of the verb \(\checkmark\) xaap spend the night in a place.
}

Figure 13.1: Possessed and kinship noun morphological structure
Unspecified \(\left\{\begin{array}{l}\text { Absolutive } \\ \text { Possessor }\end{array}\right\}\) Stem \(\left\{\begin{array}{l}\text { Plural } \\ \text { Absolutive extra material }\end{array}\right\}\)
\begin{tabular}{|c|c|c|c|}
\hline (27) & \begin{tabular}{l}
Singular \\
a. C suffix \\
hehe \\
cof \\
ctam \\
hamác \\
caamopxa
\end{tabular} & \begin{tabular}{l}
Plural \\
hehe-t \\
cof-t \\
ctam-cö \\
hamac-j \\
caamopxa-j
\end{tabular} & \begin{tabular}{l}
plant \\
San Juanico (tree) \\
man \\
fire \\
white-lined sphinx moth
\end{tabular} \\
\hline & \begin{tabular}{l}
b. CC suffix \\
hapxa \\
hax
\end{tabular} & \[
\begin{aligned}
& \text { hapxa-lc } \\
& \text { hax-lc }
\end{aligned}
\] & cottontail rabbit arrow point \\
\hline & c. CCV suffix xpaahjö isxaneehjö & xpaahjö-lca isxaneehjö-lca & \begin{tabular}{l}
hematite \\
3P-sternum
\end{tabular} \\
\hline & \begin{tabular}{l}
d. CVC suffix \\
xtaasi \\
xees \\
nop \\
zaap \\
hamquee
\end{tabular} & \begin{tabular}{l}
xtaasi-toj \\
xees-taj \\
nop-xam \\
zaap-coj \\
hamquee-col
\end{tabular} & \begin{tabular}{l}
estuary \\
fox \\
bobcat \\
roadrunner \\
wooden cooking fork
\end{tabular} \\
\hline & f. CCVC suffix haaho & haaho-lcam & road \\
\hline
\end{tabular}

Other nouns lose a vowel in either the singular form or the plural form, although this is rarely the sole indicator of plurality for nouns. \({ }^{21}\) See the examples in (28). (More examples are

\footnotetext{
\({ }^{21}\) The vowel that is absent or present varies unpredictably in quality and therefore must be lost rather than inserted in most, if not all, cases. Some evidence from historical documents (see Marlett 2010c) and from archaic forms preserved in songs supports this view. Disyllabic nouns in songs include "hamat" earth (nineteenth century hamt earth, soil, year and modern hant earth, year and hamt soil) and "coeept" quail (late nineteenth century hamt earth, soil, year and modern coeept (sg.), coeepitoj (pl.). The word "hamat" appears in various songs, including the creation song (Hant quij Cöipaxi hac 2009); the word "coeepit" appears in a song about the
}
given below.)
\begin{tabular}{llll} 
(28) & \begin{tabular}{l} 
Singular \\
inol
\end{tabular} & Plural & \\
& colquiimet & inl & his/her arm/hand/finger \\
& colquiimt \({ }^{22}\) & black vulture
\end{tabular}

Other nouns appear to infix the consonant \(\mathbf{j}\) before a final \(\mathbf{c}\) in the plural form. Some exampls are given in (29).
(29) Singular
hameepec hameepejc place behind the house
hasc
icoeesc
xpeetc
\begin{tabular}{ll} 
Plural & \\
caatjc & grasshopper \\
hameepejc & place behind the house \\
hasjc & ABs-body.louse \\
icoeesjc & woven basket used as strainer \\
xpeetjc & a sack-like brown seaweed
\end{tabular}

Yet other nouns indicate plurality in part through changes in certain consonants near the end of the word. The most common changes are \(\mathbf{j}[\mathrm{x}]\) to \(\mathbf{l}[\mathrm{l}]\), as in (30), and \(\mathbf{n}\) to \(\mathbf{z}[J]\), as in (31), but \(\mathbf{m}\) to \(\mathbf{t z}\left[\mathrm{t} \int\right]\) is also attested in some loanwords, as in (32), It is not obvious whether these are simple (or not so simple) consonant mutations, or more complex cases of affixation and deletion, or a combination of these.
\begin{tabular}{rlll} 
(30) & \begin{tabular}{l}
\(\mathbf{j} \sim \mathbf{l}\) \\
Singular \\
haamoja \\
zaaj \\
paaij
\end{tabular} & \begin{tabular}{l} 
Plural \\
haamol-ca \\
zaal-ca \\
paail-c
\end{tabular} & \begin{tabular}{l} 
antelope \\
cave \\
driftwood
\end{tabular} \\
\((31)\) & \(\mathbf{n \sim \mathbf { z }}\) & & Plural
\end{tabular}

\footnotetext{
quail by Lidia Ibarra that appears in a collection in preparation by Thor Morales. The evidence is clear that vowel loss is responsible for the labialized consonants in Seri. See the data in (36) in this section, for example.
\({ }^{22}\) This lexeme is obviously etymologically related to the verbal expression - cola quiime high SN-HAVE-home - and so therefore it really fits with the verb pluralization patterns described in §17.3.3.
\({ }^{23}\) The final \(\mathbf{i}\) in this word and the next could be epenthetic since coda consonant clusters disallow obstruent-nasal sequences. See the end of §28.3.3.
}
(32) \(\mathbf{m} \sim \mathbf{t z}\)
\begin{tabular}{lll}
\begin{tabular}{l} 
Singular \\
hequem
\end{tabular} & \begin{tabular}{l} 
Plural \\
eenim
\end{tabular} & \begin{tabular}{l} 
eequetz
\end{tabular} \\
haaonam & haaonatz & grinding stone (archaic) \\
ynife \({ }^{24}\) \\
yequim & yectz & ABs-hat \(^{25}\) \\
& Yaqui
\end{tabular}

Most nouns use a combination of suffixation, deletion, and mutation for indicating plurality. The morpheme breaks are only suggestively indicated in examples (33)-(36) because it is really quite difficult to tell what is the stem and what is the suffix. \({ }^{26}\)
(33) Words with post-tonic stem vowels in both forms
\begin{tabular}{lll}
\begin{tabular}{l} 
Singular \\
cozixoj
\end{tabular} & \begin{tabular}{l} 
Plural \\
cozíxol-coj \\
hanaj
\end{tabular} & hanal-c
\end{tabular}
(34) Words with post-tonic stem vowels in neither form
Singular Plural
slenapzj slenapzl-coj little blue heron
cotj cot-lea round stingray

\footnotetext{
\({ }^{24}\) This word is a loanword from a Uto-Aztecan language. See Appendix A. The source of this plural formation is unknown, however; it does not seem to be found in modern Uto-Aztecan languages.
\({ }^{25}\) This word is a loanword from a Uto-Aztecan language. See Appendix A.
\({ }^{26}\) Nevertheless, there is some evidence indicating consonants and vowels that are part of the stem. See the
lengthening rule described in §28.5.1.
}
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{14}{*}{(35)} & \multicolumn{3}{|l|}{Words with post-tonic stem vowels in the plural form only} \\
\hline & Singular & Plural & \\
\hline & coeept & coeepit-oj & Gambel's quail \\
\hline & hasct & hasact-oj & lung \\
\hline & hast & hasat-oj & stone \\
\hline & haxz \({ }^{\circ}\) & haxa-ca & dog \\
\hline & iist & iisat-oj & 3P-roe \\
\hline & isct & isact-0j & 3P-lung \\
\hline & oot & ooto-lc & coyote \\
\hline & siip & siipi-lc & male youth \\
\hline & xpist & xpisat-j & a squirrel \\
\hline & xtiip & xtiipo-lc & giant Panamic cockle \\
\hline & ziic & ziica-lc & bird \\
\hline & zoozj & zoozal-ca & burlap bag \\
\hline \multirow[t]{18}{*}{(36)} & \multicolumn{3}{|l|}{Words with post-tonic stem vowels in the singular form only} \\
\hline & Singular & Plural & \\
\hline & heexoj & heexöl & dry pitahaya torch \\
\hline & hapefe & hapef-coj & harpoon point \\
\hline & mojepe & mojep-toj & sahuaro cactus \\
\hline & haquim & hactz & whale \\
\hline & icaheme & icahem-toj & camp \\
\hline & iime & iim-t & 3P-dwelling \\
\hline & iizax & iiztox & month \\
\hline & hoocax & hooctax & raincloud \\
\hline & yaamol & yaaml-oj & 3P-stomach (of fish) \\
\hline & seepol & seepl-oj & a common small coastal shrub \\
\hline & teepol & teepl-oj & black jackrabbit \\
\hline & хеесој & xeecöl & wolf \\
\hline & sleecoj & sleecöl & heron \\
\hline & heexoj & heexöl & torch made of dry organ pipe cactus \\
\hline & imoz & imjöc & 3P-heart \\
\hline & haaco & haacö-t & Abs.house \\
\hline
\end{tabular}

The plural suffixes -j and - \(\mathbf{- j}\) (which might be allomorphs of each other, or of the suffix -toj), and -taj appear with most of the recent loanwords, as in (37). (Note also that the suffixes \(\mathbf{j}\) and -taj appear in the plurals of surnames, as shown in \(\S 15.1\), after vowels and non-sibilant consonants, respectively.)
\begin{tabular}{|c|c|c|c|}
\hline (37) & \begin{tabular}{l}
Singular \\
a. Vowel-final stem cascareera hohra \\
pazaato \\
soaano \\
seaato \\
saraapi \\
canoaa
\end{tabular} & \begin{tabular}{l}
Plural \\
cascareera-j \\
hohra-j \\
pazaato-j \\
soaano-j \\
seaato-j \\
saraapi-taj \\
canoaa-taj
\end{tabular} & \begin{tabular}{l}
ladder \\
donkey \\
shoe \\
bed sheet \\
goat \\
blanket \\
boat
\end{tabular} \\
\hline & \begin{tabular}{l}
b. Consonant-final \\
santaar \\
tootar \\
meroon \\
ret
\end{tabular} & ```
m
santaar-0j
tootar-0j
meroon-taj
ret-coj
``` & \begin{tabular}{l}
soldier \\
chicken \\
melon \\
lariat
\end{tabular} \\
\hline
\end{tabular}

The examples included here are only a sample of the facts. Because of the complexities of expressing number, the 2005/2010 dictionary lists plural forms for nouns (and also for verbs because the complexities are similar, see \(\S 17.3 .3\) ). See the following section for additional complexities presented by the number of the possessor. \({ }^{27}\)

\subsection*{13.2.2 Plural possessor}

Possessor prefix morphology does not generally distinguish the number of the possessor (see \(\S 13.2 .3\) ). The morphological indicators of number discussed in the previous section, which generally indicate the number of the item (singular or plural), sometimes also indicate the number of the possessor. For example, the word ipl (3P-tongue) means his/her/its tongue; it has the plural form ipaloj (3P-tongue-PL), which means their tongues. In most cases this would imply that there is more than one possessor because animals and people do not share tongues and they typically do not have more than one tongue. An animal that did have two tongues, however, would use the form ipaloj nonetheless. Other nouns like this (where a plural possessor would generally imply more than one possessed item) are given in (38).

\footnotetext{
\({ }^{27}\) One might ask how these plural forms are learned, or whether there is disagreement about them. As a matter of fact, there is quite widespread agreement about them, although (not surprisingly) a few alternative plurals have been recorded. When one asks about a particular plural form, one can witness people fishing for the plural form at times. And certainly no one knows all of the plural forms that have been recorded, especially for words that are uncommon or archaic.
}
\begin{tabular}{lllll} 
(38) & \multicolumn{2}{l}{ Singular } & & Plural \\
a. ilít & his/her/its head & ilit-coj & their heads \\
b. ipac & his/her/its back & ipaj-0j & their backs \\
c. iip & its tail & iip-coj & their tails \\
d. yaap & his/her/its neck & yaap-coj & their necks
\end{tabular}

The plural form is clearly ambiguous for various lexemes referring to items that are commonly plural even when a single possessor is involved. Some examples are given in (39).
\begin{tabular}{lllll} 
& Singular & & Plural & \\
a. isla & his/her/its ear & isl-0j & his/her/its/their ears \\
b. & inol & his/her/its hand/arm & inl-oj & his/her/its/their hands/arms \\
c. & iime & his/her/its home & iim-toj & his/her/its/their homes \\
d. & itrooqui & his/her car & itrooqui-j & his/her cars; their car(s) \\
e. & yaaco & his/her house & yaacö-t & his/her houses; their house(s)
\end{tabular}

Some kinship terms and personal items have the same ambiguity found in body part nouns. See (40).
\begin{tabular}{lll} 
(40) \begin{tabular}{l} 
Singular \\
acmajeete his wife's older sister
\end{tabular} & \begin{tabular}{l} 
Plural (ambiguous) \\
acmajeet- \(\mathbf{0 j}\)
\end{tabular} \\
& \begin{tabular}{l} 
his wife's older sisters, or \\
their wives' older sisters
\end{tabular} \\
azaac her older sister
\end{tabular}\(\quad\)\begin{tabular}{l} 
azaac-la \begin{tabular}{l} 
her older sisters or \\
their older sisters
\end{tabular} \\
icaamiz his/her shirt
\end{tabular}

For some body part nouns, at least one personal item, and many kinship terms, the language is more expressive in that it often has a distinct form of the noun when the possessor is plural. The word that indicates plurality of possessor in addition to implied plurality of the item appears to have extra plural morphology, as indicated by the tentative morpheme breaks shown in (41). A word such as átcalcoj is ambiguous: it means both their younger sister and their younger sisters.
\begin{tabular}{lll} 
Sg. item, & Pl. item, & Sg./Pl. item (usually), \\
sg. possessor & sg. possessor & pl. possessor
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline a. & imt & imt & ímat-j & breast \\
\hline b. & istj & istj & ístal-ca & leaf, petal \\
\hline c. & ito & ito-j & íto-lcoj & eye \\
\hline d. & itoaa & itoiit & itoaa-tj & foot/leg \\
\hline e. & ii & ii-t & eaa-tj \({ }^{28}\) & head louse \\
\hline f. & itac & ítajc & ítaj-oj & bone, stem, trunk \\
\hline g . & iiseja & iiselca & iiselc-0j & wing, branch \\
\hline h. & itaamt & itaamt & itaamat-j & sandal \\
\hline 1. & atalxiicom & atalxiicom-jc & atalxiicom-joj & wife 's sister's husband \\
\hline j. & atcamahaj & atcamahal-c & atcamáhal-coj & younger sister (of female)'s child \\
\hline k. & atcmajeem & atcmajeem-taj & atcmajeem-tolca & younger sister's (of female)'s husband \\
\hline 1. & atcz & atcal & átcal-coj & younger sister (of female) \\
\hline m . & azcz & azcal & ázcal-0j & younger brother (of male) \\
\hline
\end{tabular}

Possessed noun stems (whether body part nouns or deverbal nouns using the nominalizer \(\mathbf{y}\) - \()^{29}\) beginning with \(\mathbf{y}\) have special allomorphs of the possessive prefixes for first and second person when the possessor is plural. That is, rather than the usual hi- and mi- (which have the allomorphs (i)h- and (i)n- before \(\mathbf{y}\) as explained in \(\S 13.2 .3\) below) the allomorphs ha- and maoccur in this situation. Otherwise these allomorphs of the possessive prefixes do not occur in the language. See the examples in (42)-(44).
(42)
\begin{tabular}{rl} 
Singular Possessor \\
ihyanopj & my fist \\
ihyanoplc & my fists \\
inyanopj & your fist \\
inyanoplc & your fists \\
yanopj & his/her fist \\
yanoplc & his/her fists \\
ihyahit & my eating \\
inyahit & your eating \\
yahit & his/her/its eating
\end{tabular}

Plural possessor
\begin{tabular}{rl} 
hayanópalcoj & our fists \\
mayanópalcoj & your (pl.) fists \\
yanópalcoj & their fists \\
\(\underline{\text { hayaaitoj }}\) & our eating \\
\(\underline{\text { mayaaitoj }}\) your (pl.) eating \\
yaaitoj & their eating
\end{tabular}

\footnotetext{
\({ }^{28}\) This form was not recorded until 2010, so far as I know. I thank Xavier Moreno for pointing it out to me.
\({ }^{29}\) No kinship term root begins with \(\mathbf{y}\), so this strategy for indicating plural possessor is not used with kinship terms. The prefixes ha- and ma- are the subject markers for first and second person plural, respectively (§17.3.2.1). This may be a case in which the morphology from the verb paradigms has leaked over to the noun paradigms.
}
\begin{tabular}{rlrl} 
(44) \begin{tabular}{rl} 
ihyayooz \\
inyayooz
\end{tabular} & \begin{tabular}{l} 
the one I worship \\
the one you worship
\end{tabular} & \begin{tabular}{l} 
hayayoozxam \\
mayayoozxam
\end{tabular} & the one \((s)\) we worship
\end{tabular}

\subsection*{13.2.3 Details about possessor morphology}

Possessor morphology is limited to a small set of prefixes. Of the class of nouns that use possessor morphology, two important subclasses emerge based on the details of the morphology: kinship terms vs. the others (including body part nouns, personal items, locational nouns, and deverbal nouns (§13.4)). The possessor morphology used for the latter is also used with the inflected P-elements (§21.3.3).

\subsection*{13.2.3.1 Kinship terms}

Kinship terms are a semantically coherent class of words in Seri; they all express the familial relationship between individuals. \({ }^{3031}\) The lexemes themselves may indicate the sex of the referent, the sex of the person to whom they are related, and their relative age. See the sample lexemes presented in (45). These lexemes also illustrate the difference in inflectional patterns between consonant-initial roots ( \(\sqrt{ }\) paac and \(\sqrt{ }\) mahaj), and vowel-initial roots ( \(\sqrt{ } \mathrm{VV} \mathbf{a z}\) and \(\sqrt{ }\) Vpaz). None of the kinship terms with vowel-initial roots gives any direct hint as to the quality of the vowel, \({ }^{32}\) although these terms do distinguish between one mora and two moras in the stressed syllable. We know that they are vowel-initial roots because the regular stress pattern is to stress the penultimate syllable of the root.

\footnotetext{
\({ }^{30}\) A few expressions of kinship are synchronically and transparently based on verbs and are therefore inflected like normal deverbal nouns. The most common ones are illustrated by these examples: him caazi (1SGDO SNcarry) my father, more literally, the one who carried me; ihyaazi (1P-ON-carry) my child (male speaking), more literally, the one whom I carried, hoeen (1P-ON-carry.items) my children (male speaking), more literally the ones whom I carried; him quiiquet (1SGDO SN-be.pregnant.with) my mother, more literally, the one who was pregnant with \(m e\); hiiquet (1P-ON-be.pregnant with) my child (woman speaking), more literally, the one with whom I was pregnant. There are also productive ways to express kinship using denominal verbs based on kinship noun roots; see \(\S 19.3\).
\({ }^{31}\) The kinship terms are probably on the verge of being obsolete for many Seri speakers. These data were collected more than fifty years ago by Edward and Mary Moser and before them by Alfred Kroeber (see Kroeber 1931). Of course, some of them are still in use, but the number of people who control them well has been decreasing drastically. See Marlett \& M. Moser (1989), \& M. Moser \& Marlett (1999). Some corrections appear in the 2005 dictionary. As mentioned in the introduction, the number of primary kinship terms in the language should make it a contender for a world record.
\({ }^{32}\) Discussions of these roots in Marlett (1981b) claimed that these roots begin with aa and a based on indirect hints, primarily analogy with verb roots. However, while the verb roots provide direct evidence for the quality the root-initial vowel, the noun roots never do.
}
\begin{tabular}{llllll}
\hline & \multicolumn{6}{c}{\begin{tabular}{c} 
Table 13.3: Possessor morphology \\
Kinship terms
\end{tabular}} & \begin{tabular}{l} 
Other possessed nouns
\end{tabular} & \\
First person & hi- & hi- (and ha-, see §13.2.2)
\end{tabular}

See \(\S 13.2 .2\) for discussion of the morphology relating to a plural possessor. See \(\S 13.2 .4\) for discussion of absolute forms of these nouns.

\subsection*{13.2.3.2 Other possessed nouns}

Possessed nouns other than kinship terms all use the other set of possessive prefixes shown in Table 13.3. As with kinship terms, plurality of the possessor is sometimes indicated by suffixes (see \(\S 13.2 .2\) ), although noun stems beginning with \(\mathbf{y}\) do something a bit more expressive (see the end of \(\S 13.2 .2\) ). See the sample lexemes presented in (46). These lexemes also illustrate the difference in inflectional patterns between consonant-initial roots ( \(\sqrt{\text { taast }}\), \(\mathbf{y}\)-initial roots ( \(\sqrt{ }\) yeen ), and vowel-initial roots \((\sqrt{ } V V\) sa and \(\sqrt{ } V\) soj \()\). None of the nouns with vowel-initial roots gives any direct hint as to the quality of the vowel.
\begin{tabular}{lrrrr} 
& \begin{tabular}{r} 
tooth \\
hitaast
\end{tabular} & \begin{tabular}{r} 
face \\
ihyeen
\end{tabular} & \begin{tabular}{r} 
tonsil \\
hiisa
\end{tabular} & \begin{tabular}{r} 
body \\
hisoj
\end{tabular} \\
First person & hatitaast & hatyeen & hatiisa & hatisoj \\
First person emphatic & \begin{tabular}{rl} 
mitaast
\end{tabular} & inyeen & miisa & misoj \\
Second person & itaast & yeen & iisa & isoj \\
Third person & quitaast & & & quisoj
\end{tabular}

The \(\mathbf{i}\) of the prefixes hi-, mi- and \(\mathbf{i}\) - elides before \(\mathbf{y}\). This produces a cluster that is not syllabifiable unless the word is preceded by a vowel, and therefore in most cases an epenthetic vowel i precedes the sonorant-consonant cluster (see §27.1.1). The \(\mathbf{m}\) assimilates to the point of articulation of the \(\mathbf{y}\); see \(\S 28.5 .2\).

The third person possessor prefix may be preceded by the unspecified subject/ possessor prefix ca- (see §17.3.5), which loses its vowel in this context: quilít (< putative underlying form \{ca-i-lit\}) one's head/hair, quitoj one's eyes, quipl one's tongue. The meaning or usage of such
forms is slightly different from the absolute forms halít head/hair, \({ }^{33}\) hatoj eyes, hapl tongue (see §13.1.2). A pair of examples to contrast the two forms is given in (47):
(47) a. Quilít quij sahpaaisx aha.

US-3P-head the.CM Ir.Id-Pv-cause.be.clean AUX-DcL
'Uno debe lavarse la cabeza.'
One should wash one's head. (DS2010, ca-) RMH_08-24-07_111a
b. ... halít quih imacaaitic.

Abs-hair/head the.Fl 3:3-Px-cause.be.soft
'... ablanda el cabello.'
...it softens the hair. (DS2010, pnaacöl) RMH_08-24-07_111b
This unspecified subject or possessor prefix ca- is used in this way before general possessed nouns, but never before kinship terms: *caata (one's mother), *casaac (one's son). Kinship terms only use the absolute forms for similar ideas.

Locational nouns are inflected for possessor identically to the body part nouns; see \(\S 13.4\). Deverbal nouns are discussed in chapter 14.

\subsection*{13.2.4 Details about absolute morphology}

Body part nouns and kinship terms may be inflected for the absolute prefix (§13.1.2).
The absolute prefix for nouns other than kinship terms is ha-, with the surface allomorph haa- when the root begins with two moras; see the word for tonsil in (48).
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{4}{*}{(48)} & & tooth & face & tonsil & body \\
\hline & Third person & itaast & yeen & iisa & isoj \\
\hline & Absolute & hataast & hayeen & haasa & hasoj \\
\hline & Root & \(\checkmark\) taast & \(\sqrt{ }\) yeen & \(\sqrt{\text { VVsa }}\) & \(\sqrt{ }\) Vsoj \\
\hline
\end{tabular}

The absolute prefix for kinship terms is ha- before consonant-initial roots and hape- before vowel-initial roots; see (49). \({ }^{34}\)
\begin{tabular}{|c|c|c|c|c|}
\hline Third person & older sister (of male) apaac & father's older brother amahaj & younger brother (of female) aacaz & paterna grandfathe apaz \\
\hline Absolute & hapaac & hamahaj & hapeequez & hapepez \\
\hline Root & \(\checkmark\) paac & \(\checkmark\) mahaj & \(\sqrt{ } \mathrm{VVcaz}\) & \(\sqrt{ }\) Vpaz \\
\hline
\end{tabular}

\footnotetext{
\({ }^{33}\) The difference between these meanings is signaled by the choice of article: quij (the.CM) for the head and quih (the.FL) for the hair.
\({ }^{34}\) This fact confirms the claim made that certain roots begin with (empty) vowel position(s); see §28.2 for the relevance of this to the placement of stress.
}
\begin{tabular}{lc}
\hline \multicolumn{1}{r}{ Table 13.4: } & Absolutive morphology \\
Kinship terms & General possessed nouns \\
ha- before consonant & ha- \\
hape- before vowel
\end{tabular}

One can detect that vowel harmony is taking place in the absolute forms of the kinship terms that have hape-. See §13.6.4.

Some of the absolute forms of kinship terms have extra material at the end of the word, as shown in (50). \({ }^{35}\)
\begin{tabular}{|c|c|c|c|c|c|}
\hline (50) & & sister's child (of male) \({ }^{36}\) & stepchild & father (of female) & husband's sister \\
\hline & Third person & aac & acomiique & am & aqueec \\
\hline & Absolute & haaca-t & hacomiique-t & hapeme & haqueeque-t \\
\hline & Root & \(\sqrt{ }\) VVca & \(\checkmark\) comiique & \(\sqrt{ } \mathrm{Vm}\) & \(\checkmark\) queeque \\
\hline
\end{tabular}

\subsection*{13.3 Noun classes with origin in profile}

Another classification of nouns is emerging or has emerged, which is very different from the morphological classes described above and also different from the typical count/mass noun distinction. This classification has its origin in the profile or orientation of the item referred to, but it has obviously begun to be something more complicated. \({ }^{37}\)

\subsection*{13.3.1 Determiner selection}

Several definite articles are used in the language; these are discussed in more detail in §21.2. The appropriate use of these articles very often takes into consideration the physical orientation of the item: haxz \({ }^{\circ} \mathbf{c o m}\left(\operatorname{dog}\right.\) the. Hz ) is appropriate when the dog is lying down, haxz \({ }^{\circ} \mathbf{c o p}\) (dog the. Vт) when it is standing, haxz \({ }^{\circ}\) quij (dog the.Cm) when it is sitting, and haxz \({ }^{\circ}\) quih (dog the.Fl) when it is not in view. The "motion" demonstrative adjectives tintica (MD-Aw) and tanticat (MD-Aw-PL) are sometimes used with a non-deictic force: haxz \({ }^{\circ}\) tintica when the item is going away from the point of reference, etc.

\footnotetext{
\({ }^{35}\) The phonetic evidence suggests that the vowel that may appear is part of the root, but that the final consonant is a suffix; the words are hyphenated that way below. The vowels lengthen phonetically when they are in the position required for post-tonic lengthening (§28.5.1). It is well-established that such lengthening does not apply to suffixes.
\({ }^{36}\) This noun is irregular in that it uses ha- for the Absolutive rather than hape- that is expected for vowel-initial
kinship roots.
\({ }^{37}\) See Marlett \& M. Moser (1994a).
}

The distinction between the singular article com - typically used for a horizontal object, but here denoting a group -and the plural article coi is also used effectively when the noun is overtly plural to give effects such as that shown in (51):
(51) a. Hahootj com tcooo, ...

ABS-entrance-PL the.Hz RL-all
'Todas las puertas (p. ej., del pueblo), ...'
All of the doors (e.g., in the town), ... (offered) RMH_10-15-07_58a
\begin{tabular}{lll} 
b. & Hahootj coi tcooo, \(\ldots\) \\
& Abs-entrance-Pl the.PL RL-all \\
& 'Todas las puertas (p. ej., de la casa), ...' \\
& All of the doors (e.g., de la casa), ... & \\
&
\end{tabular}

The emerging noun classes show a relationship to this foundation in physical orientation or standard profile. While some nouns (especially those referring to prominent, mobile items such as large mammals) may occur with one of various articles in different contexts, other nouns are more limited. Insects, birds and small animals may occur with a motion demonstrative adjective, but otherwise typically use quij (compact), as do words for bushes, and words like siimet bread (when viewed as a roll), and zaah sun. Words for long and typically prone items, such as canoaa boat, generally use com (horizontal) when motion is not relevant. Words for tall items, such as haaco house, use cap (vertical; or its variant cop). Flexible items such as chains, cloth, and bread (in a generic sense) typically use quih (flexible). Meteorological expressions, such as the deverbal nouns icozim (3P-PON-hot.weather) summer, hot weather, ihaapl (3P-PON-cold) winter, the cold, and ihamoc (3P-PON-be.night) darkness, night, as well as the words zaah day \({ }^{38}\) and hai air, wind all use the article cop (vertical), as do certain other abstractions, such as icaaitom (3P-PON-US-speak) word, psaac icooxi (3P-PON-US-die) hunger, and ihasii smell, odor (3P-PON-AUG-smell).

\subsection*{13.3.2 Existential verb selection}

These classes of nouns are relevant also to the choice of positional verb that is used to express existence or to present new characters in a narrative. (These verbs are the etymological sources of the articles.)

\subsection*{13.3.2.1 Vertical profile and abstractions:Vap stand and article cop/cap}

Some nouns that typically fit the vertical profile include: haaco house (and other buildings), hehe tree, hast mountain (if tall), hateeya bottle, xaasj cardón cactus and mojepe sahuaro cactus. Nouns used as abstractions in this class include: zaah day, iizax month. The word hai

\footnotetext{
\({ }^{38}\) This word means sun when it occurs with the article quij.
}
wind, air also is in this class. Notice the use of the verb \(\sqrt{ }\) ap stand in examples (52)-(53).


Plural nouns in this group use the suppletive plural \(\sqrt{ } \mathbf{o i i}\) (stand.PL) and the plural article coi, as illustrated in (54). (This plural form is used and glossed as a more general plural stem in other situations, not indicative of profile. See below.)
(54) Haacöt pac toc cötoii,

Abs.house-Pl some there 3IO-RL-stand.PL
'Había algunas casas, ...'
There were some houses, ... RMH_10-15-07_59c

\subsection*{13.3.2.2 Compact profile: \(\sqrt{ } \mathrm{i} i \mathrm{j}\) sit and article quij}

Some nouns that typically fit the compact profile include: ziic bird (and virtually all species of birds), haxölinaail \({ }^{\circ}\) mollusk (and many species of clams), hast rock, trooqui vehicle, thehe yapxöt」flower, sahmees orange, ıziix coqueht」 ball, hamác lamp (lit., fire) and Łhehe hascám \(\lrcorner\) ship. See the examples with \(V_{\text {iij }}\) in (55)-(56).
(55) Hamác zo toc cötiij, ...
fire a there 3IO-RL-sit
'Había una lumbre, ...'
There was a fire, ... RMH_05-16-08_65
(56) Coneenoziic zo toc cötiij ma, ... sparrow a there 3IO-RL-sit DS
'Un gorrión estaba allí, ...'
A sparrow was there, ... (DS2010, cahiihom) RMH_05-16-08_66
Plural items in this group use the suppletive plural \(V_{\text {ooxalca }}\) (sit.PL) when they are presented as being separate and in their locations, and the more general \(V_{\text {oii }}\) (be.Fl.Pl) when they are presented as being gathered together. See the examples in (57)-(59).
(57) Haxölinaailc pac toc cötooxalca / cötoii, mollusk-Pl some there 3IO-RL-sit.PL 3IO-RL-be.Fl.PL 'Había algunos moluscos, ...'
There were some mollusks, ... RMH_10-15-07_59d
（58）」Hehe iti iquícolim」pac toc cötooxalca，．．．
chair some there 3IO－RL－sit．PL
＇Había unas sillas，．．．＇
There were some chairs，．．．RMH＿05－16－08＿67
（59）Sahmees pac toc cötooxalca，．．． orange（s）some there 3IO－RL－sit．PL ＇Había naranjas，．．．＇
There were oranges，．．．RMH＿05－16－08＿68
Note：the verb \(\sqrt{ }\) ooxalca（sit．Pl）is used for nouns in this class that do not vary in position．A different（suppletive）plural form of \(V_{\mathbf{i i j}}\) sit is used when the noun is variable in position（typical of people and large mammals）；see §13．3．2．7．

\section*{13．3．2．3 Horizontal profile：\(\sqrt{ }\) oom lie and article com}

Some nouns that typically fit the horizontal profile include：haquiimet lizard（and species of lizards），coiimaj snake（and species of snakes），hast mountain（if long），hasoj river，zixcám \({ }^{\circ}\) fish（and species of fish），itoozj his／her／its intestine，satoj mussel，xepe sea and icaaspoj \({ }^{\circ}\) pencil，pen．See example（60）．
（60）Canoaa zo toc cotom，．．．
boat a there 3IO－RL－lie
‘Había una panga，．．．＇
There was a boat，．．．7May2010
Plural items in this group use the suppletive plural \(\sqrt{ } \mathbf{o o i t o j}\)（lie．PL）when they are presented as being separate and in their locations，and the more general \(V_{\text {oii }}\)（be．Fl．PL）when they are presented as being gathered together．See（61）．
\begin{tabular}{llll}
（61） & Canoaataj pac toc cötooitoj／cötoii，．．． \\
& boat－PL some there & sIO－RL－lie．PL & 3IO－RL－be．FL．PL \\
＇Había algunas pangas，\(\ldots\)＇ \\
& There were some boats，.. RMH＿10－15－07＿59e
\end{tabular}

\section*{13．3．2．4 Items with flexible characteristics or indeterminate profile：\(\sqrt{ }\) iih be （flexible）and article quih}

Some nouns that typically fit the＂flexible＂profile include：cápota jacket，hapnaail \({ }^{\circ}\) skirt， hapaspoj \({ }^{\circ}\) paper，เhapaspoj hanoocaj \(\lrcorner\) book，เeenm hacoaazj」 chain，poosj fishing line，เziix icacötim」 blanket，siimet bread（generically）．Indeterminate profile：ziix thing，expressions for people（especially in the sense of residing）．Note the use of the verb \(V_{\text {iih }}\) in（62）．
（62）Hap inaail zo toc cötiih，
mule．deer 3P－skin a there 3IO－RL－be．FL
＇Había una piel de venado bura，．．．＇
There was a mule deer hide，．．．（DS2010，cappca）RMH＿05－16－08＿69
Plural items in this group use the plural \(\sqrt{ }\) iihtolca（be．FL－PL）when they are presented as being separate and in their locations，and the more general \(V_{\text {oii }}\)（be．Fl．Pl）when they are presented as being gathered together；see（63）．
（63）Hapáspolca \({ }^{\circ}\) pac toc cötiihtolca／cötoii ．．．
papers some there 3IO－RL－be．Fl－Pl．ImpF 3IO－RL－be．FL．PL
＇Había algunos papeles，．．．＇
There were some papers，．．．RMH＿10－15－07＿597

\section*{13．3．2．5 Loose（non－liquid）mass：Voii be（pl．）and article coi}

Some nouns characterized as being loose but non－liquid masses include \(\llcorner x i i c a \operatorname{coosotoj}\lrcorner\) rice （thing－PL SN－narrow－PL），เxiica is cquihjö」 beans（thing－PL 3P－fruit SN－red），เhapaha quis」 flour（SN－Pv－grind SN－raw），hamt soil，sand，xiica coopol coffee（beans or grounds）（thing－PL SN－black）．Note the use of \(V_{\text {oii }}\) in（64）．
（64）เXiica an icaai」 pac toc cötoii，
sugar some there 3IO－RL－be．Fl．PL
‘Había azúcar，．．．’
There was sugar，．．．RMH＿05－16－08＿70

\section*{13．3．2．6 Liquid and knife－like items：\(\sqrt{ }\) ap stand and article cap}

Some nouns representing liquids（other than large bodies of water）include：haait blood （Abs．blood），iquihaamaj one＇s sweat（3P－PON－US－sweat），hataajc saliva（ABs－saliva），thax ihasii quiipe」perfume，ısooda coopol」cola（soda SN－black），cafee，ıxiica coopol」（liquid） coffee（thing－PL SN－black）．Knife－like items are also in this class（for unknown reasons）；these nouns include eenim knife，haspaaya sword（Abs－sword）．Note the use of \(\sqrt{ }\) ap in examples（65）－ （66）．
（65）Hax pac toc cötap，
water some there 3IO－RL－stand
＇Había agua，．．．＇
There was water，．．．RMH＿05－16－08＿71
（66）Eenim zo toc cötap，
knife a there 3IO－RL－stand
＇Había un cuchillo，．．．＇
There was a knife，．．．RMH＿－05－16－08＿72

\subsection*{13.3.2.7 People and other large land mammals: stand, sit, lie, be (flexible) and corresponding articles}

People and large land mammals are commonly presented as being seated as a kind of default position for a person being in a place (when not ill, dead, traveling, etc.), but they may also be presented as "living" in a place (using the verb \(V_{\text {iih }}\) be.FL) or in specific positions. See examples (67)-(68).
(67) Cmiique zo toc cötiij,
person a there 3IO-RL-sit
'Había una persona, ...'
There was a person, ... RMH_10-15-07_59a
(68) Cmiique ctam zo toc cötiih,
person/Seri man a there 3IO-RL-be.FL
'Había un hombre seri, ...'
There was a Seri man, ... (Consejos_perro) RMH_05-16-08_73
The presentation of plural seated people or animals in this class is different than that for
 \(\S 13.3 .2 .2) .{ }^{40}\) See examples (69)-(70).
(69) Comcaac pac toc cötahajca, ...
person/Seri-Pl some there 3IO-RL-sit.Pl.ImpF
'Había algunas personas, ...'
There were some people, ... RMH_05-16-08_74
(70) Háxaca pac toc cötahca, ...

Abs-pet-Pl some there 3IO-RL-sit.PL
'Había algunos perros, ...'
There were some dogs, ... RMH_05-16-08_75

\subsection*{13.3.2.8 Items viewed as locations: \(\sqrt{ }\) ahca be located and the article hac}

Some nouns are presented as locations rather than objects. These include hahoot entrance and zaaj cave. Note the use of \(\sqrt{ }\) ahca in (71)-(72).

\footnotetext{
\({ }^{39}\) This is perhaps the only place in the grammar that something like a notion of animacy comes to being important. And yet it can be seen from these facts that it is not really animacy (since rabbits are as animate as dogs) that is the relevant notion.
\({ }^{40}\) The 2005 dictionary incorrectly limited the \(\sqrt{ }\) ahajca stem to people.
}
(71) Hahoot zo toc cötahca ma, ... ABS-entrance a there 3IO-RL-be.located DS 'Había una entrada, ...'
There was a doorway, ... RMH_10-15-07_59b
(72) Hahootj pac toc cötahjoj, ...

ABS-entrance-PL some there 3IO-RL-be.located-PL
'Había algunas entradas, ...'
There were some entrances, ... RMH_10-15-07_59g

\subsection*{13.3.3 Placement verb selection}

The same classes of nouns are relevant for the choice of placement verb that is used in the clause, although the placement verbs do not match up one-to-one with the positional verbs. The relevant verbs at this point are \(\sqrt{ } \mathbf{a h}\) (put.Fl) for flexible things, \(\sqrt{ }\) aquim (put.items) for small loose things, \(\sqrt{c} \mathbf{c a a i x}(p u t . C m)\) for compact items, \(\sqrt{\mathbf{a x q}} \mathbf{u i m}\) (put.Hz) for long items, \(\sqrt{\text { aca }}\) (put.LQ) for liquids and knives, \(\sqrt{\mathbf{z a m}}\) (put.Vт) for tall items. (These may also be modified with hapx outside and changed into verbs of extraction.)

\subsection*{13.4 Locational nouns}

Locational nouns are a small subset of possessed nouns - perhaps only twelve lexemes which usually indicate the physical relationship of one item to another. Some of the nouns also have more concrete meanings in which they indicate a component part of some object: the surface, the tip, the bottom, the interior, etc. The referential component part noun presumably is the historical source of the locational noun, and these meanings and uses are indicated in the relevant subsections below. These other uses of the nouns sometimes make it difficult to distinguish them from certain other possessed nouns that indicate location but which have different syntactic properties from the locational nouns. \({ }^{41}\)

The examples and discussion in the subsections below show that some of these locational nouns are used with inherent frames of reference and some with relative frames of reference. \({ }^{42}\)

With respect to its syntactic properties, the prototypical use of the locational noun is expressed in the following schema:
(73) [ [ [ DP ] Locational-Noun ] Article ] P-element

A simple set of examples is given in (74).

\footnotetext{
\({ }^{41}\) The noun ihit place behind is nearly always used without the locative article hac or a P-element (see the discussion below), and for that reason it is omitted from this list.
\({ }^{42}\) Levinson (2003:41ff).
}


The definite article that occurs with the noun when it has the more concrete meaning is likely to be one of the positional articles (com, for example), whereas when the word is used as a locational noun, the article is most commonly hac (§21.2.5).

The complete inventory of locational nouns - those regularly occurring in the kind of construction shown above - is given in Table 13.4. The P-element need not immediately follow the nominal phrase (see chapter 22), as shown in the examples below. \({ }^{43}\)

About half of the locational nouns are vague for the number of the complement; the others have distinct plural forms. When there are distinct singular and plural forms, the choice of stem is determined by the number of the complement. Thus itacl (3P-surface/place.above) is the place above him/her/it and itacaj (3P-surface/place.above-PL) is the place above them.

\subsection*{13.4.1 Án place inside of it}

The first locational noun alphabetically in the list in Table 13.4 is different from the rest in that it does not have an overt third person possessor marker on it and cannot be inflected for first or second person. \({ }^{44}\) The locational noun án place inside of it is presumably related to both the concrete noun án its interior and the P-element ano in it (§22.2.1). Its plural form is ancoj. See the examples in (75)-(76).


\footnotetext{
\({ }^{43}\) The possessed noun iicot place between (plural iicotaj) does not occur with hac, apparently, and commonly occurs without a P-element. It is assumed here that it is not a noun of the category discussed here.
\({ }^{44}\) The meaning inside of you is expressed misoj com ano (2P-body the.Hz 3P-in).
\({ }^{45}\) The simpler sentence Xiica canaaotaj coi haacöt coi ano coii ha is also grammatical and synonymous.
}
（76） \begin{tabular}{lllllll} 
LHehe zamij」 quij \\
box & án & hac & ano & quiij & iha． \\
the．CM & 3P－place．inside & \begin{tabular}{l} 
the．LC \\
3P．in
\end{tabular} & SN－sit & DCL
\end{tabular}
It is down inside the box．

Example（76）is not an exact paraphrase of a similar sentence that omits the locational article and its determiner，as shown in（77），in which the meaning of inside is expressed solely by the P－element．
```

(77) \Hehe zamij」 quij ano quiij iha.
box the.CM 3P.in SN-sit DCL
'Está en la caja.'
It is in the box. RMH_05-20-08_9

```

\section*{13．4．2 Cöipatj beside it}

The locational noun cöipatj beside it is presumably related etymologically to the verb root \(\sqrt{ }\) patj flattened（sharing the same plural stem \(\sqrt{ }\) patalca and being a proposition／oblique deverbal form （§14．4）of that verb，which is the reason for the prefix cö－（§17．3．2．4）．The noun may have the concrete meaning of the side of something，as haaco cöipatj external wall surface（of house），or the side of a person（see example（ 89 p）in chapter 3 ）．This locational noun is used to describe the position of an item that is to one side or the other of another object．\({ }^{46}\) See（78）－（79）．
```

(78) ᄂHapaspoj hanoocaj ${ }_{\lrcorner}$quih cömipatj iicp hac iti
book the.FL 3IO-2P-beside 3P-place.next.to the.LC 3P-on
quiih iha.
SN-be.Fl DCL
'El libro está a tu lado.'
The book is at your side (next to you). RMH_05-20.08_11
(79) เHapaspoj hanoocaj」 coi cömipátalca iicp hac iti
books the.PL 3IO-2P-beside-PL 3P-place.next.to the.LC 3P-on
coii ha.
SN-be.Fl.PL DCL

```

\footnotetext{
\({ }^{46}\) More specific reference can be made by referring to whether the item is xepe iicp cöipatj hac the sea side， hehe án iicp cöipatj hac（alternatively heen iicp cöipatj hac）the desert side，xnaa iicp cöipatj hac（the south side），or haapa iicp cöipatj hac（the north side）．North and south are（approximately）fixed points，but the sea side and the desert side vary by location．When necessary，they may be replaced by zaah quij iicp cöipatj hac the east side（referring to zaah sun）and zeeme quij iicp cöipatj hac the west side（referring to zeeme sunset），or expressions that are even more complicated．
}
'Los libros están a tu lado.'
The books are at your side (next to you). RMH_05-20-08_12

\subsection*{13.4.3 Ihiin place near it}

The noun ihiin means place near it. \({ }^{47}\) See examples (80)-(85).
(80) Canoaa com ihiin hac iti caap iihi. boat the.Hz 3P-place.near the.Lc 3P-on SN-stand Past 'Estuvo cerca de la panga.'
S/helit was (standing) near the boat. (DS2010, hinin) RMH_08-21-07_98a
(81) Canoaataj coi hac iti caap iihi.
boat-PL the.PL 3P-place.near the.Lc 3P-on SN-stand Past
'Estuvo cerca de las pangas.'
S/he/it was (standing) near the boats. RMH_08-21-07_98b
(82) hasoj Jordán hapáh com ihiin com \(\operatorname{liti}\) cayaxi \(A_{\perp}\) xah river \(\quad\) SN-Pv-say the.Hz 3P-place.near the.Hz 3P-on SN-measure com tcooo
the.Hz RL-all
'toda la región cercana al río Jordán'
all the region near the river Jordan (NTT, Mt 3:5) RMH_08-21-07_98c
(83) Heezitim Salim hapáh quij ihiin hac city SN-PV-say the.CM 3P-place.near the.LC
ano caahca ha.
3P.in SN-be.located DCL
'Era cerca de Salim.'
It was near the city of Salim. (NTT, Jn 3:23) RMH_08-21-07_-98d
(84) Heezitim tiquij ihiin hac hax cactim caacoj \(z\) city Md-Cm 3P-place.near the.LC water SN-be.cut SN-big a
iti tiij ma,...
3P-on RL-sit DS
'Hay un estanque cerca de esa ciudad, ...'
There is a pool near that city, ... (NTT, Jn 5:2) RMH_08-21-07_98e

\footnotetext{
\({ }^{47}\) This word occurs in the name for Baja California and the distant islands in the west: Hant Ihiin (land 3Pplace.near). That one name also is the only one known to have a special form (a unique suffixed form) when modifying a noun such as Comcaac (Seri.person.PL): Hant Ihiini Comcaac Baja California Seris.
}
(85) Mihiin hac iti quiij iha.

2P-place.near the.Lc 3P-on SN-sit DcL 'Está sentado/a cerca de ti.'
S/he/it is sitting near you. RMH_08-21-07_98f

\subsection*{13.4.4 Ihiinpx place near it}

The noun ihiinpx also means place near it; see examples (86)-(90). Much less commonly used than ihiin, and considered somewhat old-fashioned, this noun may be used to demonstrate respect to the addressee if the addressee is also the complement of the locational noun, as in (86). \({ }^{48}\)
(86) Mihiinpx hac iti quiij iha.

2P-place.near the.LC 3P-on SN-sit DCL
'Está sentado/a cerca de ti.'
S/he/it is sitting near you. RMH_-08-21-07_98k
(87) ilhiinpx hac iti hsiih haa-ya?

3P-place.near the.Lc 3P-on 1SGS.Tr-Ir.ID-put.FL AUX QM
‘¿Quieres que lo ponga allí cerca (del otro)?'
Do you want me to put it there near the other one? (DS2010, hinpx) RMH_-08-21-07_98g
(88) ... heezitim Jerosalém hac ihiinpx hac iti miizcam. city the.LC 3P-place.near the.LC 3P-on Px-arrive.PL
'... llegaron cerca de Jerusalem.'
... they arrived near Jerusalem. (NTT, Mk 11:1) RMH_08-21-07_-98h
(89) ... hast Sinaí hapáh cop ihiinpx hac iti toii, mount SN-Pv-say the.Vt 3P-place.near the.Lc 3P-on Rl-be.Fl.PL
'... estaban cerca del monte Sinaí, ...'
... they were near Mount Sinai, ... (NTt, Ac 7:38) RмH_08-21-07_-98i
(90) ... hiicto \({ }^{\circ}\) hizcoi mihiinpx hac iti tmahca. my.children Px-PL 2P-place.near the.Lc 3P-on Sb-sit.PL
'.. mis hijos pueden estar sentados cerca de ti.'
... my children can be seated near you. (NTT, Mt 20:21) RMH_08-21-07_98j

\footnotetext{
\({ }^{48}\) This word is listed in the 2005 dictionary as a variant of ihiin, but this was an error except in that they are near synonyms. The dictionary also lists ihiinipxat as a plural. However, ihiinipxat is not really a plural, and it is not used as a locational noun. Whereas ihiin and ihiinpx mean place near, ihiinipxat means place rather near (within some kind of perimeter). A sentence given to illustrate it was:
}
(iv) He Hast Yaxaxoj ihiinipxat com oo he quiihtolca ha.

1Pro Pelón.Peak place.rather.near the.Hz DL 1Pro SN-be.Fl-Impf DCL
'Caminábamos cerca de Cerro Pelón.' / We were walking near Pelón Peak. (offered) RRRecording

\subsection*{13.4.5 licp place next to it}

The locational noun iicp means place next to it. It also has an extended, non-physical meaning of on the side of it, sometimes because of it (with the verb meaning ' go '), \({ }^{49}\) and quite commonly about, concerning and related meanings.


\subsection*{13.4.6 Imac place in the midst of them}

The locational noun imac means place between them and always takes a plural complement, unlike the concrete use of that noun meaning its middle. \({ }^{50}\) See examples (96)-(99).
```

(96) Xiica coi imac hac ano cap, ..
thing.PL the.PL 3P-midst the.LC 3P.in Im-stand
'Ponte de pie en medio de esas personas, ...'
Stand up in the midst of them, ... (NTt, Lk6:8) RMH_08-21-07_99e

```

\footnotetext{
\({ }^{49}\) A previously unrecorded "unspecified possessor" (or absolutive) form of this word is found in the refrain Ziix hapecp zo haa pomahca ta x áno somcasiijim aha. One should not get involved in affairs that are not one's own (reported by René Montaño Herrera).
\({ }^{50}\) The plural form ímajc is only used with the concrete meaning.
}
(97) iMimac hac ano tap?

2P-midst the.LC 3P.in RL-stand
'¿Está parado en medio de Uds.?'
Is s/he/it standing in your midst? RMH_08-21-07_100a
(98) ... Pedro com santaar quih coocj imac hac ano toom,... the.Hz soldier the.Fl SN-two 3P-midst the.LC 3P.in Rl-lie
'... Pedro estaba acostado entre dos soldados, ...'
...Peter was lying between two soldiers, ... (NTT, Ac 12:6) RMH_08-21-07_100b
\begin{tabular}{|c|c|c|c|}
\hline & Tabl & Locational & \\
\hline First person & Second person & Third person & \\
\hline 一* & -* & án & place inside of (sg.) \\
\hline -* & -* & ancoj & place inside of (pl.) \\
\hline cöhipatj & cömipatj & cöipatj & place next to (sg.) \\
\hline cöhipátalca & cömipátalca & cöipátalca & place next to (pl.) \\
\hline hihiin & mihiin & ihiin & place near \\
\hline hihiinpx & mihiinpx & ihiinpx & place near \\
\hline hiicp & miicp & iicp & place next to \\
\hline himac & mimac & imac & place in the midst of \\
\hline himocl & mimocl & imocl & place under (sg.) \\
\hline himocaj & mimocaj & imocaj & place under (pl.) \\
\hline himozít & mimozít & imozít & place in the middle of \\
\hline hipac & mipac & ipac & place behind (sg.) \\
\hline hípajoj & mípajoj & ípajoj & place behind (pl.) \\
\hline hipot & mipot & ipot & place at the bottom of \\
\hline hitacl & mitacl & itacl & place above (sg.) \\
\hline hitacaj & mitacaj & itacaj & place above (pl.) \\
\hline hiyat & miyat & iyat & place on top of (sg.) \\
\hline híyataj & míyataj & íyataj & place on top of (pl.) \\
\hline ihyanicp & inyaniicp & yaniicp & place in front of (sg.) \\
\hline hayaniicjoj & mayaniicjoj & yaniicjoj & place in front of (pl.) \\
\hline \multicolumn{4}{|l|}{*First and second person inflected forms of an(coj) are not grammatical, unlike those of the postposition ano (§22.2.1).} \\
\hline
\end{tabular}
（99）i＜Ziix coqueht」 quij mimac hac ano xiij！ ball the．CM 2P－midst the．Lc 3P．in Em－sit
＇¡El balón está en el medio de ustdes！’
The ball is in the midst of you（pl．）！

\section*{13．4．7 Imocl place under it}

The locational noun imocl means place under it and has a plural form imocaj．\({ }^{51}\) Its concrete meaning is its underside．See examples（100）－（104）．

＇La dinamita explotó debajo de la panga．＇
The dynamite exploded under the boat．（DS2010，imocl）RMH＿08－21－07＿100c
（101）\(\llcorner\) Hapaspoj hanoocaj \(\perp\) quih mimocl hac ano xiih． book the．FL 2P－place．under the．Lc 3P．in Em－be．FL
＇El libro está debajo de ti．＇
The book is under you．（DS2010，imocl）RMH＿08－21－07＿100d
（102）Hast quij himocl hac ano hyocaaix． stone the．Cm 1P－place．under the．Lc 3P．in 1SGS．Tr－Dt－put．Cm ＇Puse la piedra debajo de mí．＇
I put the stone under me．RMH＿08－21－07＿100e
（103）Haxz \({ }^{\circ}\) com himocaj hac ano coom iha． \(\operatorname{dog}\) the．Hz 1P－place．under．PL the．LC 3P．in SN－lie DCL
＇El perro está tirado debajo de nosotros．＇
The dog is lying under us．RMH＿08－21－07＿100f
（104）」Acaam ccaa」quij hehet com imocaj com wren the．Cm plant－PL the．Hz 3P－place．under－PL the．Hz
\[
\begin{array}{llll}
\text { ano } & \text { tiihtim } & \mathbf{x}, & \cdots \\
\text { 3P.in } & \text { RL-be.FL.IMPF } & \text { UT }
\end{array}
\]
＇La troglodita anda muy rápido debajo de los arbustos，．．．＇RMH＿－08－21－07＿100g
The wren goes around very quickly under the bushes here and there，．．．（Ds2010，acaam ccaa）

\footnotetext{
\({ }^{51}\) The translation of Lk 13：34 has íselca coi imocl hac an itaquim \(\mathbf{x}\) for she puts them under her wings．It is notable that here the singular form imocl is used although the complement is plural（iselca coi，3P－wing－PL the．PL）．This translation was confirmed to me and it was explained that it was appropriate because there is only one hen．If there were two hens，the plural form imocaj would be appropriate．
}

This locational noun (as distinguished from the component part noun) appears to generally be used with a relative frame of reference. This is the appropriate locational noun to use when describing, for example, an insect that is sitting "on" the surface of inverted table; the insect is actually under the table. This is also the appropriate expression for describing the position of anything that is lower than about waist level of a person who is seated in a chair. It makes no difference whether an object is on the floor behind, beside, or in front of the person.

\subsection*{13.4.8 Imozít in the middle of it}

The locational noun imozít means in the middle of it. Its concrete meaning is its half. Although a plural form of the noun exists, the singular form is used for the locational noun. See (105).


\subsection*{13.4.9 Ipac place behind it}

The locational noun ipac means place behind it. See (106)-(108). Its concrete meaning is its/her/his back (the part of the body). The plural form is not used when the referent objects are grouped, as in (107), but it is appropriate when plural persons are referred to, as in (108).


This locational noun appears to be used with an inherent frame of reference when the reference object (Ground) has an inherent backside. Therefore this word is used to indicate that the item is "behind" an object even if the backsde of the Ground is facing the interlocutors.

\subsection*{13.4.10 Ipot place at the bottom of it}

The locational noun ipot means place at the bottom of \(i t\), while its concrete meaning is its
bottom. See example (109).
(109) ¿Hapáspolca \({ }^{\circ}\) coi ipot hac ano toom? papers the.Pl 3P-bottom the.Lc 3P.in Rl-lie
'Is it at the bottom of the pile of papers?'
Is it at the bottom of the pile of papers? (DS2010, ipot) RMH_08-21-07_101a

\subsection*{13.4.11 Itacl place above it}

The locational noun itacl means place above it, while its concrete meaning is its surface. For some speakers, this locational noun also means on top of it, while for others that meaning is preferentially indicated by iyat (see \(\S 13.4 .12\) below). The basic distinction between the two is clear from the contrast between itacl hac iti (3P-surface.place.above the.Lc 3P-on), which implies in the air, and iyat hac iti (3P-place.on.top.of the.LC 3P-on), which usually means on the surface. See examples (110)-(111).
(110) Hamazaj quij mitacl hac ano quiij iha.

Abs-clay.pot the.CM 2P-surface/place.above the.LC 3P.in SN-sit Dcl
'La olla está arriba de ti.'
The pot is above you. (DS2010, itacl) RMH_08-21-07_101c
(111) LZiix ccap」 tintica itacaj hac iti quiij iha.
airplane MD-Aw 3P-surface/place.above-PL the.LC 3P-on SN-sit the
'El avión está arriba de ellos.'
The plane is above them. (DS2010, ital) RMH_08-21-07_101d
See also the expression in (112) (without a P-element):
\begin{tabular}{ll} 
(112) & \(\boldsymbol{i} \mathbf{i \text { Mitacl }}\) hac hoocta! \\
& 2P-place.above the.LC Im-look.at
\end{tabular}

\subsection*{13.4.12 lyat place on top of it}

The locational noun iyat means place on top of it, while its concrete meaning is its tip. See examples (113)-(115).

(114) Caatc quij hac iti quiij iha.
grasshopper the.CM 3P-place.on.top.of the.LC 3P-on SN-sit DCL 'El saltamontes está en ella (p. ej., la mesa).'
The grasshopper is on it (e.g., the table). RNH_05-20-08_16
(115) hac iti hsiiquim aha.

2P-place.on.top.of the.LC 3P-on 1SGS.Tr-Ir.Id-put.items Aux-dcl 'Los voy a poner encima de ti.'
I am going to put them on top of you. RMH_05-2000__17

\subsection*{13.4.13 Yaniicp place in front of it}

The word yaniicp place in front of it (sometimes pronounced yeniicp) is etymologically derived from yeen its face and iicp place next to it (§13.4.5). See examples (116)-(118).
(116) \(\mathrm{Haxz}^{\circ}\) cop haaco cop yaniicp hac iti caap iha. dog the.Vt Abs.house the.Vt 3P-place.in.front the.Lc 3P-on SN-stand DcL 'El perro está parado delante de la casa.'
The dog is standing in front of the house. RMH_08-21-07_101e
(117) Haxz \({ }^{\circ}\) cop haacöt coi yaniicioj hac dog the.Vt Abs.house-Pl the.Pl 3P-place.in.front-Pl the.LC
iti caap iha.
3P-on SN-stand DCL
'El perro está parado delante de las casas.'
The dog is standing in front of the houses. RMH_08-21-07_101f
(118) ilhyaniicp hac caaaxoj!

1P-place.in.front.of the.LC Im-go.away.from-PL
'Salgan de en frente de mí.'
Get out of in front of me! RMH_-88-21-07_102
This locational noun appears to be used with an inherent frame of reference when the reference object (Ground) has an inherent frontside. Therefore this word is used to indicate that the item is "in front of" an object even if the front of the Ground is facing away from the interlocutors.

\subsection*{13.5 Lexicalized expressions and compound nouns}

Some nominal expressions have become lexicalized with usage. These expressions are sometimes identical syntactically and extremely similar phonologically to non-lexicalized constructions, making the boundary between the two difficult to determine. At the same time, some expressions are slightly more compressed phonologically. These are all considered to be com-
pounds in this grammar.
When a compound has quite transparent meaning and the parts are all quite clearly similar to existing words, the compound is written as more than one word. These are called analytic compounds here. When the pieces of the compound are less transparent semantically or morphologically, the compound is written as one word. These are called synthetic compounds here. \({ }^{52}\)

In this section compounds are presented by comparing them with productive syntactic constructions that they resemble and from which they presumably have derived historically.

\subsection*{13.5.1 Common noun + common noun}

One productive syntactic construction combines two nouns to form a noun phrase; see §8.2.1. One common interpretation of these phrases is that the first noun gives the material of which the second noun is made. \({ }^{53}\) A simple example is caztaz haaztoj wheat porridge. This construction is the source of some compounds that are quite transparent as well as some that are not so transparent; see (119). For example, an explanation for the compound hehe zamij box based on its parts is unknown. The compounds xepe ziic sea bird and xepe poosj fishing line are analytic noun-noun compounds, but the first word (xepe sea) does not indicate the material from which the item indicated by the second words (ziic bird, poosj cord, string) is made. \({ }^{54}\)
\begin{tabular}{lllll} 
(119) & a. & hehe hascám & ship & plant/wood Abs-reed.boat \\
& b. & eenim cosi & needle & metal thorn \\
c. & hehe zamij & box & plant/wood palm.tree \\
& d. & xepe ziic & sea bird & sea bird \\
e. & xepe poosj & fishing line & sea cord/string \\
& f. & mooj poosj & cotton cord & cotton cord \\
g. & caaz poosj & mesquite root cord & prepared.mesquite.root cord
\end{tabular}

The compound hant xnoois (land eelgrass.grain) meaning garbage, trash is an opaque combination.

The examples in (120) might well be considered synthetic compounds for more than one reason, although they have been written as two words in the 2005/2010 dictionary. The first part,

\footnotetext{
\({ }^{52}\) The decisions about writing compounds were made by a committee for the 2005 dictionary.
\({ }^{53}\) Alternatively, the second noun specifies the shape and form of the material mentioned in the first noun.
\({ }^{54}\) The counterpart to this term is not a Noun + Noun expression, but rather (apparently) Adverb + Noun: heeno ziic desert bird, where heeno is an adverb that usually modifies a verb and indicates something like relating to the desert. The particular relationship implied between xepe and ziic in the expression xepe ziic does not seem to be a common one for such expressions.
}
eenm, is a reduction of the word eenim metal. In fact, the \(\mathbf{m}\) is not pronounced in the compound, and the \(\mathbf{n}\) metathesizes (or merges) with the glottal stop of the following morpheme: [ \(\varepsilon ?^{\prime}\) naakni] and [ \(\left.\varepsilon ?^{\prime} n^{\circ}{ }^{\circ} \chi^{\mathrm{w}} \ddagger\right]\), respectively.
\begin{tabular}{lllll} 
(120) & a. eenm haacni & rifle & <eenim haacni & metal bow \\
b. eenm haxöl & spoon & <eenim haxöl & metal clam
\end{tabular}

\subsection*{13.5.2 Possessor + possessed noun}

A possessor nominal phrase precedes a possessed noun (see §8.3). This construction is the basis for many analytic compounds, including those in (121). \({ }^{55}\)
\begin{tabular}{lllll} 
(121) & a. & hápats imoon & lima bean & Apache 3P-bean \\
b. & oot ipyooque & a species of sun star & coyote 3P-sun.star \\
c. & oot iquejöc & ashy limberbush & coyote 3P-firewood \\
d. & xepe án & intertidal zone (especially) & sea 3P.area \\
e. & hehe án & inland area, countryside & plant 3P.area \\
& f. & xepe án iheel & red tide & sea 3P.area 3P-PON-red \\
& g. & hocö ine & tar made from plants & pine 3P-mucus
\end{tabular}

Some synthetic compounds, such as those in (122), also display this pattern.
\begin{tabular}{llllll} 
(122) & a. & haxölinaail & mollusk & \(<\) haxöl i-naail & \begin{tabular}{l} 
Protothaca 3P-shell/skin \\
b.
\end{tabular} \\
& b. & hateiictim & rag & <hataaio \({ }^{\text {iictim }}\) & cloth 3P-PON-break
\end{tabular}

The word hapnaail \({ }^{\circ}\) skirt is presumably derived historically from hap inaail (muledeer 3Pskin). \({ }^{56}\) However, if that is so, it has been reanalyzed as ha-pnaail (Abs-skirt) since it now functions in the possessed noun paradigm: hipnaail my skirt, mipnaail your skirt, ipnaail her skirt.

\subsection*{13.5.3 Postpositional phrase + common noun}

Postpositional phrases do not commonly occur in noun phrases with common nouns (rather than deverbal nouns) as heads (see \(\S 8.2 .1\) ), but some relatively straightforward analytic compounds, such as those in (123)-(127), show this pattern.
(123) \begin{tabular}{cc}
{\([\) Hast } & ano \(]\) \\
San.Esteban.Island 3P.in & cmaam/ctam \\
woman/man
\end{tabular}

\footnotetext{
\({ }^{55}\) Expressions like xepe án and hehe án are common examples of a type that is quite productive and may simply be a phrase rather than a compound. See, for example, xaasj án (area where there are many cardón cactuses), mojepe án (place where there are many sahuaro cactuses), has án (area where there are many mesquite trees), and cocsar án (place where there are lots of non-Indian Mexicans). The expression uses the singular form of the noun that is referred to.
\({ }^{56}\) This suggestion was first made by Mary B. Moser (p.c.), so far as I know.
}
\begin{tabular}{|c|c|c|c|}
\hline (124) & \[
\left[\begin{array}{ll}
{[\text { iicj }} & \text { ano }] \\
\text { coarse.sand } & 3 P . i n
\end{array}\right.
\] & \begin{tabular}{l}
moosni \\
black.sea.turtle
\end{tabular} & a mole crab \\
\hline (125) & \[
\begin{array}{ll}
\text { caaial }^{\circ} & \mathbf{i t i}] \\
\text { dry.lake.bed } & 3 P-\text { on }
\end{array}
\] & \begin{tabular}{l}
siml \\
barrel.cactus
\end{tabular} & Emory's barrel cactus \\
\hline (126) & [ xepe ano] coiiz sea 3P.in spider & & a sea spider \\
\hline (127) & [ haas ano ] coc mesquite 3P.in ratt & \begin{tabular}{l}
zni \({ }^{\circ}\) \\
esnake
\end{tabular} & lyre snake \\
\hline
\end{tabular}

Some synthetic compounds, such as those in (128), are also obviously based on this construction.
\begin{tabular}{rllll} 
(128) & a. & xepenococazni & pelagic sea snake & \(<\)\begin{tabular}{l} 
xepe ano cocazni
\end{tabular} \\
& sea 3P.in rattlesnake
\end{tabular}

\subsection*{13.5.4 Noun + clause with deverbal noun head}

The standard way to modify a noun with a clause is to use a relative clause headed by a deverbal noun (see chapter 14). The same construction is the source for various lexicalized expressions.
13.5.4.1 Subject-oriented deverbal noun-headed relative clause modifying overt head

The examples in (129) have overt heads and subject-oriented deverbal nouns.

\begin{tabular}{|c|c|c|}
\hline e. & ziix paaij ano coom thing driftwood 3P.in SN-lie & \begin{tabular}{l}
striped tail scorpion (Vaejovis sp.) \\
(thing that lies in driftwood)
\end{tabular} \\
\hline f. & ziix hast iizx ano coom thing rock \(3 \mathrm{P}-\mathrm{PON}\)-tear 3 P.in SN-lie & \begin{tabular}{l}
northern chuckwalla \\
(thing that lies in rock crevice)
\end{tabular} \\
\hline g . & ziix quiisax thing SN-have.life & person \\
\hline h. & \begin{tabular}{l}
ziix quixaaza \\
thing SN-have.weapon
\end{tabular} & soldier, policeman \\
\hline 1. & zixquisiil \({ }^{\circ}\) quisil child SN -small & baby \\
\hline k. & hant xepe imac quiij & island \\
\hline & land sea 3P-middle SN-sit & (land that is in the middle of the sea) \\
\hline 1. & hanzajipj quiipa & frying pan \\
\hline & pan SN-HAVE-tail & (pan that has a tail) \\
\hline
\end{tabular}

The same pattern is seen in the examples in (130) except that the deverbal noun is passive and hence has a different allomorph of the nominalizer (see §14.1).
\(\left.\begin{array}{lll}\text { a. eenm hacoaazj } \\ \text { metal SN-PV-braid }\end{array} \quad \begin{array}{l}\text { chain } \\ \text { (metal that is braided) }\end{array}\right\}\)

Synthetic compounds made on this pattern include those in (131): \({ }^{57}\)
\begin{tabular}{lllllll} 
(131) & a. & zixcám \(^{\circ}\) fish & \(<\) & ziix & ccam & (thing SN-alive) \\
& b. & zixquisiil \(^{\circ}\) child & \(<\) & ziix & quisil \(^{58}\) & (thing SN-small) \\
& c. & xpacaao & mermaid & \(<\) & xepe & caao
\end{tabular} (sea SN-Tr-pass.by)

The compound hant quixoaa (land SN-plan.to.fight) hermit crab does not have an obvious analysis since the role of hant in the compound is unclear.

\footnotetext{
\({ }^{57}\) The compound noun zixcám \({ }^{\circ}\) fish is attested as early as 1852 (see Bartlett 1852, item 109).
\({ }^{58}\) In the compound the stress is also shifted to the right and causes a lengthening of the vowel \(\mathbf{i}\).
}

\subsection*{13.5.4.2 Subject-oriented deverbal noun-headed relative clause modifying nonovert head}

Just as headless relative clauses with deverbal nouns occur productively (§8.4.6), headless relatives also occur in analytic compounds. See the examples in (132).
\begin{tabular}{|c|c|c|c|}
\hline (132) & a. & เhehe hascám」quij ano caticpan ship the.CM 3P.in SN-work & \begin{tabular}{l}
sailor(s) \\
(who work in the ship)
\end{tabular} \\
\hline & b. & santaar quih ano quihehe soldier the.FL 3P.in SN-have-stick & \begin{tabular}{l}
officer (of soldiers) \\
(who is leader of the soldier)
\end{tabular} \\
\hline & c. & \begin{tabular}{l}
hant ano ccah \\
land 3P.in SN-make.sound
\end{tabular} & \begin{tabular}{l}
a large yellow bee \\
(what makes sound in ground)
\end{tabular} \\
\hline & d. & miizj hant quixquim well land SN-Tr-put.Hz & \begin{tabular}{l}
boat captain \\
(who puts it [boat] down well)
\end{tabular} \\
\hline & f. & \begin{tabular}{l}
acaam ccaa \\
3P-husband SN-Tr-look.for
\end{tabular} & \begin{tabular}{l}
wren \\
(who is looking for her husband)
\end{tabular} \\
\hline & g. & \(\begin{array}{lll}\text { hehe } & \text { iti } & \text { cooscl } \\ \text { plant/tree } & \text { 3P-on } & \text { SN-mottled }\end{array}\) & tree lizard (Urosaurus ornatus) (what is mottled and on a tree) \\
\hline & h. & \begin{tabular}{l}
hapaha quis \\
SN-Pv-grind SN-raw
\end{tabular} & \begin{tabular}{l}
flour \\
(what is ground and raw)
\end{tabular} \\
\hline & i. & \(\begin{array}{ll}\text { hayaa } & \text { cacoxl } \\ \text { SN-Pv-own } & \text { SN-TR-tend }\end{array}\) & \begin{tabular}{l}
storekeeper \\
(who tends possessions)
\end{tabular} \\
\hline & j. & \begin{tabular}{ll} 
hayaa & hacoxl \\
SN-Pv-own & SN-Pv-tend
\end{tabular} & \begin{tabular}{l}
store (of merchandise) \\
(possessions that are tended)
\end{tabular} \\
\hline
\end{tabular}

The expression for ancestor is based on the idiom for being from the ancestral past and is a headless relative: hantx moca (at.base Twd-SN-move).

\subsection*{13.5.4.3 Proposition/oblique-oriented deverbal noun-headed relative clause modifying overt head}

The analytic compounds in (133) are formed with proposition/oblique-oriented deverbal nouns and overt heads.
\(\left.\begin{array}{rlll}\text { (133) } & \text { a. } & \begin{array}{l}\text { ziix icacötim } \\ \text { thing }\end{array} & \text { 3P-PON-US-cover.oneself }\end{array} \quad \begin{array}{l}\text { blanket } \\ \text { (thing that one covers up with) }\end{array}\right)\)
\begin{tabular}{|c|c|c|}
\hline d. & \begin{tabular}{l}
nm icaatj \\
etal 3P-PON-US-pound.flat
\end{tabular} & \begin{tabular}{l}
hammer \\
(metal that one pounds flat with)
\end{tabular} \\
\hline e. & \begin{tabular}{l}
ziix iti icoohit \\
thing 3P-on 3P-PON-US-UO-eat
\end{tabular} & \begin{tabular}{l}
plate \\
(thing on which one eats)
\end{tabular} \\
\hline f. & \begin{tabular}{l}
ziix an hax ipén \\
thing 3P.in water 3P-PON-Pv-carry
\end{tabular} & \begin{tabular}{l}
water container \\
(thing in which water is carried)
\end{tabular} \\
\hline g. & \begin{tabular}{l}
hant an icocoho \\
place 3P.in 3P-PON-US-UO-see
\end{tabular} & \begin{tabular}{l}
window \\
(place from which one sees)
\end{tabular} \\
\hline h. & \begin{tabular}{l}
hehe iti icoohitim \\
plant 3P-on 3P-PON-US-UO-eat-ImpF
\end{tabular} & \begin{tabular}{l}
table \\
(wood on which one eats)
\end{tabular} \\
\hline 1. & haaco ano hapaspoj \({ }^{\circ}\) cöicacoaat Abs.house 3P.in paper 3IO-3P-US-ca & school know (building in which one is taught formally) \\
\hline j. & hax ihasii quiipe water 3P-PON-Aug-smell SN-good & \begin{tabular}{l}
perfume \\
(water that has a good odor)
\end{tabular} \\
\hline k. & \begin{tabular}{l}
hehe an icaaij \\
plant 3P.in 3P-PON-US-fetch.water
\end{tabular} & \begin{tabular}{l}
water drum \\
(wood in which one fetches water)
\end{tabular} \\
\hline
\end{tabular}

The second part of the compound hant ipzx gulch, arroyo is very similar to the proposition/oblique-oriented deverbal noun of the predicate for torn, iipzx. However, the vowel in the compound expression is short. \({ }^{59}\)

\subsection*{13.5.4.4 Proposition/oblique-oriented deverbal noun-headed relative clause modifying non-overt head}

The analytic compounds in (134) are formed with proposition/oblique-oriented deverbal nouns and non-overt heads.
\begin{tabular}{|c|c|c|c|}
\hline (134) a. & an
3P.in & \begin{tabular}{l}
icayeeno \\
3P-PON-US-HAVE-face
\end{tabular} & \begin{tabular}{l}
mask \\
(what one puts one's face into)
\end{tabular} \\
\hline b. & an
3P.in & \begin{tabular}{l}
ihiih \\
3P-PON-be.FL
\end{tabular} & container (for flexible things) (that in which it is) \\
\hline c. & \begin{tabular}{l}
an \\
3P.in
\end{tabular} & ihiij
3P-PON-sit & container (for compact things) (that in which it sits) \\
\hline d. & an
3P.in & \begin{tabular}{l}
iquitj \\
3P-PON-US-HAVE-trunk
\end{tabular} & \begin{tabular}{l}
pants \\
(that one puts one trunk into)
\end{tabular} \\
\hline
\end{tabular}

\footnotetext{
\({ }^{59}\) This was mis-recorded in the 2005 dictionary; the correction is due to René Montaño Herrera.
}
\(\left.\begin{array}{lll}\text { e. eenim ipemt } \\
\text { metal 3P-PON-Pv-rub }\end{array} \quad \begin{array}{l}\text { whetstone } \\
\text { (what metal is rubbed with) }\end{array}\right]\)\begin{tabular}{l} 
tire
\end{tabular} (what it rolls on the ground with)

The headless compound hant imaasij an ihiij tire rim (more literally, that in which sits what it rolls on the ground with) combines the headless compound hant imaasij tire (see (134f) above) with the commonly headless compound an ihiij container (see (134c) above).

The headless compound hehe iti icoohitim ihaanim tablecloth (more literally, what the wood on which one eats is covered with) combines the overtly headed compound hehe iti
\begin{tabular}{|c|c|c|}
\hline \multicolumn{3}{|c|}{Table 13.6: Compounding adjectives} \\
\hline Compounding form & & Stative predicate \\
\hline -aacoj (pl. -aacöl) & big & Vaacoj (pl. Vaacöl) \\
\hline -ictoj, -iictoj & red & \(\checkmark\) actoj \\
\hline -iicösxaj (pl. -iicöla) & long, tall & Vacösxaj (pl. Vacöla) \\
\hline -iil & large & ? etymologically from Vooil blue/green \\
\hline -iispoj & spotted, patterned & \(\checkmark\) oospoj \\
\hline -ipol, (pl. -ipl) & black & Voopol (pl. Voopl) \\
\hline -iscl & gray & \(\checkmark\) oosel \\
\hline -isol (pl. -isl) & yellow & \(\checkmark\) masol (pl. \(\checkmark_{\text {masl }}\) \\
\hline -isot & narrow & \(\checkmark\) oosot \\
\hline -ixp & white & Vooxp \\
\hline
\end{tabular}

\footnotetext{
\({ }^{60}\) Other forms include iti hmiiha my parent, iti hmiihat my parents, iti mmiihat your parents. See Appendix D.
}
icoohitim table (see (133h) above) with the deverbal noun ihaanim (3P-PON-Pvcause.be.covered) that with which it is covered.

The compound hant ihiip its meaning is apparently based on the root \(\sqrt{ }\) ap stand (land 3P-PON-stand). It has a future form hant isiip ha what it will mean (as in the sentence ¿Hant isiip ha zo nsiya haaya? ¿Vas a entender lo que significa? Are you going to understand its meaning (what it will mean)? Beyond that, nothing more is known.

\subsection*{13.5.5 Noun + adjective}

The class of adjectives is very small (see chapter 23), but some of these occur in lexicalized expressions. Some examples are given in (135); see more examples in §23.1.1.
\begin{tabular}{|c|c|c|c|}
\hline (135) a. & siml áa & variety of barrel cactus, Ferocactus tiburonensis & < siml barrel cactus, áa real \\
\hline b. & hapis áa & factory-made cigarette & < hapis tobacco, áa real \\
\hline c. & cmiique áa & clean-living person & < cmiique person, áa real \\
\hline d. & inol aapa & his/her right hand & \[
\begin{aligned}
&< \text { inol 3P-hand/finger, } \\
& \text { aapa strong }
\end{aligned}
\] \\
\hline e. & hamác cöhaisx & smoke signal & < hamác fire, cöhaisx injured \\
\hline f. & haamjö íi & a plant, Hechtia montana & \[
\begin{aligned}
& <\text { haamjö Agave subsimplex, } \\
& \text { íi first }
\end{aligned}
\] \\
\hline g. & inol zaac & his/her little finger & < inol 3P-arm/hand/finger, zaac small \\
\hline
\end{tabular}

Some words are synthetic compounds based on this pattern. Two examples are given in (136).
\((136)\) a. haitaapa northwest wind \(<\) hai wind, aapa strong
b. mosnaapa variety of black sea turtle < moosni black sea turtle, aapa strong

\subsection*{13.5.6 Noun + compounding adjectival form}

Some synthetic compounds utilize a compounding adjectival root. These morphemes are apparently limited in number and some are found in only one or two compounds. A perhaps complete list of them is given in Table 13.5. Examples of lexemes with these combining adjectives are given in (137).
(137) a. hantaacoj
mainland
\begin{tabular}{ll}
\(<\) hant & -aacoj \\
land & big
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline b. & cocaznaacöl & gopher snake & & \begin{tabular}{l}
cocazni \({ }^{\circ}\) \\
rattlesnake
\end{tabular} & \begin{tabular}{l}
-aacöl \\
big (pl.)
\end{tabular} \\
\hline c. & Hastictoj & (a place) & < & hast stone/mountain & -ictoj \({ }^{61}\) red \\
\hline d. & xnejamsiictoj & \begin{tabular}{l}
(a bush) \\
(Stegnosperma halimifolium
\end{tabular} & \(<\) & \begin{tabular}{l}
xneeejam is \\
- 3P-seed
\end{tabular} & \begin{tabular}{l}
-iictoj \\
red
\end{tabular} \\
\hline e. & Taijiicösxaj & (a place) & \(<\) & \begin{tabular}{l}
itaaij \\
shoreline
\end{tabular} & \begin{tabular}{l}
-iicösxaj \\
long/tall
\end{tabular} \\
\hline f. & Hastojiicöla & (volcano cones on Baja California) & \(<\) & \begin{tabular}{l}
hastoj \\
stone/hill-PL
\end{tabular} & \begin{tabular}{l}
-iicöla \\
tall-PL
\end{tabular} \\
\hline g. & mosniil & variety of black sea turtle & \(<\) & \begin{tabular}{l}
moosni \\
black.sea.turtle
\end{tabular} & \[
\begin{aligned}
& \text {-iil } \\
& \text { large }
\end{aligned}
\] \\
\hline h. & seneliispoj & monarch butterfly & \(<\) & \begin{tabular}{l}
seenel \\
butterfly
\end{tabular} & -iispoj spotted \\
\hline i. & mosnipol & leatherback (sea turtle) & \(<\) & \begin{tabular}{l}
moosni \\
black.sea.turtle
\end{tabular} & \begin{tabular}{l}
-ipol \\
black
\end{tabular} \\
\hline j. & Hastojipl & (a place) & < & \begin{tabular}{l}
hastoj \\
stone/hill-PL
\end{tabular} & \begin{tabular}{l}
-ipl \\
black-PL
\end{tabular} \\
\hline k. & catquiscl & pallid-winged grasshopper & < & caatc grasshopper & -iscl gray \\
\hline 1. & Hastisol & (a place) & < & \begin{tabular}{l}
hast \\
stones, hill
\end{tabular} & -isol yellow \\
\hline m. & tajisl & an unidentified fish & \(<\) & ? & \begin{tabular}{l}
-isl \\
yellow-PL
\end{tabular} \\
\hline n. & xtipisot & jackknife clam & \(<\) & \begin{tabular}{l}
xtiip \\
giant.cockle
\end{tabular} & -isot narrow \\
\hline o. & hantixp & gypsum & < & \begin{tabular}{l}
hant \\
land
\end{tabular} & \begin{tabular}{l}
-ixp \\
white
\end{tabular} \\
\hline p. & xpanamsaacöl & sargassum & < & xpanaams seaweed & -aacöl big-PL \\
\hline q. & Cailipolaacoj & (a certain dry lake bed) & < & \multicolumn{2}{|l|}{caail, -ipol, -aacoj dry.lake.bed, black, big} \\
\hline
\end{tabular}

\footnotetext{
\({ }^{61}\) The compounding root for red seems to have two allomorphs, with a short initial vowel and with a long initial vowel.
}
r. Taijiicösxaj (a place name)
\begin{tabular}{ll}
\(<\) itaaij & -iicösxaj \\
shoreline & long
\end{tabular}

\subsection*{13.6 Allomorphy in possessed nouns and kinship terms}

The inflection for the person of the possessor of body parts, personal items, kinship terms, and locational nouns is very regular, but not altogether simple. Representative paradigms of each are given below. Absolute forms of kinship terms often have additional material at the end of them, which is not discussed here; see \(\S 13.2 .4\).

Noun roots that begin with true consonants or glottal stop allow the prefixes to be seen in their underlying forms. (See \(\S 13.1 .1\) for discussion of the difference between second person miand ma-, and third person \(\mathbf{i}\) - and \(\mathbf{a}-\).) Examples are given in (138).
\begin{tabular}{|c|c|c|c|c|c|}
\hline (138) & Absolute & First & Second & Third & \\
\hline & \begin{tabular}{l}
Body part \\
halít \\
hataast
\end{tabular} & \begin{tabular}{l}
hilít \\
hitaast
\end{tabular} & \begin{tabular}{l}
milít \\
mitaast
\end{tabular} & \begin{tabular}{l}
ilít \\
itaast
\end{tabular} & head, hair tooth \\
\hline & Personal item hamazaj hataamt & \begin{tabular}{l}
himazaj \\
hitaamt
\end{tabular} & \[
\underset{\underline{\text { mimazaj }}}{\underline{\text { mitant }}}
\] & imazaj itaamt & clay pot sandal \\
\hline & \begin{tabular}{l}
Kinship term \\
hacamaz \\
hatmahaj
\end{tabular} & \begin{tabular}{l}
hicamaz \\
hitmahaj
\end{tabular} & \begin{tabular}{l}
macamaz \\
matmahaj
\end{tabular} & \begin{tabular}{l}
acamaz \\
atmahaj
\end{tabular} & daughter-in-law mother's older sister \\
\hline \multicolumn{6}{|c|}{Locational noun} \\
\hline & & himocl & \(\underline{\text { mimocl }}\) & \(\underline{\text { imocl }}\) & place under \\
\hline & & hitacl & \(\underline{\text { mitacl }}\) & itacl & place above \\
\hline & & & & & place near \\
\hline
\end{tabular}

Roots that begin with \(\mathbf{y}\) show some interaction with the \(\mathbf{i}\) of a possessive prefix; this interaction is discussed in \(\S 13.6 .1\). See the examples in (139).
\begin{tabular}{lllll} 
(139) & \begin{tabular}{llll} 
Absolute & First & Second & Third
\end{tabular} \\
\begin{tabular}{llll} 
Body part \\
hayáx
\end{tabular} & \(\underline{\text { ihyáx }}\) & inyáx & yax & belly \\
hayeen & \(\underline{\text { ihyeen }}\) & inyeen & yeen & face
\end{tabular}

Roots that putatively begin with a vowel show fusion with the prefix vowel; this is discussed in \(\S 13.6 .2\). (See \(\S 13.2 .4\) for discussion of the difference between absolute prefix used
with kinship terms and that used with other nouns.) These are divided into groups in (140)-(141) based on the length of the stressed vowel in the third person form.
\begin{tabular}{|c|c|c|c|c|c|}
\hline (140) & Absolute & First & Second & Third & \\
\hline & \begin{tabular}{l}
Body part \\
hamas \\
hamt
\end{tabular} & \begin{tabular}{l}
himas \\
himt \\
heaaj
\end{tabular} & \(\underline{\text { mimas }}\) mimt meaaj & \[
\begin{aligned}
& \text { imas } \\
& \underline{\text { imt }} \\
& \text { eaaj }
\end{aligned}
\] & \begin{tabular}{l}
pubic hair \\
breast vertebra
\end{tabular} \\
\hline & Kinship term hapepez hapeme hapeez hapeetz & \begin{tabular}{l}
hipaz \\
him \\
heaaz \\
hiitz
\end{tabular} & \begin{tabular}{l}
\(\underline{\operatorname{mapaz}}\) \\
mam \\
maaz \\
maaitz
\end{tabular} & \[
\begin{aligned}
& \text { apaz } \\
& \text { am } \\
& \text { aaz } \\
& \text { aaitz }
\end{aligned}
\] & \begin{tabular}{l}
paternal grandfather \\
father (of female) \\
mother's father \\
father's ygr. brother
\end{tabular} \\
\hline & Locative noun & \begin{tabular}{l}
hipot \\
hipac
\end{tabular} & \begin{tabular}{l}
mipot \\
mipac
\end{tabular} & \begin{tabular}{l}
ipot \\
ipac
\end{tabular} & place at bottom of place behind \\
\hline (141) & Absolute & First & Second & Third & \\
\hline & Body part haaf & hiif & \(\underline{\text { miif }}\) & iif & nose \\
\hline & Kinship term hapect & hiict & maact & \(\underline{\text { aact }}\) & mother's mother \\
\hline & Locational nou hapecp & hiicp & \(\underline{\text { miicp }}\) & iicp & place next to \\
\hline & Personal item haaonam & hiionam & miionam & iionam & hat \\
\hline
\end{tabular}

The word for daughter (of male) is unusual in that it has an invariant vowel ee and also an unexpected allomorph for absolute. The word for child of sister (of male), shown in (142), also displays an unusual pattern of inflection.
\begin{tabular}{lllll} 
(142) & \(\underline{\text { heequet }}\) & \(\underline{\text { heec }}\) & \(\underline{\text { meec }}\) & eec
\end{tabular} \begin{tabular}{l} 
daughter (of male) \\
\\
haacat
\end{tabular}

\subsection*{13.6.1 i-Deletion, relevant to \(y\)-initial roots}

If a bound noun root begins with a \(\mathbf{y}\), the vowel \(\mathbf{i}\) of a prefix generally deletes before it. \({ }^{62}\) Thus underlying \{i-yeen\} (3P-face) becomes yeen his/her/its face. If the prefix is hi- or mi-, the loss of the \(\mathbf{i}\) results in a cluster that is not a permitted syllable onset. This often results in the vowel \(\mathbf{i}\) being epenthesized before the cluster (see \(\S 27.1 .1\) for the conditions). The labial nasal assimilates to the point of the immediately following consonant (§28.5.2). Thus underlying \(\{\mathbf{h i} \mathbf{-}\) yeen \(\}\) becomes ihyeen \(m y\) face and \{mi-yeen\} becomes inyeen your face.

The \(\mathbf{i}\) of the possessive prefix also deletes before the object nominalizer \(\mathbf{y}\) - (§14.3) and the proposition/oblique nominalizer \(\mathbf{y}\) - (§14.4), except when the possessor prefix is preceded by the third person inflection for indirect/oblique object, cö-. Compare the examples in (143).
```

(143) a. hant iti yaii
land 3P-on 3P-PON-be.FL.PL
'lugar donde están/estaban'
place where they are/were RMH_05-16-08_78
b. toc cöiyaii iti
there 3IO-3P-PON-be.Fl.PL 3P-on
'mientras estaban allí'
while they were there RмH_05-16-08_79

```

\subsection*{13.6.2 Root-initial vowels}

It is not possible to directly see the root-initial vowel in possessed nouns because all of the prefixes (hi-, mi-, \(\mathbf{i -}\), ha-, hape-) are vowel-final and that vowel is always preserved. \({ }^{63}\) And yet the roots must be vowel-initial since the stress appears before the first consonant of the root, in a pattern consistent with vowel-initial verb roots. (See the account of stress in §28.2.) The vowelinitial nature of these roots also provides the means for an account of the distribution of the absolute prefix allomorphs (§13.2.4). \({ }^{64}\)

\footnotetext{
\({ }^{62}\) The loss of \(\mathbf{i}\) before \(\mathbf{y}\) does not happen everywhere in the language. In fact, when the prefix cö- (3IO) precedes the \(\mathbf{i}\) of a possessor prefix, the \(\mathbf{i}\) does not delete. The 3:3 prefix \(\mathbf{i}\) - never deletes before the Distal Realis prefix yo-. The \(\mathbf{i}\) of the possessor prefixes deletes before a nominalizer \(\mathbf{y}\) (such as \(\mathbf{y}\) atj \(<\left\{\mathbf{i} \mathbf{-} \mathbf{y}_{\text {Abl }}-\mathbf{0 t j}\right\} 3\) P-PON-arise, his/her arising; see §14.4.1), but it does not delete before a zero-allomorph nominalizer that is followed by a root-initial \(\mathbf{y}\) (such as iyaa \(<\{\mathbf{i}-\varnothing\)-yaa \(\} 3\) P-PON-own, his/her owning it.
\({ }^{63}\) The sole exception of a possessed noun with an initial vowel of a specific vowel quality is the root \(\sqrt{ }\) eec daughter (of male) mentioned at the end of \(\$ 13.6\). The prefix vowels delete before this vowel.
\({ }^{64}\) In some of my own earlier work (e.g., Marlett 1981b), the length on the vowel in these nouns was ignored, unfortunately. It was thought to be a phonetic lengthening if it was really there at all. The contrast between long and short vowels in these words is not very evident at first. In terms of distribution, the majority of words with an open first syllable have a short vowel and most words with a closed first syllable have a long vowel. I now
}

A conservative approach for obligatorily possessed nouns does not give a specific vowel in the root-initial position of these nouns since there is never any information from the root that makes a difference in the declension of the nouns; only the vowels of the prefixes are important in the stressed syllable of these examples. Therefore it is proposed that the roots have an underlying form such as \(\sqrt{ } \mathrm{V}\) soj body and \(\sqrt{ } \mathrm{VV}\) sa tonsil. The addition of the prefix hi- (1P), for example, supplies the vowel features to associate to the root-initial vowel position(s): hisoj my body, and hiisa my tonsil.

\subsection*{13.6.3 i-Lowering}

The root for mother's father must be \(\sqrt{ }\) Vaz. The prefix vowel occupies the root-initial position, and if it is \(\mathbf{i}\) it lowers to e. Subsequently the a apparently lengthens because of the diphthong effect (§28.3.4): heaaz (1P-mother's.father) my mother's father.

The lowering of \(\mathbf{i}\) to \(\mathbf{e}\) is also observed in the conjugation of a few unusual verbs (see the end of \(\S 17.3 .3 .1\) ). The phonetic sequence ia is apparently not possible in the language. Some morpheme-internal examples of ea, such as Voneaax wash hands and seaato goat (from Spanish 'chivato'), arose from - or perhaps even synchronically actually are - /ia/.

\subsection*{13.6.4 Low vowel harmony}

Underlying \{hape-Vaz\} (Abs-mother's.father) is surface hapeez, showing that some rule raising \(\mathbf{a}\) to \(\mathbf{e}\) is necessary. In a similar vein, underlying \{hape-Vmaz\} (Abs-father's.mother) is surface hapemez; underlying \{hape-Vpxaz\} (Abs-female's.older.sister's.child) is surface hapepxez; and underlying \{hape-VVcaz\} (ABs-female's.younger.brother) is surface hapeequez.

Two exceptions to the raising of a to \(\mathbf{e}\) (both with a coronal consonant as part of the intervening cluster) are hapetcaz woman's younger sister, from underlying \{hape-Vtcaz\} and hapezcaz man's younger brother from underlying \{hape-Vzcaz\}.

Harmony of the vowels a and \(\mathbf{e}\) is attested in the verb paradigms in slightly different ways. See §27.2.3 (where it is shown that a...e becomes e...e) and \(\S 27.7\) (where it is shown that some irregular verbs do something similar).

The sequence é[Consonant]a (with stress on the vowel e) is possible morpheme-internally, but it is not common: heejac a bush (Ebenopsis confinis), xneeejam (a part of the plant name xneeejam is hayaa Viscainoa geniculata, heeesam seahorse. The sequence e[Consonant]á is not found morpheme internally.
believe that the length on these vowels is not imaginary and not due to a phonetic rule, and this is confirmed by the reaction of skilled writers and readers.

\subsection*{13.6.5 Other rules}

Underlying \{hape-Vitz\} becomes hapeetz, showing that another kind of rule lowering \(\mathbf{i}\) to \(\mathbf{e}\) is needed. The sequence ei is attested in Seri only in the recent compound hateeictim rag, from hataai \({ }^{\circ}\) iictim (cloth 3P-PON-be.cut).

\section*{14. Deverbal nouns}

The only productive morphology for deriving nouns from another class of words is that which derives nouns from verbs. Such derivation is extremely important in the language.

The deverbal nouns have traits of both nouns and verbs. The subcategorization frames that characterize the verbs also characterize the corresponding deverbal nouns. In addition, the deverbal nouns inflect for direct object, indirect object, negation, and passive in the same way as verbs. Examples of these facts are given in numerous places in this grammar where deverbal nouns are presented. In addition, an adverb such as miizj well or anxö Intns (see §5.1) may occur before the deverbal noun just as before a verb, as in the following examples with a headless (or fused-head) relative clause.
```

(1) Miizj cqueecöl quih haa piij, ...
well SN-Tr-listen the.Fl there Ir.Dp-sit
'El que escuche estando allí, ...'
The one who listens well being there, ... (Rv22:17) RMH_08-21-07_103a
Anxö cooit quih ${ }^{\circ}$ iihjoj sooxyat ${ }^{\circ}$ aha.
Intns SN-dance the.Fl s/he.will.get.tired Aux-Dcl
'El/la que baila mucho se cansará.'
The one who dances a lot will get tired. RMH_08-21-07_103b

```

As shown below, deverbal nouns differ from finite verbs in that subject inflection is either absent (in the subject-oriented deverbal nouns) or is expressed morphologically through the possessor set (in the object and proposition/oblique-oriented deverbal nouns). \({ }^{1}\) They inflect for normal direct object and indirect object morphology. \({ }^{2}\)

The deverbal nouns distinguish between realis and irrealis by their morphology. The realis forms are the most complicated morphologically; they are presented in §§14.1-4. The irrealis forms are simple but usually co-occur with an auxiliary of some sort, as is explained in §14.5.

Other ways in which the deverbal nouns tend to look like nouns is a result of the context in which they are used. When used in simple headless relative clauses, they may be presented with only a determiner and thus look like any simple noun followed by a determiner. This is certainly the etymology of a number of nouns - some quite transparently and others less so. Five

\footnotetext{
\({ }^{1}\) The irrealis object-oriented form is exceptional in this regard. See \(\S 14.5\).
\({ }^{2}\) The object-oriented form does not inflect for object agreement for the same reason that the subject-oriented form does not inflect for subject agreement.
}
examples are given here; numerous others could be provided. \({ }^{3}\)
(3)
a. \(\quad\left[\begin{array}{ll}\varnothing & \text { cocazni }] \text { com } \\ & \text { SN-UO-bite the.Hz }\end{array}\right.\)
'el/la que muerde'
the one that bites
a. [ \(\varnothing\) coopol ] quij
SN-black the.Cм
'el/la que es/era negro/a'
b. cocazni com
'la víbora de cascabel'
the rattlesnake
the one that is/was black
(6)
a. [ Ø caail ] com
SN-wide the. Hz
'el/la que es ancho/a'
the one that is wide
a. [ Ø cöcoqueetx ] quij
3IO-SN-UO-? the.CM
'el/la que regresa a él/ella' the one returning to it
a. [Ø hataai \(] \quad\) quih
SN-Pv-wear.kilt the.FL
'lo que se llevó (como tonelete)'
what was worn as a kilt
b. hataai quih
the cloth
b. coopol quij
'la viuda negra'
the black widow spider
b. caail com
'la playa seca'
the dry lake bed
b. cöcoqueetx quij
girl celebrating the second puberty fiesta

This fact does not, however, indicate that the form cocazni in (3a) or the form coopol in (4a) is a noun. It is assumed here that generally the head (whether overt or not) determines the category of the phrase. The deverbal form modifies the head (regardless of how it is glossed) and for that reason the deverbal noun in (3a) might be reasonably glossed 'biter' in this particular context. But it is the context that is most important.

The classification of deverbal nouns make reference to the grammatical relation that the deverbal noun has to the predicate - the verbal base - on which it is formed. Three basic types of deverbal nouns exist, all of which are completely productive in their formation and semantics. (This productivity does not bar them from taking on lexicalized meanings in addition to the compositional semantics, as the examples in (3) and (4) illustrate.)

A subject-oriented deverbal noun refers to (or modifies) the person or thing that is the grammatical subject of the verbal base. A few simple examples are:

\footnotetext{
\({ }^{3}\) In the 2005 dictionary, these are generally listed separately from the verb.
}

From the intransitive root \(\sqrt{ }\) oos sing
\begin{tabular}{llll} 
a. coos & SN-sing & who sings/sang \\
b. imoos & SN-N-sing & who is not singing
\end{tabular}
moos
SN-N-sing
c. soos ca Ir.Id-sing Aux.SN
d. smoos ca

Ir.Id-N-sing Aux.SN
who sings/sang
who will sing
who will not sing

From the transitive root \(\sqrt{ }\) azix saw
a. quizix SN-TR-Saw
b. imazix SN-TR-N-saw
c. hapazix SN-Pv-saw
d. impazix SN-N-Pv-saw
e. siizix ca Ir.Id-saw Aux.SN
f. smazix ca Ir.Id-N-saw Aux.SN
g. spazix ca Ir.Id-Pv-saw Aux.SN
h. sompazix ca Ir.Id-N-Pv-saw Aux.SN
who is not singing / did not sing
who saws / sawed (it)
who does/did not saw (it)
which is being or has been sawn
which is/was not sawn
who will saw (it)
who will not saw (it)
which will be sawn
which will not be sawn
(10) From the derived intransitive stem \(\sqrt{\text { oozix }}\) saw ( \(<\left\{-\mathbf{o}_{\mathrm{Abl}}-\mathbf{a z i x}\right\}\)-UO-saw)
a. coozix SN-UO-saw who is sawing
b. imoozix SN-N-UO-saw who is not sawing
c. soozix ca Ir.Id-UO-saw Aux.SN who will saw
d. smoozix ca Ir.Id-N-UO-saw Aux.SN who will not saw

An object-oriented deverbal noun refers to (or modifies) the person or thing that is the grammatical direct object of the (necessarily transitive) verbal base.

From the transitive root \(\sqrt{\text { azix }}\) saw, cut with sawing motion
\begin{tabular}{llll} 
a. hoozix & 1P-ON-saw & what I sawed \\
b. moozix & 2P-ON-saw & what you sawed \\
c. oozix & 3P-ON-saw & what s/he sawed \\
d. himazix & 1P-ON-N-saw & what I didn't saw \\
e. ihsiizix ha & 1SGS.Tr-Ir.ID-saw & what I will saw \\
f. ihscmazix ha & 1SGS.Tr-Ir.ID-saw & what I will not saw
\end{tabular}

A proposition/oblique deverbal noun has more varied usage. It may refer to the action or state described by the verb. It may also refer to (or modify) a person or thing related to the verbal base in some way other than as subject or direct object.

From the transitive root \(\sqrt{\text { azix }}\) saw
a. hiizix
my act of sawing it, what I sawed it with, etc.
1P-PON-saw
b. miizix
your act of sawing it, what you sawed it with, etc.
2P-PON-saw
c. iizix

3P-PON-saw
his/her act of sawing it, what s/he sawed it with, etc.
\begin{tabular}{lcll}
\hline & Table 14.1: Realis deverbal noun structure \\
Type of Deverbal noun & & Nominalizer & \\
Subject-oriented & - & \(\mathbf{c -} / \mathbf{q u -}\) - ha-, i- & \\
Object-oriented & Possessor & \(\mathbf{0}-, \mathbf{h}-\mathbf{y}\)-, null & Verbal base \\
Action/Oblique-oriented & Possessor & \(\mathbf{h -}\) - \(\mathbf{y}-\), null & (can be negative, passive, etc.)
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{d.} & himazix & my act of not sawing it, etc. \({ }^{4}\) \\
\hline & 1P-PON-N-saw & \\
\hline \multirow[t]{2}{*}{e.} & impazix & its not being sawn, etc. \\
\hline & 3P-PON-N-PV-saw & \\
\hline f. & hisiizix ha 1P-Ir.Id-saw Aux & my future act of sawing it, what I will saw it with, etc. \\
\hline g. & hiscmazix ha 1P-Ir.ID-N-saw Aux & my future act of not sawing, what I will not saw it with, etc. \\
\hline h. & ispazix ha 3P-Ir.Id-Pv-saw Aux & its future act of being sawn, with what it will be sawn, etc. \\
\hline 1. & \begin{tabular}{l}
iscompazix ha \\
3P-Ir.Id-N-Pv-saw Aux
\end{tabular} & its future act of not being sawn, with which it will not be sawn, etc. \\
\hline
\end{tabular}
(13) From the derived intransitive stem \(\sqrt{ }\) oozix saw ( \(<\left\{-\mathbf{o}_{\mathrm{Abl}}-\mathbf{a z i x}\right\}\)-UO-saw)
a. my act of sawing, what I saw with, etc.
b. himoozix my act of not sawing, what I don't saw with, etc.

1P-PON-N-UO-saw
c. hisoozix my future act of sawing. what I will saw with, etc.

1P-Ir.ID-UO-saw
d. hiscmoozix my future act of not sawing. what I won't saw with,

1P-Ir.Id-N-UO-saw etc.

The formation of realis deverbal nouns is illustrated simply by the slightly oversimplified chart in Table 14.1.

In the following sections a very brief overview is given of how each type of deverbal noun is used, with cross-references to the appropriate sections where the facts are discussed in detail. Details of the morphology are given in this chapter.

\footnotetext{
\({ }^{4}\) The negative object-oriented and proposition/oblique-oriented realis forms are always identical in form.
}

\subsection*{14.1 Details about realis subject-oriented deverbal nouns}

The subject-oriented deverbal noun is so common that the singular perfective non-negative active realis form is used as the citation form for verbs in the 2005 dictionary. If one asks "How does one say 'sing' (or Spanish 'cantar') in Seri?', the form invariably given in reply is the (singular perfective non-negative active realis) subject-oriented deverbal noun coos. In this grammar this form of the verbs has been informally glossed using a participle or adjective because such glosses fit the two primary contexts in which this form is used.

This form is used in relative clauses when the clause modifies a noun that is the subject of the verbal base (see \(\S 8.4 .1\) and also \(\S 8.4 .6\) for uses in headless constructions).
(14) cmaam coostim quih
woman SN -sing-ImpF the.FL
'la mujer que canta, la mujer que cantó, la cantante' RMH_08-21-07_103c
the singing woman, the woman who sings, the woman who sang, the woman singer
(15) ctam imacösxai quih
man SN -N-tall/long the.FL
'el hombre que no es alto, el hombre que no era alto'
the man who is not tall, the man who was not tall RMH_08-21-07_104a
This form is also used in main clauses with a modal (see §10.4).
(16) Cmaam quij coos iha.
woman the.Cm SN-sing DcL
'La mujer está/estaba cantando.'
The woman is/was singing. RMH_08-21-07_104b
(17) Hiip cop cacösxaj iha. 1P-tail the.VT SN-tall/long DcL 'Mi cola es larga.' My tail is long. (Lagartijas 25)

This form inflects for direct and indirect objects in the same way as finite verbs (§17.1.2.33):
(18) a. cmaam ipca \({ }^{\circ}\) quiho quih
woman rain SN-Tr-see the.Fl
'la mujer que ve la lluvia'
the woman who sees/saw the rain (see ES2007, cmaam ipca) RMH_08-21-07_104d
b. cmaam himquiho quih
woman \(1 \mathrm{SGDO} \mathrm{SN}-\mathrm{Tr}\)-see the.Fl
'la mujer que me ve'
the woman who sees/saw me RMH_08-21-07_104e
c. cmaam ma quiho quih
woman \(2 \mathrm{SGDO} \mathrm{SN}^{2}-\mathrm{Tr}\)-see the.FL
'la mujer que te ve'
the woman who sees/saw you (sg.) RMH_08-21-07_104f
(19)
a. haxz he cocaai \({ }^{5}\) quih
\(\operatorname{dog} 1 \mathrm{IO} \mathrm{SN}-\) ? the.FL
'el perro que me/nos sigue/seguía'
the dog that follows/followed me/us RMH_08-21-07_1049
b. haxz me cocaai quih
dog 2IO SN-? the.FL
'el perro que te/os sigue/seguía'
the dog that follows/followed you (sg. or pl.) RMH_08-21-07_104h
c. haxz cöcocaai quih
dog 3IO-SN-? the.FL
'el perro que le/les sigue/seguía'
the dog that follows/followed him/her/it/them Rмн_08-21-07_104i

\subsection*{14.1.1 The morphology of the form}

The subject-oriented realis deverbal noun has the following structure:
(20) I.O. \& D.O. Inflection - Directional - Nominalizer - (Transitive) - Stem

The word "stem" in this particular formula refers to the root and any infixes, suffixes or other modifications indicating number of the subject and aspect (perfective or imperfective) (see \(\S 17.1 .3\) ). It also includes morphology that precedes the root, including negation (§17.1.4), passive marking (§17.1.5), unspecified object (§19.1.1), unspecified subject (§17.1.5), causative morphology (§19.10), and denominalization morphology (§19.3.3).

The simplest deverbal nouns would be those that are basic intransitives since they would have just the nominalizer and the stem. Some simple examples are given in (21). The prefix in these cases is always \(\mathbf{c}\) - (or its orthographic variant before front vowels, qu-). The data in the second column show underlying forms except for anything that relates to suffixes. In (21) the underlying forms are identical to the surface forms except for the epenthesis of the word-initial \(\mathbf{i}\) in (21j).
\begin{tabular}{|c|c|c|c|}
\hline a. cooxp & \[
\begin{align*}
& \text { SN-stem }  \tag{21}\\
& \{\mathbf{c - o o x p}\}
\end{align*}
\] & 'blanco' & white \\
\hline b. cooxapoj & \{c-ooxapoj\} & 'blancos' & white (pl.) \\
\hline c. cacösxaj & \{c-acösxaj\} & 'alto/largo' & tall/long \\
\hline d. cacöla & \{c-acöla\} & 'altos/largos' & tall/long (pl.) \\
\hline e. cpanzx & \{c-panzx\} & 'que corre' & running \\
\hline f. cpancoje & \{c-pancojc\} & 'que corren' & running (pl.) \\
\hline
\end{tabular}

\footnotetext{
\({ }^{5}\) The root itself does not have a simple gloss, but when it is used in this configuration, the sense of follow is conveyed.
}
\begin{tabular}{lllll} 
g. & ctapjö & \(\{\mathbf{c - t a p j 0}\}\) & 'desintegrado' & disintegrated \\
h. & quis & \(\{\mathbf{q u - i s}\}\) & 'crudo(s)' & raw (sg. or pl.) \\
i. & moca & \(\{\text { mo-c-a }\}^{6}\) & 'que viene' & coming \\
j. & intica & \(\{\mathbf{n t - c - a}\}^{7}\) & 'que se aleja' & going
\end{tabular}

If the verb is transitive, the "Transitive" prefix i- appears when possible phonologically between the nominalizer and the stem. This prefix is obviously akin to, and perhaps the same etymologically as, the \(3: 3\) prefix, which appears before mood prefixes when subject and direct object are both third person (see §17.1.2.1). In the deverbal noun, however, the presence of Transitive \(\mathbf{i}\) is not affected by variation in person; it only relates to transitivity. Note that \(\mathbf{i}\) appears in the form quiho in all of the examples in (18) although the person of the object changes. The prefix appears overtly only in two situations: (a) when the root begins with a stressed short low vowel - a or \(\mathbf{e}\) - (and this vowel is elided); see (22a-d); and (b) when the root begins with a stressed short \(\mathbf{i}\), with the result that in this form a long \(\mathbf{i}\) appears; see \((22 \mathrm{e}-\mathrm{j}) .{ }^{8}\) In all other cases the Transitive prefix \(\mathbf{i}\) - is elided. It is assumed here that it actually does not occur with derived stems before which it would delete anyway. The examples in (22) are all transitive stems and are used only in appropriately transitive contexts. The glosses include 'it' in parentheses to emphasize the transitivity, although the object could be any third person in most cases (depending on the meaning of the verb and in some cases the form of the stem) and this form can also be inflected with any person of direct object and not change at all except for the indirect and direct object inflection in front of the form, as shown above.


\footnotetext{
\({ }^{6}\) This is an irregular verb (see §27.7) and also has the prefix mo- TWD (§17.1.6).
\({ }^{7}\) This is an irregular verb based on the same root as the verb above it; it has the prefix nt- AW (§17.1.6). The first \(\mathbf{i}\) is epenthetic for reasons of syllabification (see \(\S 27.1 .1\) ); the second \(\mathbf{i}\) is epenthetic because of properties of this verb. See §27.7.
\({ }^{8}\) The prefix before a long \(\mathbf{i}\) does not produce a triple-long vowel, however, although syllables with such vowels exist.
}
\begin{tabular}{|c|c|c|c|}
\hline k. & cataaxa & \{qu-i-ataaxa & wetting (it) (limberbush) \\
\hline 1. & cataaxajam & \{qu-i-ataaxajam\} & wetting (it) (pl.) \\
\hline m . & caapo & \{qu-i-aapo \} & harvesting (it) \\
\hline n . & catoopjoj & \{qu-i-atoopjoj\} & harvesting (it) (pl.) \\
\hline o. & coocta & \{qu-i-oocta\} & watching (it) \\
\hline p. & cooctam & \{qu-i-ooctam \(\}\) & watching (it) (pl.) \\
\hline q. & cpii & \{qu-i-pii\} & tasting (it) \\
\hline r. & cpcooyo & \{qu-i-pcooyo\} & tasting (it) (pl.) \\
\hline s. & ctis & \{qu-i-tis\} & pointing at (it) \\
\hline t. & ctis & \{qu-i-tisxam \(\}\) & pointing at (it) (pl.) \\
\hline
\end{tabular}

The subject-oriented (non-negative) deverbal forms of a few verbs are irregular in the allomorph of the prefix used. (These cases are discussed more below.)
\begin{tabular}{llll} 
a. co-h-a & 3IO-SN-be \(_{\text {Irreg }}\) & who/that experiences \((\) see §27.7) \\
b. haa & SN.be \(_{\text {Irreg }}\) & (used in certain idioms) \(^{9}\) (see §27.7) \\
c. haa & SN.EQ & who/that is (see §10.3) \\
d. ha-pacta & SN-be.in.appearance \(^{\text {that/that is }}\) \\
e. aaha & SN-be \(_{\text {Irreg }}\) & that happens
\end{tabular}

The deverbal noun may be based on a passive verb stem. In the case that the passive verb is not negative (see below for discussion of negative verbs) the nominalizer in the subject-oriented deverbal noun is ha-. As there are two major allomorphs of the passive prefix (see \(\S 17.1 .5\) for discussion of passive morphology) and one of these is ah-, some phonological interaction results, which is not discussed here (see §17.1.5) except to mention that the underlying sequence \{ha-ah-...\} appears on the surface as simply ha-....
\begin{tabular}{|c|c|c|c|}
\hline a. & hapazix & \[
\begin{align*}
& \text { SN-PV-stem }  \tag{24}\\
& \left\{\mathbf{h a - p _ { A b l }} \mathbf{- a z i x}\right\}
\end{align*}
\] & \begin{tabular}{l}
what is/was ... \\
sawn
\end{tabular} \\
\hline b. & hapám & \{ha-p Abl \(^{\text {-am }}\) \} & swallowed \\
\hline c. & hataaxa & \{ha-ah-ataaxa\} & wetted (limberbush) \\
\hline d. & hapapo & \{ha-p Abl \(^{\text {-aapo }}\) \} & harvested \\
\hline e. & hapacta & \{ha-p Abl \(^{\text {-oocta }\}}\) & looked at \\
\hline f. & hapii & \{ha-ah-pii\} & tasted \\
\hline g. & hatís & \{ha-ah-tis\} & pointed at \\
\hline h. & hacaa & \{ha-ah-caa\} & looked for \\
\hline
\end{tabular}

The deverbal noun may also be based on a negative verb stem. In the case that it is negative, the prefix is \(\mathbf{i}\) - instead of \(\mathbf{c -} / \mathbf{q u}\) - or ha-; the feature [negative] on the verb thus takes precedence over other factors in the choice of allomorphy.

\footnotetext{
\({ }^{9}\) This is the same root as that in (23a).
}

The examples in (25) show different intransitive stems that are inflected for negation.
\begin{tabular}{|c|c|c|}
\hline a. imooxp & \begin{tabular}{l}
SN-N-Stem \\
\{i-m-ooxp\}
\end{tabular} & who/what is/was ... not white \\
\hline b. imacösxaj & \{i-m-acösxaj\} & not tall/long \\
\hline c. imafp & \{i-m-afp\} & not arriving \\
\hline d. impanzx & \{i-m-panzx \(\}\) & not running \\
\hline e. intapjö & \{i-m-tapjö\} & not disintegrated \\
\hline f. imís & \{i-m-is\} & not raw \\
\hline g. mima & \{mo-i-m-a \} & not coming (Twd-SN-N-move) \\
\hline h. cöima & \{co-i-m-a & not happening (3IO-SN-N-move) \\
\hline
\end{tabular}

The passive verb has a negative deverbal form that is entirely regular, illustrated in (26).
\begin{tabular}{llll} 
& & SN-N-Pv-Stem & what is/was ... \\
a. & impazix & \(\left\{\mathbf{i}-\mathbf{m}-\mathbf{p}_{\text {Abl }}-\mathbf{a z i x}\right\}\) & not sawn \\
b. & impám & \(\left\{\mathbf{i}-\mathbf{m}-\mathbf{p}_{\text {Abl }}-\mathbf{a m}\right\}\) & not swallowed \\
c. & imahtaaxa \({ }^{10}\) & \(\{\mathbf{i}-\mathbf{m}-\mathbf{a h}-\mathbf{a t a a x a}\}\) & not wetted \\
d. & impapo & \(\left\{\mathbf{i}-\mathbf{m}-\mathbf{p}_{\text {Abl }}-\mathbf{a a p o}\right\}\) & not harvested \\
e. & impacta & \(\left\{\mathbf{i}-\mathbf{m}-\mathbf{p}_{\text {Abl }}-\mathbf{o o c t a}\right\}\) & not looked at \\
f. & impii & \(\{\mathbf{i}-\mathbf{m}-\mathbf{a h}-\mathbf{p i i}\}\) & not tasted \\
g. & imahtis & \(\{\mathbf{i}-\mathbf{m}-\mathbf{a h - t i s}\}\) & not pointed at
\end{tabular}

The negative deverbal form of a transitive stem is also not complicated unless one assumes (as is assumed here) that these forms, like their non-negative counterparts, are inflected with the Transitive prefix \(\mathbf{i}\) - that indicates transitivity mentioned above. If that is the case, it is also true that the "expected" sequence \(\mathbf{i}+\mathbf{i}\) always shows up as the single vowel \(\mathbf{i} .{ }^{11}\)
\begin{tabular}{|c|c|c|}
\hline a. imazix & \begin{tabular}{l}
SN-TR-N-Stem \\
\{i-i-m-azix \(\}\)
\end{tabular} & \begin{tabular}{l}
who is/was ... \\
not sawing (it)
\end{tabular} \\
\hline b. imám & \{i-i-m-am \(\}\) & not swallowing (it) \\
\hline c. imataaxa & \{i-i-m-ataaxa \(\}\) & not wetting (it) \\
\hline d. imaapo & \{i-i-m-aapo \(\}\) & not harvesting (it) \\
\hline e. imoocta & \{i-i-m-oocta\} & not watching (it) \\
\hline f. impii & \{i-i-m-pii\} & not tasting (it) \\
\hline g. intís & \{i-i-m-tis\} & not pointing at (it) \\
\hline h. imcaa & \{i-i-m-caa\} & not looking for (it) \\
\hline
\end{tabular}

\footnotetext{
\({ }^{10}\) The loss of the root-initial a is typical of the passive forms of such verbs; see \(\S 17.1 .5\).
\({ }^{11}\) The idiosyncratic rule deleting the transitive marker prefix \(\mathbf{i}\)-before consonants would account for the loss of one vowel. It is also true that the standard rule of elision (§27.2.1) would delete the other \(\mathbf{i}\) before this morpheme. Therefore if one assumes that the transitive marker \(\mathbf{i}\) - is present underlyingly, there is no problem in accounting for its absence on the surface.
}

These facts about the allomorphy of the nominalizer are not affected by other differences in the stem. Some examples of subject-oriented deverbal nouns formed on causative stems are given here:
\begin{tabular}{|c|c|c|c|}
\hline a. & cacaatax & \[
\begin{align*}
& \{\text { c-i-acaatax }\}^{12}  \tag{28}\\
& \text { SN-i-drive }
\end{align*}
\] & 'manejándolo' driving (it) \\
\hline b. & imacaatax & \begin{tabular}{l}
\{i-i-m-acaatax\} \\
SN-TR-N-drive
\end{tabular} & 'no manejándolo' not driving (it) \\
\hline c. & hacaatax & \{ha-ah-acaatax\} SN-Pv-drive & \begin{tabular}{l}
'manejado' \\
driven
\end{tabular} \\
\hline d. & imahcaatax & \[
\begin{aligned}
& \{\text { i-m-ah-acaatax }\} \\
& \text { SN-N-Pv-drive }
\end{aligned}
\] & 'no manejado' not driven \\
\hline e. & coop & \[
\begin{aligned}
& \left\{\mathbf{c - o}_{\mathrm{Abl}}-\mathbf{a p}\right\} \\
& \text { SN-UO-sew.basket }
\end{aligned}
\] & 'cosiendo (canasta)' sewing (basket) \\
\hline f. & imoop & \[
\begin{aligned}
& \left\{\mathbf{i}-\mathbf{m}-\mathbf{o}_{\mathrm{Abl}}-\mathbf{a p}\right\} \\
& \text { SN-N-UO-sew.basket }
\end{aligned}
\] & 'no cosiendo (canasta) not sewing (basket) \\
\hline g. & hahitaj & \begin{tabular}{l}
\{ha-ah-ahitaj\} \\
SN-Pv-cause.ignite
\end{tabular} & \begin{tabular}{l}
'encendido' \\
ignited
\end{tabular} \\
\hline
\end{tabular}

Examples with inflection for direct or indirect object are given in (18)-(19) above.
In the case of the verb \(\sqrt{ }\) pacta be in appearance, the allomorph ha- occurs instead of the expected \(\mathbf{c}\)-: hapacta. This allomorphy reflects the etymology of this form, which is a reanalysis of the passive deverbal noun of the root \(V\) oocta look at. \({ }^{13}\) The form hapacta is ambiguous between \(\{\boldsymbol{h a - p a c t a}\}\) (SN-be.in.appearance) and \(\left\{\boldsymbol{h a - p _ { \text { Abl } } - \mathbf { o o c t a } \}}\right.\) (SN-Pv-look.at\}.

The verb for happen is an irregular verb that is apparently a verb meaning be inflected for third person indirect object; it also has irregular allomorphy for the subject nominalizer: coha \(\{\mathbf{c o - h} \mathbf{- a}\}\left(3 \mathrm{IO}-\mathrm{SN}-\mathrm{be}_{\text {Irreg }}\right.\) ).

The regular subject nominalizer allomorphy is summarized as follows, where the order of presentation is crucial since each "clause" takes precedence over the subsequent one(s).

\footnotetext{
\({ }^{12}\) The causative forms are often used intransitively, but the deverbal nouns of subject-oriented transitive causative verbs are indistinguishable from those of intransitive ones.
\({ }^{13}\) See Marlett (2002) for more discussion.
}
(29) Subject Nominalizer:
\begin{tabular}{lll} 
i & when negative, & \\
ha & when passive, & (by implication, "and not negative") \\
\(\mathbf{c}(\mathbf{q u})\) & (elsewhere) & (by implication, "not negative and not passive")
\end{tabular}

\subsection*{14.2 The inflected subject-oriented deverbal nouns}

In some special complement clauses, and only in those contexts, the subject-oriented deverbal nouns occur with subject person inflection. Any prefix of the subject inflection set (including 3:3 i-) occurs before the subject nominalizer. \({ }^{14}\)
\begin{tabular}{|c|c|c|c|}
\hline a. & iquihit & \{i-qu-i-ahit\} & 3:3-SN-Tr-eat \\
\hline b. & ihpcooca & \{hp-c-ooca \} & 1SGS.In-SN-rest \\
\hline c. & imcofeaa & \{m-c-ofeaa\} & 2SGS-SN-have.good.eyesight \\
\hline d. & macoii & \{ma-c-oii\} & 2PLS-SN-be.Fl.Pl \\
\hline e. & icmís & \{i-c-i-mis \(\}\) & 3:3-SN-Tr-resemble \\
\hline f. & iquiht & \{i-qu-i-aht \(\}\) & 3:3-SN-Tr-see-Pl \\
\hline g & cohcacooix & \{co-h-c-acooix \(\}\) & 3IO-1SGS.Tr-SN-remove \\
\hline
\end{tabular}

See \(\S 12.2 .1\) (complements of hax \(\sqrt{ }\) oocta think (opine) and hax \(\sqrt{ } \operatorname{Cimoz}\) think (opine), hax \(\sqrt{ }\) ahii seem, and hax \(\sqrt{ }\) Vsoj \(\sqrt{ }\) Cii think).

\subsection*{14.3 Details about realis object-oriented deverbal nouns}

The object-oriented deverbal noun is used in relative clauses when the clause modifies a noun that is the direct object of the verbal base. (See §8.4.1 and also §8.4.6 for uses in headless constructions.) The form always indicates the person of the subject person by means of a possessor prefix. (The glosses do not always reflect the fact that the form is ambiguous between present and past tense; as a realis form it does not indicate future, however.)
a. \({ }^{\circ}\) Azlc canl \({ }^{\circ}\) hozáxö hizcoi ...
stars 1P-ON-discuss Px-PL
'Estas estrellas de que hablo ...'
These stars that I am talking about ... (ES2007, Hapj_14) RMH_08-21-07_105a
b. haaco mooxi cap
Abs.house 2P-ON-finish the.VT
'la casa que hiciste'
the house that you built RMH_08-21-07_105b

\footnotetext{
\({ }^{14}\) When the verb is intransitive and the subject is third person, there is no overt subject inflection, exactly as expected by this analysis. The homophony of \(3: 3\) and 3 P (both \(\mathbf{i}\) ) makes this fact important to note.
}
```

c. ctam canoaa quih hiive quij
man boat the.Fl 1P-ON-give.gift the.CM
'el hombre a quien le di la panga'
the man whom I gave the boat RMH_08-21-07_105c

```

This form is also used in (what might be thought of as) main clauses with a modal (§20.5). These are sometimes most felicitously translated as passive clauses in English and Spanish because this use gives thematic prominence to the parient-object; they are not passive clauses in Seri.

\section*{a. Azoj Cmiique hapáh cop cöootni \({ }^{\circ}\) ha.}

SN-Pv-say the.Vt 3IO-3P-ON-injure DCL
'[El venado bura] fue herido por el Azoj Cmiique.'
[The mule deer] was injured by Azoj Cmiique. (ES2007, Hapj_XX) RMH_08-21-07_105d
b. Xoop cap comcaac coi oiisax quihiih cah \(^{\circ}\) elephant.tree the.Vт person/Seri.Pl the.Pl great.degree
cöiyanzaaiti iha.
3IO-3P-ON-respect DCL
'Los seris tratan al torote colorado con mucho respeto.' RмH_08-21-07_105e
The Seri people are very respectful of the elephant tree. (ES2007, xoop)
c. Haptco mocoht iha, me.
already 2P-ON-see-Pl DCl 2Pro
'Ya lo han visto.'
You have already seen him. (Jn 14:7) RMH_07-11-07_51a RMH_08-21-07_105f
(33) Ipanzx hoomzo ha.

3P-PON-run 1P-ON-want DCL
'Quiero que corra.'
I want him/her/it to run. RMH_10-15-07_60
..., heme \({ }^{\circ}\) itámlajc \(x\), oiitoj iha. camp 3:3-RL-bring-Pl UT 3P-ON-eat.PL DcL
'..., los llevaron al campamento, los comieron.'
... they took them to camp, they ate them. (Gigante_Comelon_200-201)

\subsection*{14.3.1 The morphology of the form}

There are several regular suppletive allomorphs of the realis object nominalizer. Examples below are all cited in the third person form; the person of the possessor never affects the form of the nominalizer.

The object-oriented realis deverbal noun has the following structure:

\section*{I.O. Inflection - Possessor — Nominalizer - Stem}

The nominalizer is null in all negative clauses. These third person forms turn out to be homophonous with the negative subject-oriented deverbal forms (§14.1). But unlike the subjectoriented forms, these belong to a set that is variable by person. For example: mimazix ( \(2 \mathrm{P}-\mathrm{ON}-\mathrm{N}-\) saw) what you didn't saw, himazix what I didn't saw (1P-ON-N-saw).

3P-ON-N-Stem \({ }^{15}\)
a. imazix \(\{\mathbf{i}-\varnothing\)-m-azix \(\} \quad\) 'lo que no cortó what s/he didn't saw
'lo que no quiso' what s/he didn't want
'lo que no miró' what s/he didn't look at 'lo que no compró' what s/he didn't buy
e. imaa
\(\{\mathbf{i}-\varnothing \mathbf{- m} \mathbf{- a C a}\}\)
'lo que no supo' what s/he didn't know

The nominalizer is \(\mathbf{h}\) - when it precedes the unstressed \(\mathbf{i}\) that is the denominalizing prefix HAVE (§19.3.3), such as is often found with the denominal verbs meaning have \(X\) (see §13.4) and kinship verbs (§19.3.4). \({ }^{16}\) (All cases of stressed \(\mathbf{i}\), including the denominalizing prefix, and the verbs that have an unstressed \(\mathbf{i}\) in root-initial position take the next allomorph.)
\begin{tabular}{lll} 
a. ihihaxöl & \begin{tabular}{l} 
3P-ON-HAVE-Root \\
\{i-h-i-haxöl\} \(\}\)
\end{tabular} & \begin{tabular}{l} 
'lo que usó como cuchara', \\
what s/he had for a spoon
\end{tabular} \\
b. ihicaamiz & \{i-h-i-caamiz\} & \begin{tabular}{l} 
'lo que usó como camisa'17 \\
what s/he had for a shirt
\end{tabular} \\
c. ihitaamt & \{i-h-i-taamt \} & \begin{tabular}{l} 
'lo que llevó como huaraches, 18 \\
what s/he wore as sandals
\end{tabular}
\end{tabular}

\footnotetext{
\({ }^{15}\) Here the word "stem" refers to everything else that follows the negative prefix in the verb word.
\({ }^{16}\) The examples with stressed prefix \(\mathbf{i}\) may be a complication. If ihipon his/her/its voice is derived from the verb \(\checkmark\) ipon have voice, which is in turn derived from the older root \(\sqrt{ }\) Vpon voice (which shows up as ipon in some contexts, then some stressed \(\mathbf{i}\) verbs do indeed take the allomorph \(\mathbf{h}\)-. The crucial example in the next set is the form derived from \(\sqrt{ }\) ita have as mother. This verb does not take \(\mathbf{h}\) - for the nominalizer.
\({ }^{17}\) One consultant did not like this form. He would simply use the form icaamiz (3P-shirt) instead, regardless of the circumstances..
\({ }^{18}\) One consultant did not like this form. He would simply use the form itaamt (3P-sandal) instead, regardless of the circumstances.
}

The nominalizer is null when it precedes other instances of \(\mathbf{i}:{ }^{19}\) all cases of stressed \(\mathbf{i}\) and also unstressed \(\mathbf{i}\) that are not prefixes (except for the verb \(V_{i t a l h a a}\) mentioned above). This allomorph therefore occurs before denominal verbs meaning have \(X\) (see §13.4) if the stem has an initial stressed vowel, as in \((38 \mathrm{~g})\).
\begin{tabular}{|c|c|c|c|}
\hline & & 3P-ON-Stem & \\
\hline a. & icseenpx & \{i-Ø-icseenpx\} & 'lo que llevó debajo de su brazo' what \(s\) he carried under her/his arm \\
\hline b. & ihiicx & \{i-Ø-ihiicx \(\}\) & 'el/la con que tuvo relaciones sexuales' whom she had intercourse with \({ }^{20}\) \\
\hline c. & ii & \{i- \(\varnothing\)-ii\} & 'lo que oyó' what s/he heard \\
\hline d. & iic & \{i-Ø-iic \(\}\) & 'lo que sembró' what s/he planted \\
\hline e. & iiha & \{i-Ø-iiha\} & 'lo que posee' what she owns \\
\hline f. & iip & \{i-Ø-iip \(\}\) & 'lo que llevó en su cabeza' what s/he carried on her/his head \\
\hline g. & iiquet & \{i-Ø-iiquet\} & 'el/la con que estaba encinta' whom she was pregnant with \\
\hline h. & iixim & \{i-Ø-iixim \(\}\) & 'lo que temio' what \(s\) he feared \\
\hline i. & ip & \{i-Ø-ip\} & 'lo que enderezó' what s/he straightened \\
\hline j. & ita \({ }^{21}\) & \{i-Ø-i-Vta \(\}\) & 'la que tiene como madre' whom \(s\) he has as mother \\
\hline k. & itai \({ }^{22}\) & \{i-Ø-itai\} & 'lo que aguantó' what s/he resisted \\
\hline 1. & italhaa & \{i-Ø-italhaa\} & 'el que compró' what \(s\) he bought \\
\hline m. & iitlim \({ }^{23}\) & \{i-Ø-itlim \(\}\) & 'lo que atizó' what s/he kindled \\
\hline
\end{tabular}

\footnotetext{
\({ }^{19}\) It is possible that one might propose one of the other allomorphs of this prefix, such as \(\boldsymbol{0}\)-, to underly the forms here as well. And it is possible that one might account for the deletion of this vowel by other general rules of the language.
\({ }^{20}\) This is a polite term.
\({ }^{21}\) One consultant did not like this form. He would simply use the form ata (3P-mother) instead, regardless of the circumstances.
\({ }^{22}\) This is used in the expression miizj \(\sqrt{ }\) itai, which refers to holding out against an opponent.
\({ }^{23}\) The long vowel here is unexplained.
}

The nominalizer is \(\mathbf{y}\)-before long low vowels and also before the prefixes (ah-, ac-, \(\mathbf{a}-\) ) that occur in augmented forms such as causatives. \({ }^{24}\) The vowel of the possessor prefix deletes before this approximant (see §13.2.3.2) except when it is inflected for an indirect object as in cöiyaafc what s/he pounded with it. XXX hihacohot what I showed XXX
(39)

3P-ON-Stem
a. yaazi
b. yaafc
c. yaao
d. yaactim
e. yacaalim
f. yahaapl
g. yataamatot
\{i-y-aazi\}
\{i-y-aafc \(\}\)
\{i-y-aao \(\}\)
\{i-y-aa-actim \(\}\)
\{i-y-ac-aalim \(\}\)
\{i-y-ah-aapl \(\}\)
i-y-aa-taamatot \(\}\)
'lo que llevó'
what s/he carried
'lo que golpeó'
what s/he pounded
'donde pasó'
where s/he passed
'lo que cortó'
what s/he cut (caused to be cut)
'con que jugó'
what s/he played with \({ }^{25}\)
'lo que enfrió' what s/he cooled (caused to be cold) 'el/la en que puso huaraches' the one on whom s/he put sandals

The nominalizer is oco- when it immediately precedes the verbs \(\sqrt{ }\) aCa know and \(\sqrt{ }\) aho see.
Possessor-ON-stem
\begin{tabular}{lll} 
a. ocoaa & \begin{tabular}{l} 
\{i-oco-aCa\}
\end{tabular} & \begin{tabular}{l} 
'lo que sabía/conocía' \\
what s/he knew
\end{tabular} \\
b. mocoaa & \{mi-oco-aCa \(\}\) & \begin{tabular}{l} 
'lo que sabías/conocías' \\
what you knew
\end{tabular} \\
c. ocoho & \(\{\) i-oco-aho \(\}\) & \begin{tabular}{l} 
'lo que vio' \\
what s/he saw
\end{tabular} \\
d. hocoho & \{hi-oco-aho \(\}\) & \begin{tabular}{l} 
'lo que vi' \\
what I saw
\end{tabular} \\
e. hocoht & \(\{\) hi-oco-aht \(\}\) & \begin{tabular}{l} 
'lo que vimos' \\
what we saw RMH_08-21-07_106
\end{tabular}
\end{tabular}

The nominalizer is \(\mathbf{0}^{-}\)abl otherwise. This allomorph in effect occurs before consonants

\footnotetext{
\({ }^{24}\) The augment prefix occurs as long whenever it is stressed, but short whenever it is not stressed. The disjunction in the generalization given here is avoided if one proposes that all allomorphs of the augment prefix are underlyingly long. XX HIHACOOHOT XX WHAT I SHOWED - DITRANSITIVE CAUSATIVE
This allomorph is not used before the phonetically long low vowels that are part of diphthongs. See the discussion of the dipthong effect on length in §28.3.4.
\({ }^{25}\) The verb Vacaalim means play with (something), and the toy or game is the direct object.
}
(except for negative forms, see above), before root-initial short low vowels, and before \(\mathbf{0}\)-initial roots (of which there may be only one). In the cases of its occurrence before short low vowels, the same processes of elision and coalescence apply as in the inflection of mood on verbs (see chapter 27). \({ }^{26}\) In the case of its occurrence before an \(\mathbf{0}\)-initial root, see the discussion of Ablaut in §14.4.2.
(41)

3P-ON-Stem
\begin{tabular}{|c|c|c|c|c|}
\hline a. & opii & \{i-0-abl -pii \(\}\) & 'lo que probó' & what s/he tasted \\
\hline b. & ocaa & \{i-0-abl-caa\} & 'lo que buscó' & what s/he looked for \\
\hline c. & oozix & \{i-0-Abl-azix \(\}\) & 'lo que cortó' & what s/he sawed \\
\hline d. & oom & \{i-0-abl-am & 'lo que tragó' & what s/he swallowed \\
\hline e. & oohit & \{i-0-Abl-ahit \({ }^{\text {a }}\) & 'lo que comió' & what s/he ate \\
\hline f. & oosi & \{i-0-abl-asi\} & 'lo que tomó' & what s/he drank \\
\hline g. & oomen & \{i-0-abl-emen \(\}\) & 'lo que tiró pa & acá y allá' \\
\hline & & & what sh & shook back and forth \\
\hline h. & oaacta & \{i-o-abl-oocta \(\}\) & 'lo que miró' & what s/he looked at \\
\hline
\end{tabular}

This allomorph occurs as expected before the root \(\sqrt{ } \mathbf{a h} d o\), say, put, but unexpectedly this verb does not undergo the usual rule of Short Low Vowel Assimilation (§27.3.1), which would have yielded *0oh; the object-oriented deverbal form is oaah what s/he did (with somewhat unexpected lengthening of the \(\mathbf{a}\) in this form.

This allomorph also occurs as expected before the root \(\sqrt{\text { acö }}\) kill, but unexpectedly an \(\mathbf{i}\) appears in the object-oriented deverbal noun. Instead of the expected *oocö, the form ooicö is used.

The regular object nominalizer allomorphy is summarized as follows (excluding the allomorph oco-), where the order of presentation of the "clauses" is again crucial:
\begin{tabular}{ll} 
Object & Nominalizer: \\
null & when negative, \\
\(\mathbf{h}\) & before prefixal \(\mathbf{i}\) \\
null & before other \(\mathbf{i}\) \\
\(\mathbf{y}\) & before long low vowel and prefixal a \\
\(\mathbf{o}_{\text {Abl }}\) & elsewhere.
\end{tabular}

\subsection*{14.4 Details about realis proposition/oblique nominalizations}

The proposition/oblique-oriented deverbal verb form is used in several ways. It is used in relative clauses in which the head noun (which may be non-overt) is neither the subject nor the

\footnotetext{
\({ }^{26}\) In simple terms, o+a becomes \(\mathbf{0 0}\).
}
direct object. Three simple examples are given here, but more are found in §8.4.3.
comcaac quih hant iti \(\quad\) yaii
person/Seri.PL the.FL land 3P-on
3P-PON-be.FL.PL hac \begin{tabular}{l} 
the.LC
\end{tabular}
(44) Ihaapl cop cöyaxyat.

3P-PON-cold the.Vt 3IO-Dt-die.PL
‘Murieron por causa del frío.' Rмн_07-11-07_17b
They died from the cold (weather). (the time when the weather is cold) (offered)
(45) ilhyacazni xooixaj!

1P-PON-UO-bite Em-strong
‘¡Mi mordida es fuerte!’
My bite is hard! (the way in which a certain lizard bites) (Lagartijas 51)
This deverbal noun is commonly inflected for third person indirect object, using co-/cö(§17.1.2.4) when it is being used as the head of a clause in a stage-setting situation or the fact of the action or state, as in the following examples, respectively.
\begin{tabular}{lllll}
\({ }^{\circ}\) Azlc canl \({ }^{\circ}\) & Hapj hapáh coi hamiime com iti \\
stars & & SN-Pv-say the.Pl sky the.Hz & \(3 P\). in
\end{tabular} cöiyaii hac ... 3IO-3P-PON-be.Fl.Pl the.Lc
'Cuando las estrellas llamadas Hapj están en el cielo ...'
When the stars called Hapj are in the sky ... (ES 2007, Hapj_11) RMH_08-21-07_108b
\begin{tabular}{lllll} 
Zixcám ticom & cöipahit & hac & seehe & cohyomaa. \\
fish & MD-Hz & 3IO-3P-PON-Pv-eat & the.LC \\
to.do.(it) & 3IO-1SGS.TR-DT-N-know \\
'No puedo/pude con respecto al comer de ese pescado.' \\
I can't/couldn't with respect to the eating of that fish. (offered) & RMH_10-15-07_50
\end{tabular}

This form is also required in the complement clauses of the prototypical type (see §12.2.1).
(48) Micazni hmiimzo.

2P-PON-bite 1SGS.Tr-Px-want
'Quiero que lo/la muerdas.'
I want you to bite it. RMH_08-21-07_109a
This deverbal form is used in exclamations such as that in (49).
(49) Trooqui tintica, icöihaziim tax! vehicle Md-Aw 3IO-3P-PON-beautiful Sbrd
' Qué bonito ese carro!'
How nice that car! RMH_08-24-07_89
Other contexts use this form, including the concessive auxiliary isax (see §25.4.2.1).
\begin{tabular}{lllllll} 
Miica & & mpoomzo & \(\mathbf{x}\), & immisa & ha \\
TWD-Inf.In-move & 2SGS-Ir.DP-want UT & ThD-2SGS-Ir.ID-move AUX-DCL
\end{tabular}
'Puedes venir si quieres, pero si te cansas, nadie te va a llevar.' RмH_08-21-07_109b You can come if you want, but if you get tired, no one is going to carry you. (Ds2005, isax)

Due to the wide variety of usages, it is not possible to give a single adequate translation for any given form; the translation must be adapted to the context. For example, the form hiizix in a relative clause might refer to the instrument used and the best translation would be with which I sawed it (§13.5). In another context it might refer to the place in which the action took place, and so it would be translated where I sawed it. One might use it to refer to the manner in which one cuts, and so it would be translated how I sawed it. In a complement clause it would be translated that I saw it or for me to saw it.

\subsection*{14.4.1 The morphology of the form}

The proposition- or oblique-oriented realis deverbal noun has the following structure:
(51) I.O. \& D.O. Inflection - Directional - Possessor - Nominalizer - Stem

The proposition/oblique nominalizer has four regular suppletive allomorphs and two idiosyncratic ones. The idiosyncratic allomorph hi- occurs with the verb \(\sqrt{ }\) ap stand as in ihiip (3P-PON-stand) where it stands (see (14b) in chapter 15). The allomorph \(\mathbf{h}\) - (which is also a regular allomorph in another context) occurs with the verbs for come and go, which are based on the same root: miiha his/her/its coming (from \{mo-i-h-a\} TwD-3P-PON-move) and intiiha his/her/its going (from \{nt-i-h-a\} Aw-3P-PON-move). \({ }^{27}\) It likewise occurs in the irregular verb for means be with, happen: cöiiha (from \{co-i-h-a\} 3IO-3P-PON-be).

\footnotetext{
\({ }^{27}\) The length of the stressed vowel is not explained by a regular rule.
}

Before root-initial (stressed) short low vowels \({ }^{28}\) and before consonants (which may be the \(\mathbf{m}\) of the negative prefix or the \(\mathbf{p}\) of the passive prefix or another prefix, as shown below), the nominalizer is null. Examples of this allomorph in these two contexts are given in (52) and (53). (On the length of the prefix vowel in the surface form, see \(\S 27.3 .1\).)
\begin{tabular}{|c|c|c|c|}
\hline a. & iizix & \[
\begin{align*}
& \text { 3P-PON-stem }  \tag{52}\\
& \{\mathbf{i}-\varnothing-\mathbf{- a z i x}\}
\end{align*}
\] & 'su cortarlo' \\
\hline & & & her/his sawing it \\
\hline b. & iimen & \{i-Ø-emen \(\}\) & 'su tirarlo por aquí y allá' her/his shaking it \\
\hline c. & iihit & \{i-Ø-ahit \} & \begin{tabular}{l}
'su comerlo' \\
her/his eating it
\end{tabular} \\
\hline d. & iiho & \{i-Ø-aho \(\}\) & \begin{tabular}{l}
'su verlo' \\
her/his seeing it
\end{tabular} \\
\hline a. & imazix & \{i-Ø-m-azix \(\}\) & \begin{tabular}{l}
'su no cortarlo' \\
her/his not sawing it
\end{tabular} \\
\hline b. & icaa & \{i-Ø-caa \(\}\) & \begin{tabular}{l}
'su buscarlo' \\
her/his looking for it
\end{tabular} \\
\hline c. & ipahit & \{i-Ø-p \(\mathbf{p}_{\text {Abl }}\)-ahit \(\}\) & 'su ser comido' its being eaten \\
\hline d. & ipanzx & \{i-Ø-panzx \(\}\) & \begin{tabular}{l}
'su correr' \\
her/his/its running
\end{tabular} \\
\hline e. & icám & \{i-Ø-cam \(\}\) & \begin{tabular}{l}
'su vivir' - 'su vida' \\
his/her living — his/her life
\end{tabular} \\
\hline f. & imoqueepe & \{i-Ø-moqueepe \(\}\) & \[
\begin{aligned}
& \text { 'su estar enfermo' - 'su enfermedad' } \\
& \text { his/her being sick - his/her sickness }
\end{aligned}
\] \\
\hline g. & icozim & \{i-Ø-cozim \(\}\) & \begin{tabular}{l}
'su hacer calor' - 'calor' \\
its being hot (weather) - heat, summer
\end{tabular} \\
\hline h. & ihamoc & \{i-Ø-hamoc\} & 'su ser noche' - 'noche' its being night - night \\
\hline
\end{tabular}

The consonant that determines this allomorph may be from the unspecified subject prefix ca-.

\footnotetext{
\({ }^{28}\) The superficially long diphthongs such as âai conjugate as if they began with a short vowel a rather than a long vowel. See §28.3.4.
}
\begin{tabular}{|c|c|c|c|c|}
\hline (54) & a. & icamatj & \{i-Ø-ca-matj\} & 'el ser caliente de uno' - 'fiebre de uno' one's being hot - one's fever \\
\hline & b. & \multicolumn{2}{|l|}{icamoqueepe \(\{\) i-Ø-ca-moqueep} & 'el estar enfermo de uno' - enfermedad de uno' one's being sick - one's sickness \\
\hline & c. & icaaitom & \{i-Ø-ca-âaitom & 'el hablar de uno' - 'palabra de uno' one's speaking - one's word \\
\hline & d. & icaaixaj & \{i-Ø-ca-âaixaj \} & 'el ser fuerte de uno' - 'fuerza de uno' one's being strong - one's strength \\
\hline & e. & icapitol & \{i-Ø-ca-pitol\} & \[
\begin{aligned}
& \text { 'el hincharse de uno' - 'indigestión de } \\
& \text { uno' } \\
& \text { one's being bloated - one's indigestion }
\end{aligned}
\] \\
\hline & f. & icaapl & \{i-Ø-ca-matj\} & 'el tener frío de uno' - 'el frío' one's being cold - the cold \\
\hline & g . & icocooxa & \(\left\{\mathbf{i}-\right.\) Ø-ca-o \({ }_{\text {Abl }}-\mathbf{c o o}\) & \[
\begin{aligned}
& \text { 'el cantar (a bebé) de uno' - 'arrullo' } \\
& \text { one's singing (to baby) - lullaby }
\end{aligned}
\] \\
\hline & h. & icoos & \{i-Ø-ca-oos \(\}\) & 'el cantar de uno' - 'canción de uno' one's singing - one's song \\
\hline & i. & icaaspoj & \{ i-Ø-ca-aaspoj\} & \begin{tabular}{l}
'lápiz' \\
pencil - what one writes with
\end{tabular} \\
\hline
\end{tabular}

Before the allomorph of the passive morpheme that is not consonant-initial, the nominalizer is \(\mathbf{h}\)-. \({ }^{29}\) The presence of the glottal stop causes the deletion of the glottal stop in the passive prefix just as in glottal stop of the subject-oriented deverbal noun prefix ha- does; see §14.1. \({ }^{30}\)

\section*{3P-PON-Pv-Stem}
\(\begin{array}{lll}\text { a. ihacazni } & \text { \{i-h-ah-cazni\} } & \begin{array}{l}\text { 'su ser mordido' } \\ \text { her/his being bitten }\end{array} \\ \text { b. ihatís } & \text { \{i-h-ah-tis }\} & \begin{array}{l}\text { 'su ser señalado' } \\ \text { her/his being pointed at }\end{array} \\ \text { c. ihasanj } & \text { \{i-h-ah-sanj }\} & \begin{array}{l}\text { 'su ser llevado en la espalda' } \\ \text { her/his being carried on the back }\end{array}\end{array}\)
Before a long low vowel or a back vowel of an intransitive verb form other than the passive, the nominalizer is \(\mathbf{y}\)-abl. The back vowel may be the Unspecified Object prefix or it may be the

\footnotetext{
\({ }^{29}\) These form are homophonous with the infinitive in many cases, which can be a point of confusion.
\({ }^{30}\) This is described in Yip (1988) as an effect of the Obligatory Contour Principle.
}
part of a causative verb that is being used intransitively. This allomorph also causes the next vowel to change quality. The ablaut process changes \(\mathbf{0}\) or \(\mathbf{0 0}\) to a (see §14.4.2). The vowel of the possessor prefix elides before the \(\mathbf{y}\) as it does in the object-oriented deverbal nouns (see §14.3) and common possessed nouns ( \(\S 13.2 .3 .2\) ), except when the form is inflected for an indirect object; thus cöiyatj corresponds to yatj in (56a).

3P-PON-Stem
a. yatj \(\quad\{\mathbf{i}-\mathbf{y}\)-abl-0tj \(\} \quad\) 'su ponerse de pie' her/his arising
b. yazix \(\left\{\mathbf{i}-\mathbf{y}-\mathrm{Abl}^{-} \mathbf{o}_{\mathrm{Abl}}-\mathbf{a z i x}\right\} \quad\) 'su cortar (UO)' her/his sawing (UO)
c. yaahzx \(\{\mathbf{i}-\mathbf{y}-\mathrm{Abl}-\mathbf{a a h z x}\} \quad\) 'su estornudar' her/his sneezing
d. yaaspoj \{i-y-abl-aaspoj\} 'su escribir' her/his writing
e. yaalim \(\{\mathbf{i}-\mathbf{y}-\) abl-aalim \(\} \quad\) 'su jugar' her/his playing
f. yaticpan \{i-y-ab-aticpan\} 'su trabajar' her/his working
g. yanaao \{i-y-abl-anaao \(\}\) 'su maullar' its meowing

The nominalizer is \(\mathbf{h}\) - elsewhere. Specifically, this means before high front vowels, before long low vowels of transitive verb forms (including transitive causatives and assistives), and before back vowels of transitive verb forms (including transitive causatives and assistives). \({ }^{31}\)

3P-PON-stem
\begin{tabular}{|c|c|c|c|}
\hline a. & ihíp & \{i-h-ip \} & 'su enderezarlo' / her/his straightening it \\
\hline b. & ihisil & \{i-h-isil\} & \begin{tabular}{l}
'su ser pequeño' - 'su niñez' \\
his/her being small - his/her childhood
\end{tabular} \\
\hline c. & ihihiicx & \{i-h-ihiicx \(\}\) & 'su tener relaciones sexuales' his/her having sexual relations \\
\hline d. & ihaafc & \{i-h-aafc \(\}\) & 'su golpearlo' / her/his pounding it \\
\hline e. & ihaacsx & \{i-h-aa-acsx\} & 'su despertarlo/la' (causar despertarse) her/his waking him/her (cause awaken) \\
\hline f. & ihaactim & \{i-h-aa-actim \(\}\) & 'su cortarlo/la' (causar estar cortado) her/his cutting it/him/her (cause be cut) \\
\hline g . & ihaaspoj & \{i-h-aaspoj\} & 'su escribirlo' (causar ser manchado) her/his writing it (cause be spotted) \\
\hline h. & ihoocta & \{i-h-oocta \(\}\) & 'su mirarlo' her/his looking at it \\
\hline i. & ihatolec & \{i-h-atolec \} & \begin{tabular}{l}
'su pedirle ayuda' \\
his/her asking him/her for help
\end{tabular} \\
\hline
\end{tabular}

\footnotetext{
\({ }^{31}\) The form ihaat in chapter 15 example (16), based on the obsolete root \(\sqrt{ }\) ihaat, is irregular.
}
j. hasaj ctam ticop mihitalhaa 'canasta que vendiste a ese hombre' basket man Md-Vt 2P-PON-buy/sell basket that you sold to that man
k . hasaj ihitalhaa cop 'la canasta que (le) vendió' basket 3P-PON-buy/sell the.VT the basket that s/he sold (him/her) \({ }^{32}\)
1. hasaj me ihitalhaa cop 'la canasta que te vendió' basket 2IO 3P-PON-buy/sell the.VT the basket that s/he sold you

The regular proposition/oblique nominalizer allomorphy is summarized as follows (excluding the idiosyncratic instances of the allomorphs hi-, \(\mathbf{h}-\), and \(\varnothing\) ), where the order of the "clauses" is again crucial: XXX cohyacohot WHOM I SHOWED XXX
(58) Proposition/Oblique Nominalizer:

Ø before stressed short low vowels and before consonants
h before passive prefix (by implication, vowel-initial)
\(\mathbf{y}_{\text {Abl }} \quad\) before a long low vowel or a back vowel of an intransitive verb (by implication, not passive and not stressed)
h elsewhere.

\subsection*{14.4.2 Ablaut}

A moprhological operation that is quite common in the language is one that ablauts \(\mathbf{i}\) to \(\mathbf{e}\), and \(\mathbf{o}\) to a. The input vowel may be long, but the output is short in some cases and long in others (for reasons that are not understood). This may be conceived of as a rule that changes a non-low vowel to a low vowel. Various morphemes are triggers for this rule; there does not seem to be any phonological motivation.

The preceding section presented one allomorph of the proposition/oblique nominalizer that triggers the ablaut rule. It just happens in that case that the allomorph \(\mathbf{y}\)-abl occurs only before

\footnotetext{
\({ }^{32}\) I am puzzled by the lack of the 3 IO prefix cö- on this verb, but repeated checking made it clear that it was not there. Compare the following examples:
(i) Juan quih hasaj he ihitalhaa quih the.FL flat.basket \(1 I O 3 P-A N-s e l l\) the.FL
'la canasta que Juan me vendió'/ the basket that Juan sold me RRR
(ii) Juan quih hasaj meihitalhaa quih the.FL flat.basket 2IO 3P-AN-sell the.FL
'la canasta que Juan te vendió' / the basket that John sold you RRR
(iii) hasaj Juan quih María quih ihitalhaa quih
flat.basket the.FL the.FL 3P-AN-sell the.FL
'la canasta que Juan le vendió a María' / the basket that John sold María RRR
}
back vowels. The ablaut rule therefore only affects the verbs with \(\mathbf{0}\), such as underlying \{i-y-Abl \({ }^{-}\) \(\mathbf{o t j}\}\), which becomes yatj by Ablaut as well as the deletion of possessor \(\mathbf{i}\) before \(\mathbf{y}\).

Other morphemes that trigger Ablaut include: one allomorph of the object nominalizer (§14.3), one allomorph of the first person emphatic subject prefix (§17.1.2.1), the transitive allomorph of the infinitive prefix (§17.2.1), one allomorph of the imperative prefix (§17.2.2), and one allomorph of the passive prefix (§17.1.5). See the relevant sections for the data.

\subsection*{14.5 Details about irrealis deverbal nouns}

Irrealis deverbal nouns are used in fewer contexts than realis deverbal nouns. They are used in relative clauses (see §8.4) and also in main clauses (see §10.4.5).

The irrealis deverbal nouns are always formed with the prefix si- (see Table 14.2), which is the same prefix for the finite irrealis forms. Irrealis deverbal nouns are used with an auxiliary verb, ca or ha. as explained below, while finite irrealis forms use ha (§20.2.1).

The subject-oriented irrealis deverbal nouns occur with the auxiliary ca (§20.2.2). The deverbal noun does not bear inflection for person of the subject: it is what has been called elsewhere in this grammar a "stripped" irrealis. Example (59) shows a subject-oriented irrealis form modifying a noun, and (60) shows the usage as a main verb.


Table 14.2: Irrealis deverbal noun structure
\begin{tabular}{llll}
\multicolumn{3}{c}{ Table 14.2: Irrealis deverbal noun structure } \\
\hline Type of Deverbal noun & & \begin{tabular}{l} 
Nominalizer \\
Subject-oriented: stripped \\
irrealis
\end{tabular} & si-
\end{tabular}

Examples of the irrealis subject-oriented deverbal nouns are given in (61).
\begin{tabular}{|c|c|c|c|c|}
\hline (61) & a. & siitax ca & \[
\begin{gathered}
\{\mathbf{s i - a t a x}\} \\
\text { IR.ID-go }
\end{gathered}
\] & \begin{tabular}{l}
'que irá' \\
who will go
\end{tabular} \\
\hline & \multirow[t]{2}{*}{b.} & \multirow[t]{2}{*}{smatax ca} & \{si-m-atax \(\}\) & 'que no irá' \\
\hline & & & Ir.Id-N-go & who will not go \\
\hline & \multirow[t]{2}{*}{c.} & \multirow[t]{2}{*}{siisi ca} & \{si-asi\} & 'que (lo) tomará \\
\hline & & & Ir.ID-drink & who will drink (it) \\
\hline & \multirow[t]{2}{*}{d.} & \multirow[t]{2}{*}{smasi ca} & \{si-m-asi\} & 'que no (lo) tomará \\
\hline & & & IR.ID-N-drink & who will not drink it \\
\hline & \multirow[t]{2}{*}{e.} & \multirow[t]{2}{*}{soohitim ca} &  & 'que comerá' \\
\hline & & & Ir.Id-UO-eat-IMPF & who will eat \\
\hline & \multirow[t]{2}{*}{f.} & \multirow[t]{2}{*}{smoohitim ca} &  & 'que no comerá' \\
\hline & & & Ir.Id-N-UO-eat-ImpF & who will not eat \\
\hline & \multirow[t]{2}{*}{g .} & \multirow[t]{2}{*}{spahit ca} & \{si-p \(\mathbf{p}_{\text {Abl }}\)-ahit \(\}\) & 'que será comido' \\
\hline & & & IR.ID-Pv-eat & that will be eaten \\
\hline & \multirow[t]{2}{*}{h.} & \multirow[t]{2}{*}{sompahit ca} & \{si-m- \(\mathbf{p}_{\text {Abl }}\)-ahit \} & 'que no será comido' \\
\hline & & & IR.ID-N-Pv-eat & that will not be eaten \\
\hline & \multirow[t]{2}{*}{i.} & \multirow[t]{2}{*}{mosa ca} & \{mo-si-a \(\}\) & 'que vendrá' \\
\hline & & & Twd-Ir.Id-move & who/that will come \\
\hline & \multirow[t]{2}{*}{j.} & insama ca & \{mo-si-m-a & 'que no vendrá' \\
\hline & & RMH_10-15-07_62 & Twd-Ir.Id-N-move & who/that will not come \\
\hline
\end{tabular}

In one sense there is no irrealis direct object-oriented deverbal noun. A finite form is used with the auxiliary ha (§20.2.1).
a. ihsemasi ha
\{h-si-m-asi\}
1SGS.Tr-Ir.Id-N-drink
\{ha-si-asyoj \} 1PLS-Ir.ID-drink.PL
c. iscatxla ha
d. masoonec ha

RMH_10-15-07_63
\{i-si-catxla\}
3:3-Ir.ID-bite
\{ma-si-oonec \(\}\)
2PLS-Ir.ID-carry.PL
'lo que no tomaré what I will not drink
'lo que tomaremos' what we will drink 'a quien/que morderá’ whom/which it will bite 'que ustedes llevarán' which you (pl.) will carry

Irrealis proposition/oblique deverbal forms also use the auxiliary ha, but the lexical verb is a possessed form, the possessor indicating the subject of the verb.
\begin{tabular}{|c|c|c|c|}
\hline a. & hisacötim ha & \begin{tabular}{l}
\{hi-si-ācötim \} \\
1P-Ir.ID-cover.oneself
\end{tabular} & \begin{tabular}{l}
'con que me cubriré' \\
what I will cover up with
\end{tabular} \\
\hline b. & misiizcam ha & \{mi-si-azcam \(\}\) 2P-IR.ID-arrive.PL & \begin{tabular}{l}
‘que llegarán Uds.' \\
that you (pl.) will be arriving
\end{tabular} \\
\hline c. & an hisiihca ha & \{hi-si-ahca \(\}\) 1P-Ir.Id-sit.PL & 'en que viajaremos' that we will travel in \\
\hline d. & ispácotim ha & \(\left\{\mathbf{i}-\mathbf{s i}-\mathbf{p}_{\text {Abl }}\right.\)-acotim \(\}\) 3P-Ir.ID-Pv-kill-ImpF & 'con que será cortado (rep.)' what it will be chopped with \\
\hline e. & an isahahoopol ha & \{i-si-ah-ah-oopol\} 3P-Ir.ID-Pv-AUG-black & 'en que será hecho negro' what it will be made black in \\
\hline f. & \begin{tabular}{l}
iscamoiij ha \\
RMH_10-15-07_64
\end{tabular} & \begin{tabular}{l}
\{i-si-ca-a-moiij\} \\
3P-Ir.Id-US-AUG-circular
\end{tabular} & 'con que uno remendará' that one will mend with \\
\hline
\end{tabular}

\section*{15. Names}

A (proper) name is an expression that conventionally refers to a particular entity. \({ }^{1}\) This chapter examines the form and the syntax of names for places, individuals, legendary and historical figures, spirits, months, constellations, stars, etc. in recent and modern Seri culture. \({ }^{2}\) It is in this context that ethnonyms are discussed, although these are actually common nouns in Seri. In \(\S 15.1\) it is shown how common nouns are distinguished from names. In \(\S 15.2\) the structure of names is presented. The ethnonyms are presented in \(\S 15.3\) even though they are not strictly "names". The names of individuals are discussed in \(\S 15.4\), and the embellishments that occur with them in \(\S 15.5\). Their use as appositive modifiers is presented in \(\S 15.6\). The use of names as vocatives is presented in §15.7. Expressions that replace names in contexts where indirect reference is appropriate are discussed in \(\S 15.8\).

\subsection*{15.1 Distinguishing common nouns from names}

It is appropriate to consider how names are distinguished from common nouns and common noun phrases, especially since they are so similar both in form and in usage.

Common nouns can be distinguished from names in Seri by the verbless predicate nominal construction (§10.1). Names are not used predicatively and cannot appear as in this construction just as definite nominals cannot. See the ungrammatical examples in (1).
(1) a. * Hipiix Juan (quih) iha. DPS the.Fl DCl (‘Éste es Juan.')
(This is John.)
b. * Hant himquij Tahejöc (quij) iha.
land Dт-Cм Tiburón.Island the.CM DcL
('Ese lugar ese la isla Tiburón.')
(That land/place over there is Tiburon Island.)
Names may occur as the complement in the copula construction (§18.2.1) just as common nominals may, as shown in (2). (Names are followed by a definite article, which is true of most contexts in Seri (excluding vocatives and in sentences with verbs of naming, discussed below). \({ }^{3}\)

\footnotetext{
\({ }^{1}\) This chapter is based on Marlett (2008). See the discussion of the problems with the term 'name' in Anderson (2004:436) and additional discussion of these facts from a broader perspective in Anderson (2008).
\({ }^{2}\) See also M. Moser \& Marlett (2001b).
\({ }^{3}\) The use of definite articles with names (including place names) in Seri should be noted, since Longobardi (2001:589) states that "Except for Greek ..., at least a subset of proper names, especially place names and names
}
(2) a. Hipiix Juan quih haa ha.
DPS the.Fl SN.EQ DCL
'Éste es Juan.'
This is Juan. RRR
b. Hant himquij Tahejöc quij haa ha.
land Dт-См Tiburón.Island the.Cm SN.EQ Dcl
'Ese lugar la isla Tiburón.'
That land/place is Tiburon Island. RRR
The typical common noun may modified by a relative clause (§8.4), unlike names in their typical usage. Count nouns also often have a plural form, unlike most names. However, the examples in (3) with a modified or quantified name are appropriate if more than one person named Juan were being discussed. The definite article in (3a) needs to be the focus form cah (see §24.2.2); otherwise, with the simple article quih, the sentence is anomalous unless the person's name is "Big Juan".
a. Juan caacoj cah hyooho.

SN-big the.Fl-Foc 1SgS.Tr-Dt-see
'Vi al Juan grande.'
I saw the big Juan.
b. Juan quih coocj coi hyooho. the.Fl SN-two the.Pl 1SGS.Tr-Dt-see
'Vi a los dos (personajes que se llaman) "Juan".'
I saw the two "Juans".
As a matter of fact, there is a culturally standardized way to refer to one of two individuals with the same name: Juan quisil (Juan SN-small) the younger Juan, Juan cmaacoj (Juan old.man) the older Juan; María quisil (María SN-small) the younger María, María comcaii (María old.woman) the older María. Despite the words involved (e.g., comcaii old.woman), only the relative ages of the people indicated are relevant. \({ }^{4}\) The opposite word order is used to refer to an elderly person named Juan; see §15.5.

Names modified with nonrestrictive adjectival modifiers that would parallel examples like

\footnotetext{
of months and days, seem to be allowed to make arguments without any determiner in all the best-analyzed modern languages..." Otomian languages also regularly use articles with proper names (Hess 1968, Echegoyen 1979, as do some varieties of Nahuatl).
\({ }^{4}\) The word quisil is the subject-oriented deverbal noun formed on the root \(\sqrt{ }\) isil be small, while cmaacoj and comcaii are nouns.
}
"crotchety Plato", \({ }^{5}\) "haughty Virginia", "huge pugnacious Colonel Daniel Morgan", "the irrepressible Martha Smith", and "an unflappable John Roberts" have not been observed. But see \(\S 15.5\) below on other kinds of embellishments.

The one context in which a name may be pluralized is with the Spanish surnames in common use: a plural suffix is added to the surname to mean the \(\qquad\) family, such as the Johnson family if Johnson were the surname in question. The singular article quih is used in this case, not the plural article coi although the verb is conjugated in the plural. \({ }^{8}\) See the examples in (4).
\begin{tabular}{lc} 
a. \begin{tabular}{c} 
Astorga-j quih yoozcam. \\
-PL the.FL DT-arrive.PL
\end{tabular} & \((* \ldots\) yoofp. \()\) \\
Dt-arrive \\
'Llegaron los Astorga.' & \\
The Astorgas arrived.
\end{tabular}
b. Names ending in vowels add -j: Montaño-j, Molina-j.
c. Names ending in a diphthong or consonant other than a sibilant add -taj: Monroy-taj, Barnet-taj.
d. Names ending in a sibilant do not add an overt indicator of plural: Morales, Perales, Méndez, López.

The typical count noun may be followed by the indefinite article zo in a fairly neutral context such as Have you seen \(\qquad\) ? whereas (unsurprisingly) a name cannot under normal circumstances; see (5).
```

* ¿Juan zo ntaho? }\mp@subsup{}{}{9
a 2SGS-Rl-see
('¿Has visto a Juan?`) (Have you seen (a) John?)

```

Despite possible tests to distinguish names from common nouns in Seri, this is not always easy in that they may be completely homophonous. Two examples: the common noun hast stone, mountain and the name Hast San Esteban Island; \({ }^{10}\) the common noun haamoja

\footnotetext{
\({ }^{5}\) Victor Davis Hanson (1999:33), "The glory that was Greece," in What If? ed. Robert Cowley ( New York, Berkley Books).
\({ }^{6}\) Thomas Fleming (1999:166) "Unlikely victory," in What If? ed. Robert Cowley (New York, Berkley Books).
\({ }^{7}\) Fleming (op. cit., 169).
\({ }^{8}\) This may seem at first glance to be a calque from Spanish, but probably it is not. The Spanish version of "the Smiths" is to use a plural article and the simple surname (without any plural suffix): "los Molina", for example. Note that the Seri version uses a plural morpheme on the surname and a singular article, although a plural article is available.
\({ }^{9}\) Grammatical: ¿Juan quih intaho? ‘¿Has visto a Juan?’ Did you see Juan? RRR
\({ }^{10}\) This designation for San Esteban Island is used in certain contexts. The more common name is Cofteecöl.
}
pronghorn, and the name Haamoja (a star in the constellation Hapj). Other examples appear later in this chapter.

Some contexts, of course, do not reveal a difference between common nouns and names. Both common nouns and names may occur as complements of the verb \(\sqrt{ } \mathbf{a h}\) say, call. The passive form impáh (Px-Pv-say) s/he/it is called (mpah after vowels) appears in the sentences in (6).
(6) a. Himt ipxasi quih isnaap impáh.

1P-breast 3P-flesh the.Fl Px-Pv-say
'La carne de mi pecho se llama "isnaap".,
The flesh on my breast is called "isnaap". (DS2005 innáap)
b. Tiix ah cahínata mpah.

DDS Foc Px-Pv-say
'Ése [tipo de venado] se llama "cahínata".,
That one [kind of deer] is called "cahinata". (DS2005 cahinata)
c. Pancho mpah.

Px-Pv-say
'Se llama Pancho.'
His name is Pancho. (DS2005, quih)
d. Taax ah oo cötpacta ma,

DDP FOC DL 3IO-Rl-be.in.appearance DS
Hant Ihiitij impáh, hast ticap. PX-PV-say mountain MD-VT
'Por eso se llama Hast Ihiitij.'
That's why that mountain is called Hant Ihiitij. (DS2005, quitij)
e. Hastojiicöla mpah.

Px-Pv-say
'Se llama Hastojiicöla.'
It is called Hastojiicöla. (Muerte_Cöquimaxp_36)
The examples in (6) illustrate that when they are used with verbs of naming, names are not used with definite articles in Seri, just as in other languages. \({ }^{11}\)

The facts are even a bit more interesting with the verb \(\sqrt{ }\) ataasitot to name. The name itself does in fact occur with a definite article, hac, which is appropriate for the explicit or implied head noun hataasi (Abs-name) name. See (7)-(8).

\footnotetext{
\({ }^{11}\) Anderson (2004:441).
}
(7) (Hataasi) Priscila hapáh hac, taax consataasitot aha. Abs-name SN-Pv-say the.LC DDP 3IO-2SGS-Ir.Id-give.name Aux-Dcl 'Debes darle el nombre Priscila.'
You should name her Priscila.
(8) Pedro quij cmaam yaazi \({ }^{\circ}\) í \(^{12}\) zo toc cötiij ma, the.См woman his.child first a there 3IO-Rl-sit DS

Juana hac cöimataasitot. the.LC 3IO-3:3-Px-give.name
'Pedro dio el nombre Juana a su primera hija.'
Pedro named his first daughter Juana.
Descriptive phrases may have three uses. First, they may be simple descriptive phrases like hast cacösxaj cop (mountain SN-tall/long the.Vт) the tall mountain, which denotes any number of entities in the world. Second, they may be hyponymic designations (classes, types, subspecies, ethnospecies, species or genera and the like), much like barn swallow in English refers to a specific subset of kinds of swallows. An example is xiica cooxp (thing.Pl SN-white) white things, which refers to two species of the genus Olivella of olive shell (C. Marlett, forthcoming). Third, they may be the names of particular entities, like Big Lake in English. An example is Xepe Coosot (sea SN-narrow), which is the Infiernillo Channel between Tiburon Island and the mainland. In Seri, however, there is no salient phonetic difference between a common noun phrase analogous to big lake and a name analogous to Big Lake, if there is any at all. The word itaasi (3P-name) applies to both of the last two types in Seri (although most saliently to proper names), as in English: a hyponym and the name of an individual. This word itaasi is therefore helpful when trying to determine if a rather complicated expression is just a description of an insect (for example) or whether it is actually the designation for the species of insect. But the word itaasi does not help to determine if a particular expression is a name or only a hyponym. \({ }^{13}\)

\subsection*{15.2 The form of names}

As indicated in \(\S 8.1\), names are typically used with definite articles in Seri, and so they are

\footnotetext{
\({ }^{12}\) This is pronounced as if it were yazii.
\({ }^{13}\) The distinction between the two senses of "name" is even more obscured in Seri culture since a certain personage in history gave each of the beings their individual "names" (presumably proper names) when they were still people. The coming of the flood turned them into the creatures that they are today, and the species still have those "names". Despite some indeterminacy in formally distinguishing names from common nouns, one should not have the impression that Seri speakers somehow are confused between these two notions; they definitely are not.
}
generally presented with them here. \({ }^{14}\) It is less common, but possible, for a demonstrative to be used with a name: Cofteecöl hipcap this San Esteban Island (see Muerte_Cöquimaxp_4.1), Tahejöc himquij that Tiburon Island (see Gigante_Comelon_02), Juan hipquij this John. It is not very clear what this combination indicates or means. Names are therefore typically "weak" in Seri, \({ }^{15}\) but they are "strong" (do not take determiners) when used as vocatives (see \(\S 15.7\) ), when the complement of the verb \(\sqrt{ }\) ah say, call ( \(\S 15.1\) ), sometimes when conjoined (see chapter 25), and in some other contexts. The article hac, which is used most commonly for names of locations as opposed to geographical entities, is omitted in some situations where other articles are not.

\subsection*{15.2.1 Simple names}

The examples in (9) are names of the simplest sort as they consist of a single word (apart from the article) that is used only as a name.
\begin{tabular}{lll} 
a. & Tahejöc quij & 'Isla Tiburón', Tiburon Island \\
b. & Socaaix hac & 'Punta Chueca' (a Seri town) \\
c. & Queeto quih & Aldebaran (the star) \\
d. & Saps hac & 'Campo Dos Amigos' (a camp name) \\
e. & Soosni cop & 'Isla Alcatraz', Alcatraz Island \\
f. & Hoona hac & (a camp name) \({ }^{16}\) \\
g. & Sana hac & (a camp on Tiburon Island) \\
h. & Xépeta hac & (a camp on Tiburon Island) \\
i. & Xana hac & 'Campo Álmon' \({ }^{17}\) \\
j. & Xnit hac & 'Campo Español' (on Tiburon Island) \\
k. & Cmaamc coi & (the constellation of the seven women)
\end{tabular}

\footnotetext{
\({ }^{14}\) The names of people are not presented with articles, however, because humans and large animals present the greatest variety of options in choice of article, determined primarily on the basis of their physical orientation. For some nouns there is a small amount of variability in the choice of article and for others there is no such variability. The question of which article appears with a given name of a person is generally ignored here, but see §21.2
\({ }^{15}\) The terminology "strong" vs. "weak" is used in Huddleston and Pullum (2002), a book that helped shape this chapter on names.
\({ }^{16}\) Hoona may be the only Seri place name that has been borrowed into regional Spanish, by at least a few people. (It was incorrectly written in the 2005 dictionary as Hona.) Typically pronounced ['o'na] by outsiders, the Seri name is ['Ro'n'a]. The phonetic lengthening on the post-tonic syllable typical of native Seri words and not of recent loanwords in Seri (see \(\S 28.5 .1\) ). This is an appropriate place to make it explicit that hardly ever is there an overlap in meaning between a Seri place name and a Spanish place name. One case is the name for the Colorado River: Río Colorado in Spanish and Hasoj Cheel (river SN-red) Red River in Seri. It is coincidental (although not surprising) that both languages name the river similarly. (The Seri name does appear to be an old name and not a modern translation of the Spanish name.)
\({ }^{17}\) This name is a corruption of Hammond, the surname of an early fish buyer from Tucson (Mary B. Moser, p.c.).
}
\begin{tabular}{lll} 
1. Hapj coi & \begin{tabular}{l} 
(the constellation of the three animals) \\
m.
\end{tabular} Coen quih & \begin{tabular}{l} 
(a spirit with the appearance of an old woman that \\
harms a child)
\end{tabular} \\
n. Icor quih & \begin{tabular}{l} 
(the spirit of plant life, power that created life and the \\
the spirit of plants)
\end{tabular}
\end{tabular}

Some simple names have an element that hints at an etymology (sometimes indicated in the Seri dictionary) relating them to some common noun or verb, but the expressions have given rise to a the use as a name. For example, the constellation name Cmaame is almost identical in form to the word for woman, cmaam (modern plural, cmajiic), and in fact it is said to be several women who have stepped away from the place where other women are giving birth. \({ }^{18}\) This etymology provides the reason for why the plural article coi is used with this name. Similarly, the constellation Hapj contains three stars, Hap Mule Deer (the middle star), Haamoja Antelope, \({ }^{19}\) and Mojet Bighorn Sheep; the plural article coi is also used with the name of this constellation. The word izaayo Saturday is a loanword from Spanish sábado, probably via O'odham. Other names, such as Tahejöc, Saps, and Xnit, do not have known etymologies.

\subsection*{15.2.2 Names derived from simple noun phrases}

A name may also be composed of a simple noun phrase. Of course, that phrase may be simply the common noun: Hacosaa quih Cactus Fruit Gathering Pole (the Big Dipper constellation); Hast cap Mountain (a special name for San Esteban Island); Zaaj hac Cave (a certain place in the sea); Xatj hac Reef (a camp name); Xapij hac Reedgrass (a camp name); Haamoja quih Antelope (a star in the constellation Hapj mentioned above); Xtaasi hac, Estuary (a name for a camp on Tiburon Island); Paaza hac (a location) named for either the Gila monster or the tree Sideroxylon occidentale.

The head of the noun phrase may be modified by a relativized possessor noun phrase, as in (10).
(10) a. Comcaii Ilít Cooxp
old.woman 3P-head/hair SN-white
'Anciana con Cabello Blanco'
White-haired Old Woman (a certain Seri woman, now deceased)

\footnotetext{
\({ }^{18}\) Kroeber was told that this constellation is "a woman [...] with her children, who came outdoors to urinate" (Kroeber 1931:12). This was generally confirmed to Edward Moser and more recently clarified by René Montaño Herrera.
\({ }^{19}\) Kroeber (1931:12) identified this star is Betelgeuse. This does not agree with information that is provided in the text "Hapj" (Montaño Herrera, ES2007), however.
}
b. Zaaj An Cooxp hac
cave 3P.interior SN-white the.LC
'Cueva con Interior Blanco'
Cave Whose Interior Is White (on San Esteban Island)
Another type of name is a head noun modified by a relative clause (§8.4), as in (11).
a. Xepe Coosot tintica
sea SN-narrow MD-Aw
'Mar Estrecho' (Canal del Infiernillo)
Narrow Sea (the Infiernillo channel) \({ }^{20}\)
b. Xepe Heeque tintica
sea small Md-Aw
'Mar Pequeño' (Canal del Infiernillo)
Small Sea (El Infiernillo Channel) (alternate name)
c. Hant Cooxp hac
land/place SN-white the.LC
'Tierra Blanca'
White Land (a camp on Tiburon Island)
d. Ziix Anxö Coohit
thing Intns SN-UO-eat
'Cosa que Comió Mucho'
Thing that Ate a Lot (a legendary giant who lived with the Seris for a while)
e. Cmaacoj Cmasol
old.man SN-yellow
'Anciano Amarillo'
Yellow Old Man (the person who named the animals)
f. Iimox Impafc
purple-lip.rock.oyster SN-N-Pv-pound
(el nombre del más fuerte de los gigantes)
(the name of individual that was the strongest of the giants) \({ }^{21}\)

\footnotetext{
\({ }^{20}\) This is the channel located between Tiburon Island and the mainland.
\({ }^{21}\) He was also known simply as Iimox, compared to the rock oyster Spondylus calcifer because of his imperviousness to blows; he was a renowned gambler and killer of those whom he defeated.
}
g．Hast Ctam cop
mountain man／male the．VT
＇Cerro Macho＇
Male Mountain（Cabeza de Caballo，on San Esteban Island）\({ }^{22}\)
h．Hast Cmaam cop
mountain woman／female the．VT
＇Cerro Hembra＇
Female Mountain（a peak on San Esteban Island）
i．\(\llcorner\) Azoj Canoj」 \(\llcorner\) Hant Ifii」 Caao quij
star morning SN－UO．pass．by the．Cm
＇Estrella que Pasa en la Mañana＇
Star that Passes in the Morning（Venus）
j．\(\quad\) Azoj Canoj」 Imatax \(^{\text {quij }}\)
star SN－N－go the．Cm
＇Estrella que No Se Mueve＇
Star that Doesn＇t Move［North Star，Polaris］
k．Azoj Yeen oo Caap quij
star 3P－face DL SN－stand the．Cm
＇Estrella que Va Primero＇
Star that Goes First［Aldebaran，the first to appear in the morning］
There may be no overt head noun in the name，and so the deverbal noun that is head of the relative clause may in essence be the head of the construction（see §4．3．4）．This deverbal noun may be the subject－oriented form（§14．1）and the noun that precedes it（if any）may be the direct object of that verb．This pattern is illustrated in（12）．
（12）
a．Hant Caai quij
land／world SN－Tr－make the．CM
＇Creador del Mundo＇
Maker of the World（the Creator in the traditional Seri belief system）
b．Cozactim quih
SN－UO－intercept the．FL
＇El que Corta el Paso＇
Interceptor（the star Canopus）

\footnotetext{
\({ }^{22}\) The designations ctam male and cmaam female in these situations typically refers to the profile of the item；a taller item is＂male＂and a wider，less tall item is＂female＂．
}

\section*{d. Hant Iiha Quimx}
land 3P-belongings SN-Tr-say
(la persona que les dio los nombres de las cosas a los antepasados seris)
(the person who first gave names to the things for the Seri ancestors)
e. Quixop
quih
SN-Tr-carry.with.stick.over.shoulder the.FL
(el espíritu que hace daño a personas que han maltratado a un perro o un coyote)
(the spirit that harms people who have mistreated a dog or coyote)
f. Hooro Cöicaasitim Quiya
gold 3IO-INF.IN-UO.deceive SN-TR-know
'El Gran Engañador'
The Great Trickster [a legendary figure who could fool people, especially outsiders, into doing all kinds of things; gold played a role in some of the tricks]

The deverbal noun may be the direct object-oriented form (§14.3) and the noun that precedes it may be the subject of that verb (expressed as possessor). See the examples in (13).
(13)


And the deverbal noun may be the proposition/oblique-oriented form (see §14.4); the noun that precedes it (if any) is often the subject/possessor of that verb. See the examples in (14).

\footnotetext{
\({ }^{23}\) The identification of comís is not known.
\({ }^{24}\) This name refers to the star that is seen during events of a girl's puberty fiesta.
}
\begin{tabular}{|c|c|c|}
\hline （14） & a． & Haxöl Iihom hac
multicolored．clam（s）
3P－PON－lie the．LC
＇Donde Están las Almejas Piedreras＇
Where the Multicolored Clams Are
［El Desemboque］ \\
\hline & b． & \begin{tabular}{lllll} 
Ool & Quih & An & Ihiip & hac \\
organpipe．cactus & the．FL & 3P．in & 3P－PON－stand & the．LC \\
＇Donde Está La Pitaya＇ & & & \\
Where the Organpipe Cactus Is ［a place］ &
\end{tabular} \\
\hline & c． & \begin{tabular}{llll} 
Hant & Coox & Ipaho & hac \\
land／world & all & 3P－PON－Pv－see & the．LC
\end{tabular} \\
\hline & d． & Miist Caal Quih An LHacx Imiih」
cat
companion the．FL 3 3P．in apart 3 3P－PON－not．be．FL \({ }^{26}\) the．LC \\
\hline & e． & Pnaacoj Cacösxaj Quih Hapx Ihiip hac mangrove SN－tall／long the．FL outside 3P－PON－stand the．LC ＇Donde Aparece Pnaacoj Cacösxaj＇ Where Pnaacoj Cacösxaj Appears［a certain place in the sea that one locates by seeing a certain item on the mainland］ \\
\hline & f． & ```
」Hant Caalaje」 Ipapjö quih
who.are.giving.birth 3P-PON-Pv-illuminate the.FL
'Con Que Se Iluminan Las que Dan a Luz'
With Which Those Giving Birth Are Given Light [Aldebaran, said to be
giving light to Cmaame as the women in that constellation are giving
birth]
``` \\
\hline & g． & \begin{tabular}{l}
Queeto yaao cop \\
Aldebaran 3P－PON－UO．pass．by the．Vt \\
＇Cuando Pasa Queeto＇ \\
When Queeto Passes［referring to the visibility of the star Aldebaran； the month corresponding to October］
\end{tabular} \\
\hline
\end{tabular}

\footnotetext{
\({ }^{25}\) More specifically，this is the youngest child of a pregnant woman who，in some sense，will be the companion of the child who is yet to be born．
\({ }^{26}\) This expression，literally not be somewhere（with a reanalyzed negative），usually means die，but consultants indicated that here it means to be lost．
}
h. Hee \(\begin{array}{ll}\text { yaao } & \text { cop } \\ & \\ \text { 3P-PON-UO.pass.by } & \text { the.VT }\end{array}\)
'Cuando Pasa Hee'
When Hee Passes [referring to the visibility of the star Hee, the antelope jackrabbit; the month corresponding to November]
i. Naapxa yaao cop

3P-PON-UO.pass.by the.VT
'Cuando Pasa Naapxa'
When Naapxa Passes [referring to the visibility of the star Naapxa, the turkey vulture; the month corresponding to December]

The names in (15) have deverbal nouns but there is no explicit subject/possessor present in the phrase.
\(\left.\begin{array}{lllll}\text { a. } & \text { An Icatázatoj } & \text { hac } \\
& \text { 3P.in } & \text { 3P-PON-US-cut.into.strips.PL the.Lc } \\
\text { 'Donde Se Cortó (Carne) en Tiras' [campamento en la isla Tiburón] }\end{array}\right]\)\begin{tabular}{llll} 
& Where (Meat) Was Cut Into Strips [a camp on Tiburon Island]
\end{tabular}

The head of the noun phrase may be a possessed noun. The possessor precedes this noun (see §8.3), as shown in (16).
(16) a. Hast Yeen hac
mountain 3P-face the.Lc
'Cara de Cerro'
Mountain's Face [a camp on Tiburon Island]

\footnotetext{
\({ }^{27}\) The form icatoomec is the oblique-oriented deverbal noun of \(\sqrt{ }\) catoomec be Sunday, which is a borrowing from Spanish domingo via the UtoAztecan language O'odham (David Shaul, p.c.). The form icatoomec itself is primarily used for the meaning week now, but may also mean Sunday. The expressions icatoomec caacoj and icatoomec heeque are both archaic.
\({ }^{28}\) The other days of the week do not have Seri names.
}
b. Cofteecöl Iifa cop

3P-peninsula the.Vt
'Península de Cofteecöl'
Cofteecöl Peninsula [Playa el Escabel, Punta Baja (on San Esteban Island)]
c. Caiinim Iyat cop

3P-tip the.VT
'Punta de Caiinim'
Caiinim Peak [Caiinim is a hill on Tiburon Island]
d. Caiinim Inoohcö quij 3P-PON-concave the.CM
'Bahía de Caiinim'
Caiinim Bay
e. Hast Caacoj quih Iyat cop mountain SN-big the.FL 3P-tip the.VT 'Punta de Cerro Grande'
Tip [Peninsula] of Big Mountain [Narragansett Point on Tiburon Island]
f. Coniic Yataam
hac
3P-mountain.pass the.LC
'Paso de Coníic'
Coniic Pass [Coníic is a camp on Tiburon Island]
g. Mosnictoj Iime hac
"red".sea.turtle 3P-home the.LC
'Hogar de la Caguama Roja'
Red Sea Turtle's Home [a certain place in the sea]
h. Caay Ítajc hac
horse 3P-bone-Pl the.LC
Huesos de Caballo
Horse's Bones [a place on Tiburon Island]
i. xnoois ihaat iizax \(\operatorname{cop}^{29}\)
eelgrass.see 3P-PON-mature 3P-moon the.VT
'Mes cuando el Grano de Trigo De Mar Madura'
Month When the Eelgrass Grain Matures [the month corresponding to April]

\footnotetext{
\({ }^{29}\) Some of the names of the months explicitly include the word iizax moon, month, but others do not.
}
```

j. iqueetmoj iizax cop
sitting.in.shade }\mp@subsup{}{}{30}3\textrm{P}-moon the.V
'Mes para Sentarse en la Sombra'
Month for Sitting in the Shade [the month corresponding to May]
k. imám imám iizax cop
3P-fruit 3P-PON-ripe 3P-moon the.VT
`Mes Cuando la Fruta [del Cacto] Madura'
Month When the [Cactus] Fruit Is Ripe [the month corresponding to June]

1. icoozlajc iizax cop
3P-PON-US-UO-pile.up.Pl 3P-moon the.Vt
'Mes Cuando Uno Amontona (Las Vainas de Mezquite)
Month When One Piles Up (Mesquite Beans) [the month corresponding to
July]
m. hant yaail ihaat iizax cop
land 3P-PON-blue/green 3P-PON-mature 3P-moon the.VT
'Mes Cuando la Vegetación Madura'
Month When The Vegetation Matures [the month corresponding to August]
```

Some names have a syntactic structure that is unlike what is found in common noun phrases. First, there are examples where the head noun of the name is phrase-final and preceded by other phrases or words - often nouns. This is the most typical construction for names of water holes, camps, etc. that are related to other place names. The head nouns in this construction, underlined in (17), are unpossessed nouns. \({ }^{31}\)
a. Caamajoj Zaaj cop cave the.VT
‘Cueva Caamajoj’
Caamajoj Cave [a hill with caves in it on San Esteban Island]
b. Xaaxp Hax hac
water the.LC
'Agua Xaaxp'
Xaaxp Water [a place where fresh water is found on Tiburon Island]

\footnotetext{
\({ }^{30}\) This form is not readily explained in its relationship to the verb \(\sqrt{ }\) aqueetmoj to sit in the shade, but the meaning is clear.
\({ }^{31}\) More examples appear in Marlett (2008a).
}


Whereas the examples in (17) have the head noun at the end of the name, those in (18) represent a less common type that has the head noun at the beginning of the name. The second part sometimes has no known etymology; when it is a meaningful word, it may vaguely indicate something that was or is salient about the place.

```

e. Caail }\mp@subsup{}{}{\circ}\mathrm{ Hatni com
dry.lake.bed woodpecker the.Hz
'Playa Carpintero del Desierto'
Woodpecker Dry Lake Bed
f. Azoj Cmiique
cop
star person/Seri the.Vt
'Estrella Persona'
Person Star [the constellation that is the hunter of the animals in the
constellation Hapj]

```
g. Hast Haquim cop
    mountain whale the.VT
    'Cerro Ballena'
    Whale Mountain [Perro Point, on Tiburon Island]

A name may be a juxtaposition of nouns or other words whose relationship is not readily explained, a meaningful translation is not forthcoming, and where neither is very obviously the head. This is not a common construction. See the examples in (19).
\begin{tabular}{|c|c|c|}
\hline (19) & a & Comitin Oot hac
ironwood.tree coyote the.LC
(un lugar) (a place) \\
\hline & b. & \begin{tabular}{l}
Hast Cmiique \\
mountain person/Seri \\
(espíritu principal en las creencias de los habitantes de la isla San Esteban) (chief spirit in the beliefs of the inhabitants of San Esteban Island)
\end{tabular} \\
\hline & c. & \begin{tabular}{l}
Hant Hasooma \\
land shade.shelter \\
(el ser que creó la primera persona seri y que era dueño de todos los animales) \\
(the being who created the first Seri and who was owner of all the animals) \({ }^{32}\)
\end{tabular} \\
\hline & d. & \begin{tabular}{l}
azoj imal cmizj cop \\
star SN-Tr-N-accompany SN-well.formed the.VT \\
(el mes que corresponde a enero; no hay estrella que acompaña la luna) (the month that corresponds to January; there is no star accompanying the moon)
\end{tabular} \\
\hline
\end{tabular}

\footnotetext{
\({ }^{32}\) It is not known why this being has this name, except perhaps because it extended protection.
}
e. azoj imal icozim quih ano caap cop star SN-Tr-N-accompany 3P-PON-hot.weather the.Fl 3P.in SN-stand the.VT (el mes que corresponde a septiembre; no hay estrella que acompaña la luna durante esta temporada de calor) [the month that corresponds to September; there is no star accompanying the moon during this time of hot weather]

Occasionally a Spanish word or phrase has been incorporated into a place name, either quite directly (through an overheard comment, perhaps) in the case of Laletiro in (20a), or through a loanword that had already been taken into the language in the cases of Masaana and saraapitaj in (20b-c).
a. Laletiro hac
< Spanish Dale tiro. ('Shoot it.')
(un lugar al norte de Desemboque) [a place north of El Desemboque]
b. Masaanaj hac
< Spanish damajuana (demijohn, a kind of large bottle), pluralized with -j
'Damijuanas' [un lugar al oeste de Punta Sargento]
Demijohns [a place west of Punta Sargento]
c. Saraapitaj hac
< Spanish sarape (a blanket), pluralized with suffix -taj
'Sarapes' [un lugar en la isla Tiburón]
Blankets [a location on Tiburon Island]
Some names are obviously derived historically from combinations of common noun and modifiers, but a consonant has been lost or a vowel has been lost or shortened. \({ }^{33}\) See the examples in (21).
\begin{tabular}{|c|c|c|}
\hline a. & Hezitmisoj quij & < heezitim settlement, isoj true \\
\hline & \multicolumn{2}{|l|}{'Poblado Verdadero' [Hermosillo]} \\
\hline & \multicolumn{2}{|l|}{True Settlement [Hermosillo, capital of the state of Sonora]} \\
\hline
\end{tabular}
b. Xpanoháx hac <xepe sea, ano in, from, hax (fresh) water
'Agua Dulce en Agua Salada' [Puerto Libertad]
Fresh Water in Sea Water [Puerto Libertad]
c. cayajzaac cop < caayaj traveling (sea turtles), zaac small
'Viajeros Pequeños' [el mes que corresponde a febrero]
Small Travelers [the month that corresponds to February]

\footnotetext{
\({ }^{33}\) The decisions to write some compounds as separate words and others as single words were not always based on clear phonological data. Phrases and compounds are not distinguished by stress patterns in Seri.
}
\[
\begin{array}{ll}
\text { d. Xpatacl hac } & \text { <xepe sea, itacl 3P-surface } \\
\text { 'Superficie del Mar' [un lugar] } \\
\text { Surface of the Sea [a place] } \\
\text { e. Yecmiihom hac } & \\
\text { 'Donde Está el Yaqui' [un lugar en la Sierra Bacatete, cerca de Guaymas] } \\
\text { Where the Yaqui Is [a place in the Bacatete mountains, near Guaymas] }
\end{array}
\]

A name, like some common nouns themselves, may be composed of a noun and the combining form of an adjectival predicate. These adjectival forms are not independent words and many times do not have the same vowel as the roots of the corresponding independent words (see §13.5.6). Examples of these types of names are given in (22).
a. Hastaacoj cop
< hast mountain, -aacoj big
'Cerro Grande'
Big Mountain [Turner's Island]
c. Hastictoj hac
< hast mountain, -ictoj red
'Cerro Rojo' [un lugar]
Red Mountain [a location]
e. Yaijispoj hac
< yaiij shoal, -ispoj spotted
'Bajo (Banco de Arena) Pintado'
Spotted Shoal [a shoal]
b. Hasixp hac
< haas mesquite, -ixp white
'Mezquite Blanco'
White Mesquite [a location]
d. Hastisol hac
< hast mountain, -isol yellow
‘Cerro Amarillo’ [un lugar]
Yellow Mountain [a location]
f. Ihamoquixp com \(<\) ihamoc its night, -ixp white
'Noche Blanca' [Vía Láctea]
White Night [Milky Way]
g. cayajaacoj cop < caayaj traveling (sea turtles), -aacoj big
'Viajeros Grandes' [el mes que corresponde a marzo]
Large Travelers [the month that corresponds to March]
h. Cailipolaacoj com < caail \({ }^{\circ}\) dry lake bed, -ipol black, -aacoj big
'Playa Negra Grande' [una playa en el desierto al norte de Puerto Peñasco]
Big Black Dry Lake Bed [a dry lake bed north of Puerto Peñasco]
i. Taijiicösxaj hac <itaaij shoreline, -iicösxaj long, tall
'Línea de la Playa Larga' [un lugar en la isla Tiburón]
Long Shoreline [a place on Tiburon Island]
j. Hastiscl cop < hast mountain, -iscl gray
'Cerro Gris' [el cerro en la Punta Sargento]
Gray Mountain [the hill at Punta Sargento]

\subsection*{15.3 Excursus into ethnonyms and language names}

Ethnonyms and the names of ancestral groups in Seri are common nouns or noun phrases based
on common nouns; they pass all the tests for common nouns mentioned earlier. \({ }^{34}\) See the examples in (23).
\begin{tabular}{cll} 
a. & Cmiique (sg.), Comcaac \({ }^{35}\) (pl.) & \begin{tabular}{l} 
'seri, seris' \\
Seri, Seris
\end{tabular} \\
b. & Cocsar (sg./pl.) & \begin{tabular}{l} 
'mexicano(s) no indígena(s)' \\
non-Indian Mexican(s)
\end{tabular} \\
c. & Hapats (sg.), Hapatsoj (pl.) & \begin{tabular}{l} 
'apache, apaches' \\
Apache, Apaches
\end{tabular} \\
d. & Yequim \({ }^{36}\) (sg.), Yectz (pl.) & \begin{tabular}{l} 
'yaqui, yaquis' \\
Yaqui, Yaquis
\end{tabular} \\
e. & Hapaay \(^{37}\) (sg.) & \begin{tabular}{l} 
'persona de la etnia o'odham' \\
O'odham person
\end{tabular}
\end{tabular}
f. Maricaana (sg.), Maricaanaj (pl.) 'norteamericano, norteamericanos' American, Americans \({ }^{38}\)
g. \(\quad\) Casopin \({ }^{39}\) (sg.)
'español'
Spaniard
h. Xnàamotat (pl.)
'los seris que vivían en el área de Guaymas en tiempos anteriores' the Seris who lived near Guaymas in earlier times \({ }^{40}\)

\footnotetext{
\({ }^{34}\) Following Spanish orthographic tradition, such names are written with lower case in popular Seri writing. It should be noted that these are all nouns referring to people; they are not adjectives.
\({ }^{35}\) The word Comcaac in some limited contexts may refer to just any people, but it is most commonly used and understood as referring only to the Seri people. When speaking generically about people today, the expression used is xiica (quih) quiistox \({ }^{\circ}\) things that have life (singular form, ziix (quih) quiisax). (The presence of the intervening definite article varies by context.)
\({ }^{36}\) See Appendix A.
\({ }^{37}\) Pinart (1879:1) had the word Papani for 'the Papago Indians' (i.e., the O'odham people), but no one that I have consulted has recognized that word.
\({ }^{38}\) Another common expression for American is ziix xepe iti quiih (thing sea 3P-on SN-be.FL), plural xiica xepe iti coii. It reportedly refers to the fact that the first Americans arrived to the Seri area by boat.
\({ }^{39}\) See Appendix B.
\({ }^{40}\) This was Band V as described first in E. Moser (1963). While the dictionary committee decided to write this as one word yet with a long vowel in the first syllable, it is quite obviously composed of the word xnaa, meaning south in various expressions, and the word motat, which is a plural conjugated form of the verb moca come. The word is a bit odd; whereas one would expect mocat those who come from, the form motat they were coming from
}

Such nouns do not occur as simple modifiers in larger noun phrases in Seri; hence one cannot say the American government, a Seri boat or the Punta Chueca road except less directly, such as a boat owned by a Seri person, and the road leading to Punta Chueca. \({ }^{41}\)

The names of various other bands, clans, or groups of people are phrases. Example (24) has a prepositional phrase preceding the nominal head, which is not common in ordinary noun phrases in Seri (see chapter 22).
\(\left[\begin{array}{lll}\text { Caail }\end{array}{ }^{\circ} \quad \mathbf{i t i}\right]_{\mathrm{PP}}\)
stamcö
San.Bartolo.Playa 3P-on man-PL
'hombres de la playa San Bartolo'
San Bartolo Playa men

It is far more common for a PP to be associated with a verb (see chapter 22), including the verb of a relative clause modifying a head noun, as in (25).
\begin{tabular}{lllll} 
a. & xiica [ Hast & ano & coii ] & coi \\
thing.PL & San.Esteban.Island & 3P.in & SN-be.FL.PL & the.PL
\end{tabular}

A pattern that may be restricted to ethnonyms is illustrated by the examples in (26) in which a toponym is followed by a common noun, typically Comcaac (Seri) persons or the singular form Cmiique (Seri) person.
appears instead. The editorial committee of the dictionary chose to write this word as a compound (and not as two wors) with a long vowel in the syllable xnaa. Stress occurs on the penultimate syllable of the word.
\({ }^{41}\) That having been said, I should also point out that the phrase NACION COMCAAC ('Seri nation', using the Spanish word for 'nation') occurs on the officially registered flag of the Seri nation. This flag was shown to me on November 22, 2005. I have also observed a slight amount of accomodation to the insistence by English- and Spanish-speakers to form such constructions when Seris are speaking Spanish.
\({ }^{42}\) This is Band VI as described in E. Moser (1963).
\({ }^{43}\) This is Band I, the Seris who lived to the north of Punta Tepopa as described in E. Moser (1963).
\({ }^{44}\) This is Band II as described in E. Moser (1963).
a. Socpatix Comcaac
person/Seri.PL
'las personas seris que vivían en Socpatix'
the Seri people who lived in the area of Socpatix
b. Tahejöc Comcaac

Tiburon.Island person/Seri.PL
'las personas seris de la isla Tiburón (y sus descendientes)'
the Seri people who lived on Tiburon Island (and their descendants) \({ }^{45}\)
An entirely unique type of pattern (so far as is known) has a special form of the toponym. The name for Baja California is Hant Ihiin, but the form Hant Ihiini appears in the name for the Seri people who used to live on that peninsula (Hant Ihiini comcaac). \({ }^{46,47}\) The final \(\mathbf{i}\) in Ihiini is anomalous. Attempts to suggest that it was part of the following noun were soundly rejected by consultants.

Ethnonyms occur with a possessed noun (most commonly iitom with which s/he speaks, a proposition/oblique-oriented deverbal form of Vaaitom speak, see \(\S 14.4\), but also sometimes iimx with which s/he tells, a parallel deverbal form of \(\sqrt{ } \mathbf{a m x}\) tell) to form the name of a language. \({ }^{48}\)


The preceding forms are common; it should be noted that the singular name of the group occurs with a nominalized form of the verb that goes with a singular subject. The construction is

\footnotetext{
\({ }^{45}\) This is Band III as described in E. Moser (1963).
\({ }^{46}\) See Herrera Casanova (2010).
\({ }^{47}\) Consultants made it clear that the extra vowel \(\mathbf{i}\) is not a prefix on the noun comcaac.
\({ }^{48}\) The last vowel of the ethnic group name is often elided; thus the expression for the English language is commonly heard as Maricàn iitom. It should be noted that these expressions are noun phrases referring to the languages; they are not adjectives.
\({ }^{49}\) In 2008 the phrase ziix xepe iti quiih iitom was also overheard in reference to English. See note 38 in this chapter.
}
productive: the expression for French language is Fransés iitom. When the name of the Seri dictionary was being proposed, however, the Seri editorial committee decided on Comcaac quih Yaza quih Hant Ihiip Hac the meaning of the Seri people's speech, where Comcaac quih yaza is composed of a plural noun (Comcaac, Seri people), and a nominalized form of the suppletive plural form of the verb for speaking (Vooza), plus the intervening definite article quih.

Simply the word Cmiique (person/Seri) typically occurs with the verb \(V_{\text {ii }}\) to hear, as in ¡Cmiique hxii! I really know the Seri language! (literally, I hear Seri!), which usually is taken to mean speak it as well as understand it.

\subsection*{15.4 Names for individuals}

Seri people today utilize official names that closely follow Mexican Spanish structure: first given name, second given name, first last name (from father), second last name (from mother). This topic is not explored here. \({ }^{50}\)

Seri children are generally given a baby name when they are very young, usually by their parents. (The Seri word for this kind of name is ihacalim what one plays with.) This name generally ceases to be used at about the time of puberty unless it is not embarrassing. Not everyone may address the child with this name, and certainly not later on in life. A spouse may not know the baby name of his or her partner. These names may be based on baby talk and they may be descriptive. They may be modified versions of the same, changing some sounds into the lateral fricative, for example, as a kind of baby talk. For the most part, they are not considered public information and so they are not presented in detail here. The structure of these names may be similar to that used for outsiders (see (30)-(32) below). Such names are generally not used directly to a person. Some childhood names include those in (28):
a. Inoosj 3P-fingernail ('Uña', Fingernail)
b. Tzocolaate ( \(<\) Spanish chocolate; so named because of the color of his skin)
c. Hataap Coha Abs-mucus 3IO-SN-be Irreg ('Quien Tiene Resfriado', Who Has a Cold)
d. Toohit Imcám Rl-UO-eat SN-N-full ('Come Pero No Está Lleno’, Eats But Isn't Full)
e. Iyocafz 3:3-Dт-bite ('Lo Mordió', S/he Bit It)

\footnotetext{
\({ }^{50}\) The transfer and use of surnames in Seri culture did not follow Mexican custom until quite recently. In earlier times, surnames within a family did not follow any obvious rule. Each child and the parents might all have different surnames, and the surnames sometimes even changed during the individual's lifetime. Surnames were sometimes conferred by a non-Seri Mexican man in the region.
}
f. Lapisiim (baby talk < saraapi caziim blanket SN-pleasant)
g. Tosni Cöcatax pelican 3IO-SN-go ('Quien Anda Como Pelícano', Who Goes Like a Pelican)
h. Isla Cöcahemej 3P-outer.ear 3IO-SN-sail ('Quien Zarpa con su Oreja’, Who Sails With His/Her Ear)
i. Yeen Captj 3P-face SN-wide ('Cara Ancha’, Wide Face)
j. Copas ('Madreperla’, Pearl Oyster; so named because the child's teeth appeared in the gums like little pearl oysters) \({ }^{51}\)
k. Papxoj (related to the verb \(\sqrt{ }\) apxoj blow, as he reacted in a cute way when someone would blow in his ear).
1. Tiiso (<Spanish mestizo)

Other nicknames may be coined later during one's youth. These are typically common nouns, verbs, or phrases. These may last for a lifetime, or they may be dropped in favor of the simple Spanish given name. The structure of names is discussed in more detail below.

Examples provided by Moser (2003) \({ }^{52}\) include most of those given in (29), which demonstrate the same variety of formations as described for place names shown above. (The translations given here are slightly less literal than others given in this section.) Similar nicknames are given to pets. Of course, there is much that should be written about the anthropological aspects of naming in Seri culture, including the role of taboo and resulting changes to the lexicon. \({ }^{53}\) Important or memorable figures in Seri history also have special names, and it is unlikely that they were their childhood nicknames, although in some cases that may be true.

\footnotetext{
a. Cöquimaxp ('Rosa Clara’, Light Pink) [a small pink-skinned man killed in a famous attack by a sea monster on a group of people traveling on reed balsas] \({ }^{54}\)
}
b. Hapetla ('Impenetrable', Who Was Impenetrable) [an infamous man from Seri history]

\footnotetext{
\({ }^{51}\) This example is from C. Marlett (2003).
\({ }^{52}\) M. Moser (2003). Various examples in this chapter are cited from this unpublished work. Explanations for the nicknames are given there.
\({ }^{53}\) These topics were touched on in M. Moser (2003).
\({ }^{54}\) See the Muerte_Cöquimaxp text.
}
c. Cmaam Quiscama ('Mujer que Tenía Balsa', Woman Who Had a Reed Boat) [a woman whose behavior was like a man's in some ways]
d. Coyote Iguana \({ }^{55}\) [a famous Seri leader, husband of the kidnapped Lola Casanova] \({ }^{56}\)
e. Juan Colovís [a notorious killer from the past] \({ }^{57}\)
f. Hant Ihiisax (Vida de la Tierra, Earth's Life) [a notorious killer in the past] \({ }^{58}\)
g. Ziix Coojoj (Cosa Baja, Short Thing) [one of the notorious gang called ctamcö catl wild men]
h. Hast Cosni (Cerro Cosni, Cosni Mountain) [Pedro Méndez, a Seri man who wore a hat that had a pointed crown that resembled the pointed hill called Hast Cosni, south of Desemboque)]

The names in (30)-(32) have been given to outsiders. \({ }^{59}\) Such names are more likely to be straightforward and descriptive. Like Seri nicknames, they may include Spanish words. They are usually not meant to give offense.
(30) Names related to a physical characteristic
a. Ilít Ctocnij ('Cabeza Redonda’, Round Head) [a certain American]
b. Naapxa Iif ('Nariz de Zopilote', Turkey Vulture Nose) [a certain Mexican]
c. Yax Caacoj ('Panza Grande', Big Belly) [a certain Mexican]
d. Moosni Ilít ('Cabeza de Caguama', Turtle Head) [Edward Moser; so named because of the buzz haircut with which he arrived in 1951]
e. Iteen Csaamij ('Boca Chueca', Crooked Mouth)
f. Maricaana Cacösxaj ('Norteamericano Alto', Tall American) [Alexander Russell]
g. Ilít Cozazni ('Cabello Enredado’,Tangled Hair) [Scott Ryerson]

\footnotetext{
\({ }^{55}\) Coyote Iguana is from Spanish, of course. One consultant said that this name arose because he would turn himself into a coyote or an iguana as he was being shot at by Mexican soldiers.
\({ }^{56}\) See Lowell (1970).
\({ }^{57}\) Consultants suggested that the name Colovís was originally Galavís.
\({ }^{58}\) The name is not easy to explain, but somehow this person was committing such atrocities that the life of the Earth itself was being affected, according to one consultant.
\({ }^{59}\) Many of these examples are also from Moser (2003).
}
h. Maricaana Quimaaxat ('Norteamericano Gris Parduzco', Gray/brown American) [Some say this was the first American to visit the Seris, a person not yet identified with certainty historically; his skin - or his clothing -was neither very white nor very dark. It may be J.W. McGee, who wore khakicolored clothing.]
i. Ctam Inol Caaitic ('Hombre con Dedos Blandos', Man With Soft Fingers) [a certain American who had no bones in his thumbs]
j. Insitjc Cooxp ('Escápula Blanca', White Shoulder Blade) [William N. Smith]
(31) Name related to something the person did or had happen to him, or a behavior
a. Santiago Roocö ('Santiago Loco', Crazy Jim) [James Hills]
b. Cmaam Coostim ('Mujer que Canta/Cantaba', Singing Woman) [Mary Moser; she had memorized a Seri song before first visiting the area]
c. Aal Cöhacazit ('Cuya Esposa Le Fue Raptada', Whose Wife Was Abducted from Him) [David Burckhalter] \({ }^{60}\)
d. Ctam Hehe Iyat Ctamtim ('Hombre que Cortaba las Puntas de las Plantas', Plant Tip Picker Man) [botanist Richard S. Felger]
e. Maricaana Coojöquim (Barking American) [Edward H. Davis; \({ }^{61}\) so named because he would bark like a dog as he threw pyrotechnic material into a campfire in order to impress the Seris]
f. Hant Coaaxoj ('Camaleón Cornudo', Horned Lizard) [Gary Nabhan, researcher of reptiles]
g. Luis Queenelim ('Luis que Gritaba', Luis the Yeller) [a certain Mexican who spoke very loudly]
h. Siip Imitóm ('Joven Sin Dinero', Young Man Without Money) [Richard White, who first visited the area as a college student and didn't buy much]
i. Cmaacoj Hap ('Viejo Venado Bura', Old Man Mule Deer) [a certain American]
j. Maricaana Tzampú ('Norteamericano Champú', American Shampoo) [a certain American; the second word is not a loanword in Seri]

\footnotetext{
\({ }^{60}\) See the explanation for this humorous name in Burckhalter (1999:10-11).
\({ }^{61}\) Davis (1862-1951) collected material for American museums and visited the Seri people in the 1920s and 1930s. His field notes, papers, and photographs may be found at the Huntington Free Library (Cornell University), the San Diego Historical Society, the National Museum of the American Indian, and Smithsonian Institution.
}

Name related to something the person said
a. Uno No Más (No More Than One, from Spanish) [Kenneth Moorhead]
b. Apaz Apaz (His Grandfather His Grandfather) [Dr. Irving Davis; the name is a repetition of the word for his paternal grandfather; this person's grandfather was Maricaana Coojöquim (31e).]
c. Cmaacoj No Poom (Old Man "no bumps") [a certain American who drove carefully; note the inclusion of Spanish "no"]
d. Ya Se Van (They Are Already Going, from Spanish) [a Mexican storekeeper's assistant]
M. Moser (2003) also reports that "one of the former naming customs of the Seri people gives a clue to the ancestral area of a man and his family on his father's side. A male dog claimed by a man was usually given the name of a certain mountain or location in the ancestral area of the owner. The owner of such a dog is called 'the father of - ' (dog's geography-based name)." Examples (with explanations from M. Moser 2003) are given in (33):
a. Camota quih ai
the.FL 3P-father.ME
'Padre de Camota' [Manuel Encinas]
Camota's father [Camota was the name of Manuel Encinas' dog, named for a mountain near Pozo Peña, part of Encina's ancestral area.]
b. Hast Haquim quih ai
'Padre de Hast Haquim' [Antonio Herrera]
Hast Haquim's father [Hast Haquim was Antonio Herrera's dog, named for a mountain on Tiburon Island.]
c. Xaasj Ihamoc quih ai
'Padre de Xaasj Ihamoc' [Santiago Blanco]
Xaasj Ihámoc's father [Xaasj Ihamoc was Santo Blanco's dog, named for an area known by that name because of a large number of sahueso cactus (xaasj) found there.]

This pattern also appears in the name of an American (David Yetman) who came to the area to visit with his very large and impressive dog: Haxz \({ }^{\circ}\) Caacoj quih Ai (dog SN-big the.Fl 3Pfather.ME).

\subsection*{15.5 Embellishment}

In some cases, a common noun or noun phrase may precede the name and so "embellish" it. \({ }^{62}\) However, the construction consisting of noun as embellishment plus name is not always easily distinguished from noun plus name used as integrated appositive; see \(\S 15.6\) below.

The use of cmaacoj old man before a name shows respect, as does cmiique Seri person, the latter being apparently more respectful than the former and also less indicative of age. The word cmiique is used with names of men; before names of women it is more common to use cmiique cmaam Seri woman. Some examples of embellishment include those in (34).
a. emiique Roberto
person/Seri
Seri Roberto
c. cmaacoj Antonio
old.man
Don Antonio
b. comcaii Sara
old.woman
Doña Sara
d. cocsar Luis
Mexican
Luis the Mexican

There are culturally important kinds of embellishments that require more explanation. These are expressions before a name to indicate that the person is deceased. The simplest type (but perhaps the least used) is the simple noun ziix before the name, with a demonstrative: ziix Pedro ticom (thing Pedro \(\mathrm{Md}-\mathrm{Hz}\) ). If the person in question died a long time back in history, the expression is more elaborate, as shown in (35).

> a. ziix cmiique caii ctam Andrés
> thing person/Seri mature man
> 'difunto Andrés (desde hace mucho tiempo)'
> long ago deceased Seri male Andrés RRR
> b. ziix cmiique caii cmaam Luisa
> thing person/Seri mature woman
> 'difunta Luisa (desde hace mucho tiempo)'
> long ago deceased Seri female Luisa RRR

If the deceased was a very old and frail person at the time of death, a simpler expression is used, as shown in (36).

\footnotetext{
\({ }^{62}\) Some of these examples are from M. Moser (2003). More recent examples are observed in unpublished essays by Francisco Xavier Moreno Herrera about famous men of the past.The term "embellish" comes from Huddleston and Pullum (2002:520).
}
a. ziix ctam Porfirio
b. ziix cmaam María
thing woman
'difunta anciana María'
deceased old woman María

If the deceased was an adult, prototypically married and perhaps even a grandparent, the word caaixaj strong is included, as in (37).
(37)
\begin{tabular}{ll} 
a. & ziix caaixaj Roberto \\
thing SN-strong \\
& 'difunto Roberto' \\
deceased adult Roberto RRR \\
b. & ziix caaixaj quipnaail Ramona \\
& thing SN-strong SN-HAVE-skirt \\
& 'difunta Ramona' \\
& deceased adult Ramona RRR
\end{tabular}

If the deceased was a child, a youth, a young person, a young adult in his or her prime, or even someone who was older but unmarried, the word cmotomn weak is included, as in (38).
a. ziix cmotomn Pedro
thing SN-weak
'difunto joven Pedro'
deceased young person Pedro
b. ziix cmotomn quipnaail María
thing SN-weak SN-HAVE-skirt
'difunta jovencita María'
deceased María
If the deceased was a newborn, the phrase ziix quixpjaj (thing SN-soft.like.gelatin) is used. In this case the child would not have received a name yet, and so no name follows the phrase.

The embellishment or the integrated appositive construction (see §15.6) may be the source for an emerging construction in which a common noun precedes a name as an "appellation". \({ }^{63}\) See the examples in (39).
(39) a. Quihehe Molina 'Gobernador Molina', Governor Molina (where Molina is a last name)
b. Quihehe Saúl 'Gobernador Saúl', Governor Saúl (where Saúl is a first name)
c. hermaano Manuel 'hermano Manuel', brother Manuel (referring to a male

\footnotetext{
\({ }^{63}\) Huddleston and Pullum (2002:519).
}
believer in the Christian faith) \({ }^{64}\)
d. hermaana María 'hermana María', sister María (referring to a female believer in the Christian faith)

\subsection*{15.6 Names as appositive modifiers}

Names may be used in a DP as integrated appositives \({ }^{65}\) and may be either semantically restrictive or nonrestrictive. The name is intonationally not separate from the common noun. Each is contrasted in (40)-(44) with a different construction - considered much more natural when two names are involved - in which the name comes first and is followed by an appositional noun phrase set off with a slight intonational break.
a. hizez
René
1P-ygr.brother.ME
'mi hermano menor, René'
my younger brother René
a. Pedro quih azcz René the.FL 3P-ygr.brother.ME
'René, el hermano menor de Pedro'
Pedro's younger brother René
b. René, hizcz
'René, mi hermano menor' René, my younger brother
b. René, Pedro quih azcz
'René, el hermano menor de Pedro'
René, Pedro's younger brother
a. René quih (cmaacoj) ai José Ángel
the.Fl old.man 3P-father.ME
'José Ángel, el padre de René'
René's father José Angel
b. José Ángel, René quih ai
'José Ángel, el padre de René'
José Ángel, René's father
a. Martín quih oyacj Juan
the.FL 3P-ON-call.sibling
'Juan, el hermano de Martín'
Martin's brother Juan

\footnotetext{
\({ }^{64}\) This example and the following are, of course, borrowings from Spanish, used with great frequency in the church in the Seri villages. As shown above, the plural form hermaanoj is used for mixed groups as well as all male groups.
\({ }^{65}\) On integrated appositives, see Huddleston and Pullum (2002:447).
}
b. Juan, Martín quih oyacj
'Juan, el hermano de Martín'
Juan, Martín's brother
a. Luis quih yaazi \({ }^{\circ}\) José
b. José, Luis quih yaazi
the.FL his.child
'José, el hijo de Luis’ 'José, el hijo de Luis'
Luis's son José
José, Luis's son
(44)

Each of the examples in (40)-(44) is followed by a definite article when used as the argument of a verb. It should be noted, however, that the name followed by an appositive does not occur with an article: *José quij, Luis quih yaazi (José, Luis 's son).

A common noun is often modified by a short relative clause headed by the deverbal noun hapáh (SN-Pv-say), as shown in (45).
a. heezitim caacoj [ Jericó hapáh] quij
city SN-big SN-Pv-say the.CM
'la ciudad de Jericó'
the city of Jericho (NTT, Lk 18:35)
b. cmiique caii [Oficj Cooil hapáh ] quih
Seri mature 3P-ON-wear.shirt SN-blue/green SN-Pv-say the.Fl
'el adulto seri llamado "Camisa Azul/Verde""
the adult Seri man named "Blue/Green Shirt" (Muerte_Cöquimaxp_26.1)
c. hant [Galilea hapáh ] hac
land/place SN-Pv-say the.LC
'el lugar llamado Galilea'
the land of Galilee (NTt, nt 2:22)

This construction may also occur without the head noun, resulting in a construction where the name appears immediately followed by hapáh, as in (46).
a. [Cofteecöl Iifa hapáh ] quih

San.Esteban.Island 3P-pensinsula SN-PV-say the.VT
'el lugar llamado "Punta de Cofteecöl""
the (place) called "Cofteecöl Peninsula" (Muerte_Cöquimaxp_31)
b. [ Heeesam Yapóticol hapáh ] hac seahorse 3P-PON-duck.a.blow-IMPF SN-PV-say the.LC 'el lugar llamado "Donde el Hipocampo Eludió""
the (place) called "Where Seahorse Ducked" (Hipocampo_10.3)

\subsection*{15.7 Nominals in vocative function}

When a nominal is used in a vocative function, it is always presented without a definite article. In this way it is systematically different from a definite nominal when it occurs as a verb argument. \({ }^{66}\) This will be illustrated in the examples below.

The kinds of nominals that are used in vocative function in Seri include:
(47) Personal names: María, Aurora, Pedro, Xavier, Alfredo.
(48) Kin terms: hita my mother, hiiquet \({ }^{\circ}\) my child (FE), hoyácalcam my brothers and sisters, although the term may have wider reference to include non-relatives who are friends, ihyaazi \({ }^{\circ}\) my child (ME), hii my father (ME) [the expression is not commonly used now as a vocative; see cmaacoj in (51)]; terms from Spanish like apá, mamá, and nana ('grandma') are also beginning to be used.
(49) General terms: ctamcö men, \({ }^{67}\) cmajiic women, zixquisiil \({ }^{\circ}\) or quisiil \({ }^{\circ}\) boy \(/\) girl, xicaquiziil boys/girls, hermaanoj members of the Christian faith (male or female). \({ }^{68}\)
(50) Occupational terms: quihehe (SN-have-stick) or quihehe caacoj (SN-haVe-stick SN-big) governor; this is not a common type of vocative. \({ }^{69}\)
(51) TERMS OF ENDEARMENT: cmaacoj old man (referring to one's husband, even if he is very young; or to one's father), comcaii old woman (referring to one's wife, even if she is very young; it is not used to refer to one's mother); otherwise this is not a common type; some consultants do not even use the preceding terms in the way described. One person was overheard in 2004 referring to his wife as mamá \({ }^{70}\)

\footnotetext{
\({ }^{66}\) Such a difference is claimed to be universal (Anderson 2004:458).
\({ }^{67}\) The singular form ctam man is not commonly used in a vocative function, nor is the singular form cmaam woman.
\({ }^{68}\) This term usually has been limited to those who are perceived to be members of the particular denomination that exists in the Seri towns, namely the Iglesia Apostólica de la Fe en Cristo Jesús.
\({ }^{69}\) Another reported possibility is ziix quih cöcacoat (thing the.FL 3IO-SN-cause.know or ziix hapaspoj \({ }^{\circ}\) cöcacoaat (thing paper 3IO-SN-cause.know) teacher, but these are not commonly used since school children are typically taught in Spanish and so use maestro or maestra. There are no widely used or accepted terms in Seri for the occupations of pastor (of the local church), or elder (as in the Consejo de Ancianos 'Council of Elders', which probably reflects the fact that these are new roles); the Spanish terms are used.
\({ }^{70}\) The term hamiigo (from Spanish amigo 'friend') is used by Coyote in one story (Pinacate_Coyote 06) in a vocative function as well as referentially (by Coyote) to refer to the stinkbug that was the subject of interest and intended ingestion. The term has not been generally used in Seri culture.
}
(52) SECOND PERSON PRONOUN: Phrases like "you who are inside the house", where some modifier occurs with the second person pronoun, sometimes occur as vocatives in elicited materials.

Status terms: Nothing equivalent to Sir or Señor exists. If one enters a room and sees a person that the speaker does not recognize, a respectful way to address that person would be ziix quiisax cmaam hizac iti quiij (thing SN-have.life female/woman Px-Lc 3P-on SN-sit) female person who is here or ziix quiisax ctam hizac iti quiij (thing SN-have.life male/man Px-Lc 3P-on SN-sit) male person who is here. (The use of these phrases has not been observed, but politeness does involve lengthy circumlocutions in the language.)
(54) Derogatory terms: Certainly there are ways to speak offensively to a person, but the use of terms like "idiot", "fool", or worse, etc. is not one of them. Offensive terms may be constructed following the pattern discussed in the following paragraph, but (apparently) they are not used in a vocative function.

Playful names and nicknames: One might use a person's ihacaalim (see §15.2) in a vocative function, if it is not offensive and if one has a proper relationship with the person. A person might also construct a name on the spot for speaking to someone playfully, such as Iif Caacoj Big Nose (3P-nose SN-big); however, the kin relationship must be a certain one and only women may speak to men this way. Men cannot speak in this way to men or to women, even in response to such a gesture. A grandfather may address a grandson with a special nickname. Such a nickname may refer to a physical characteristic, but it must not refer to any kind of physical defect. These names are not given or taken offensively. Nicknames for non-Seris may be more frequently used this way. It is reported that within a family, nicknames for the parents often arise through the initial attempts at speech by the eldest child. The nicknames then become used by the other children when speaking to their parents. Such nicknames are often simplifications of a Spanish given name or may simply be a lexification of part of the toddler's speech.

The most common position for vocatives is at the beginning of the sentence, although sentence-final position is quite acceptable. See examples (56)-(58).
(56) Hinyaac, hant haa xoofp.

1P-older.brother.ME year there Em-arrive
'Hermano mayor, el año ha terminado.'
Older brother, the year has ended. (Dos_Hermanos_106)
Pedro, ¿áz intaho?
what? 2SGS-Rl-see
'Pedro, ¿qué viste?'
Pedro, what did you see? RRR
(58) ¡Moha, \(\quad\) hiiquet \(^{\circ}\) !

TwD-Im-move my.child.FE
‘¡Ven, mi hijo/a!’
Come, my child! RRR
Sentence-medial position is judged as highly unnatural or ungrammatical, however, as shown in (59)-(60).
(59) * ¿Áz (-ya), Pedro, intaho? what? QM 2SGS-Rl-see
(‘¿Qué viste, Pedro?) (What, Pedro, did you see?)
(60) ? Hast hipquij, Lorenzo, ;hoocta! stone Px-Cм Im-look.at
‘¡Mira, Lorenzo, esta piedra!’
Look, Lorenzo, at this stone! \({ }^{71}\)

\subsection*{15.8 Indirect Reference}

It is quite common for circumlocutions (or what appear to be such) to be used to refer to people. Circumlocutions are usually considered more respectful than directly mentioning the name of someone (more so when the person is died, as explained below, but also when the person is living). They also may replace the simple kinship term that would otherwise be applied. Some examples are given in (61).
a. \(\quad\) him quiiquet
1SGDO SN-Tr-pregnant.withthe.Cm
'mi madre'
my mother

Very specialized noun phrases are used to avoid mention of a name when one is talking about someone who has recently deceased, to show respect for that person as expected in Seri

\footnotetext{
\({ }^{71}\) This sentence, while not the most felicitous for consultants, was judged to be far better than example (59).
}
culture. These customs are still practiced. See the examples in (62).
(62) a. ziix Liti miiha」 cmaam com
thing his/her.parent female the. Hz
'su madre fallecida'
her deceased mother (Moser 2003)
b. ziix Litleen oaah」 com
thing 3P-palm 3P-ON-put.FL the.Hz
'su hijo/a fallecido'
his/her deceased child (Moser 2003)
c. ziix cmotomn ctam com
thing SN-weak male the. Hz
'el joven fallecido'
the deceased young man (Moser 2003)
d. ziix caaixaj com
thing SN-strong the.Hz
'la persona fallecida'
the deceased person [person older than speaker] (Moser 2003)

\section*{16. Pronouns}

Five types of overt pronouns are presented in this chapter: personal (§16.1), demonstrative ( \(\S 16.2\) ), quantitative ( \(\S 16.3\) ), interrogative ( \(\S 16.4\) ), and locative ( \(\S 16.5\) ). The reflexive pronouns, which are a subtype of personal pronoun, are discussed in \(\S 11.2 .{ }^{1}\) Personal pronouns are distinguished from the pronominal reference in the verb morphology (see §17.1.2). The proinfinitival complement seehe is discussed in §12.1.2.1.

Pronouns may be analyzed as determiners that seldom take a complement. \({ }^{2}\) It is shown in §10.1 that most pronouns pattern with common determiner phrases in that they do not occur as predicates in the verbless predicate nominal construction. (The exceptions are the interrogative pronouns.)

The use of a personal or demonstrative pronoun generally has a contrastive or focus function if the pronoun is coreferent with a person inflection on the finite verb or possessed noun. \({ }^{3}\) (Third person inflection is not necessarily overt, however; see §17.1.2.1.)
(1) \(\underline{\mathrm{He}}\) hiixz iha.

1Pro 1P-pet Dcl
'La mascota es míA.'
It is MY pet. RMH_08-24-07_90a
(2) Me nyaaco cop caacoj iha. 2Pro 2P-house the.Vt SN-big Dcl
'Tu casa es grande.'
YOUR house is big. (ALIM 76) RMH_08-24-07_90b
(3) Tiix smatax aha.

DDS Ir.Id-N-go Aux-DCL
'ÉSE no debe ir.'
THAT ONE shouldn't go. RMH_08-24-07_900

\subsection*{16.1 Personal pronouns}

The basic set of personal pronouns is given in Table 16.1. While the table includes reflexive pro-

\footnotetext{
\({ }^{1}\) The 2005 dictionary also includes indefinite pronouns and "complex" demonstrative pronouns. These are taken in this grammar as instances of the determiners functioning as fused heads; see \(\S 4.3 .1\) for the former and \(\S 4.3 .2\) for the latter.
\({ }^{2}\) See Adger (2003:256). Huddleston and Pullum (2002:327) analyze pronouns as a subclass of nouns in English.
\({ }^{3}\) Other ways to indicate contrastive and emphatic focus are discussed in \(\S 24.2 .2, \S 24.2 .3\), and \(\S 24.2 .4\). See also §16.2.4.
}
nouns as well as the simple pronouns and the possessive pronouns, this section deals only with the latter two types. Reflexive pronouns (etymologically related to the noun for body) are discussed in §11.2.

The simple personal pronouns do not display case although they occur in a variety of syntactic contexts. They do not display number; all may have either singular or plural referents. \({ }^{4}\) The number is almost always determinable from the verb or noun with which they are associated since number is an inflectional feature of verbs and nouns. The first person pronoun does not distinguish (nor does the grammar anywhere distinguish) between inclusive and exclusive first person.

A personal pronoun may be modified by a relative clause. Examples are given in the relevant sections, \(\S 16.1 .1\) and \(\S 16.1 .2\) as well as \(\S 8.4 .1\) on relative clauses. An analysis similar to this is proposed for the examples with the expletive phrases discussed in §16.1.3.

The (typically stressed) pronouns he and me should not be confused with the (unstressed) indirect object inflection on the verb, which is nearly homophonous but entirely different in

Table 16.1: Personal Pronouns
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow{3}{*}{First person} & \multicolumn{2}{|c|}{Simple} & Reflexive & Possessive \\
\hline & he & Sg. & hisoj & (i)hyaa* \\
\hline & & Pl. & hisolca & hoyaat \\
\hline Emphatic & hatee & Sg. & & hatyaa \(\dagger\) \\
\hline \multirow[t]{2}{*}{Second person} & me & Sg. & misoj & (i)nyaa \\
\hline & & Pl. & misolca & moyaat \\
\hline \multirow[t]{2}{*}{Third person (human)} & ee & Sg. & isoj & yaa \\
\hline & & Pl . & isolca & yaat \\
\hline Unspecified & & Sg. & quisoj & \\
\hline
\end{tabular}
* The parenthesized i occurs under certain phonological conditions; see §27.1.1
\(\dagger\) The plural counterpart, hatoyaat, does not appear to exist.

\footnotetext{
\({ }^{4}\) Fieldwork in 2008 by Maria Alfonsa Larios Santacruz has revealed that some speakers (all under 50, but certainly including completely fluent speakers) are using a plural suffix on pronouns, such that first person plural is he\(\mathbf{t a j}\), and second person plural is me-taj. I had never heard these forms, and when I inquired about them with other speakers, the response was that they do not exist and that they had not heard them. On a later trip a fluent speaker (a woman married to a fluent speaker and raising her children as speakers) used the pronoun me-taj in a conversation with me. Probably if I had not been alerted to the existence of such a pronoun by Ms. Larios, I would not
}
distribution (see §17.1.2.4).

\subsection*{16.1.1 First person he}

The examples in this section illustrate the usage of the first person pronoun he with both singular and plural reference in a variety of constructions. \({ }^{5}\)

As subject of a verbless predicative construction (see §10.1):
\begin{tabular}{lll} 
(4) He cmaam iha. & (5) & He cmajiic iha. \\
1PRO woman DCL & & 1PRO woman.PL DCL \\
& 'Soy mujer.' & \\
& 'Somos mujeres.'
\end{tabular}

As subject of a predicative construction using a deverbal noun (see §10.4):
(6) He Hezitmisoj quij ano moca ha.

1Pro Hermosillo the.Cm 3P.in/from Twd-SN-move Dcl
'Vengo de Hermosillo.'
I have come from Hermosillo. (DS2005, ano) Op_2-2-07_035
(7) He imiipla caaitom iha.

1Pro 3P-PON-bad SN-speak Dcl
'Lo dije incorrectamente.'
I misspoke. \({ }^{6}\) (DS2005, caaitom) OP_2-2-07_036
(8) He cmaax \({ }^{\circ}\) ziix coqueht \({ }^{\circ}\) sacaalam caha.

1Pro now ball Ir.Id-play.with.Pl Aux.SN-DCL
'Ahora vamos a jugar béisbol.'
We're going to play baseball now. \({ }^{7}\) Op_2-2-07_037
As subject of a finite verb (cross-referenced by morphology on the verb, see §17.1.2.1, as shown by the underscored part of the verb):
(9) He hasalca coi ah(a), cohpyitalhaa iiha.

1Pro basket-Pl the.Pl FOC 3IO-1SGS.In-Dt-buy/sell only
'Yo vendí sólo las coritas.'
I sold only the flat baskets. (DS2005, ah) RmH_08-04-07_148

\footnotetext{
even have noticed it. Later that day, the woman's parents categorically denied the grammaticality of such a form, but her younger brother told me that it was indeed used by people of his generation.
\({ }^{5}\) The pronoun he contrasts, it seems, in vowel length with the noun hee jackrabbit. The difference is not very great.
\({ }^{6}\) This may also be said when one inadvertently says an obscenity.
\({ }^{7}\) This phrase, while seemingly very general, is taken as referring to baseball by default. If one were referring to soccer or volleyball, different verbs would be used.
}
```

(10) He hptahahásaquim ma x, ihxoqueepe.
1Pro 1SGS.In-RL-Pv-comb.hair.of DS UT 1SGS.Tr-Em-like
'A MÍ me gusta cuando me peinan.'
I like/liked it when my hair is/was combed (when I am helped to comb my hair).
(DS2005, ah-) OP_2-2-07_039
(11) He hesen hatatoomlcam ma x, ...
1Pro ironwood 1PlS-RL-cause.be.cut-Pl DS UT
'NoSOTROS cortamos palo fierro ...'
WE cut ironwood, ... (DS2005, cheet) OP_2-2-07_040 RMH_08-04-07_149

```

The presence of the pronoun in such examples is typically taken as contrastive. Examples without the pronoun are numerous in this grammar and are not presented here.

As direct object of a finite or nominalized verb (cross-referenced by morphology on the verb, see \(\S 17.1 .2 .3\), as shown by the underscored part of the verb), with different nuances indicated by the presence or absence of the pronouns: \({ }^{8}\)
(12) a. He hin yomaxpx.

1Pro 1SgDO Dt-N-mad.at
'No estaba enojado/a CONMIGO.'
S/he wasn't mad at ME. (or S/he doesn't scold me. or S/he didn't scold ME.)
(contrastive) (DS2005, caafin) OP_2-2-07_042
b. Hin yomaxpx.

1 SGDO DT-N-mad.at
'No estaba enojado/a conmigo.'
She wasn't mad at me. RMH_10-15-07_74a

\title{
a. He taax hin satoosiploj aha.
}

1Pro DDP 1SGDO Ir.Id-photograph-Pl Aux-DcL
'Me van a fotografiar AQUÉLLOS/AQUELLAS.'
THOSE will photograph me. RMH_10-15-07_74b (contrastive focus, I choose them)
b. Taax he hin satoosiploj aha.

DDP 1Pro 1SGDO Ir.Id-photograph-Pl Aux-Dcl
'Me fotografián A Mí.'
They will photograph ME. (contrastive focus) RMH_10-15-07_74c
c. Taax hin satoosiploj
aha.
DDP 1SGDO Ir.Id-photograph-PL Aux-DCL
'Me van a fotografiar AQUÉLLOS/AQUELLAS.'
THOSE will photograph me. RMH_10-15-07_74d

\footnotetext{
\({ }^{8}\) Direct object inflection is written as a separate word in the practical orthography.
}
\begin{tabular}{|c|c|}
\hline \multirow[t]{4}{*}{d.} & He hin satoosiploj aha. \\
\hline & 1Pro 1SgDO Ir.Id-photograph-Pl Aux-Dcl \\
\hline & 'Me van a fotografiar A Mí.' \\
\hline & They will photograph ME. (contrastive focus) RMH_10-15-07_74e \\
\hline \multirow[t]{4}{*}{e.} & Hin satoosiploj aha. \\
\hline & 1SGDO Ir.Id-photograph-Pl Aux-DCL \\
\hline & 'Me van a fotografiar.' \\
\hline & They will photograph me. RMH_10-15-07_74f \\
\hline
\end{tabular}
(14) He hizi yooho.

1Pro 1PLDO Dt-see
'Nos vio/ve a NOSOTROS.'
S/he saw/sees US. (contrastive) OP_2-2-07_043
The pronoun may also emphasize an indirect object that is already marked on the verb through the indirect object morphology (§17.1.2.4).
(15) He pac he camjc.

1Pro some 1IO Im-bring
'Tráeme algunos A Mí.'
Bring some TO ME! RMH_08-04-07_199
As possessor of a noun or proposition/oblique-oriented deverbal noun (cross-referenced by morphology on the noun):
(16) he hiime hac

1Pro 1P-home the .LC
'MI hogar'
MY home op_2-2-07_044
(17) he hiiquet \({ }^{\circ}\) quih

1Pro my.child the.Fl
'MI hijo/a' (es mujer que habla)
MY child (woman speaking) (DS2005, caanim) OP_2-2-07_045
(18) He hihihiimet quih hant yohanl.

1Pro 1P-PON-be.married the.Fl year Dt-ten
'Yo tengo diez años de casado.'
I have been married for ten years. More literally, My being married has been for ten
years. (DS2005, chanl) OP_2-2-07_046
(19) he hayaza hac

1Pro 1PlP-PON-speak.Pl the.LC
'NUESTRA lengua'
OUR language (Elicited aso in 1 Th 2:4) OP_2-2-07_047

The presence of the pronoun in such examples is typically taken as contrastive. Examples without the pronoun are found elsewhere in the grammar and are not presented here.

The pronoun may be modified by an NP. The analysis is presumed to be that shown in Figure 16.1 - an internally-headed relative clause with a predicate nominal (see §8.4.1). The following examples illustrate:
(20) He cmajiic, he soosi caha.

1Pro woman.Pl 1Pro Ir.Id-sing-Pl Aux.SN-Dcl
'Vamos a cantar, nosotras las mujeres.'
We women will sing. Op_2-2-07_048
(21) He cmajiic hascmalx aha. \({ }^{9}\)

1Pro woman.Pl 1PlS-Ir.Id-N-go.Pl Aux-Dcl
'No vamos a ir, nosotras las mujeres.'
We women will not go. Op_-2--07_049
(22) He comcaac hatcooo, ox hamimjöc.

1Pro person/Seri.Pl 1PLS-Rl-all thus 1PlS-think-Pl
'Así pensamos todos los seris.'
That's how all of us Seris think. OP_2-2-07_050
The pronoun may be modified by a relative clause (see §8.4.1).
(23) He [hihaaitloj quih coaatjö ] ox hamooctam.

1Pro 1P-blood-Pl the.Fl SN-sweet thus 1PlS-Px-look.at-Pl
'Así lo vemos los de nosotros que somos diabéticos.'
That's how those of us who are diabetics (more literally, we whose blood is sweet)
look at it. OP_2--207_051

Figure 16.1: Pronoun as head of relative clause


\footnotetext{
\({ }^{9}\) The same sentence but without the overt pronoun he was judged ungrammatical.
}
(24) He cacöla hant hac án cöicoizct 1Pro SN-tall/long.PL place the.LC 3P.interior 3IO-Inf.In-enter.PL
hascmaaj aha.
1PlS-Ir.ID-N-know-Pl Aux-Dcl
'Los de nosotros que somos altos no podremos entrarlo.'
We who are tall won't be able to enter it. RмH_08-24-07_91
The pronoun may also occur in construction with the quantifying pronoun coox all or the adjective tazo one. Two examples are given here. For the analysis of this type of example, see §8.5.
\begin{tabular}{llll} 
He coox & oo & siilx & caha. \\
1Pro all DL & Ir.ID-go-PL & Aux.SN-DCL \\
'Todos iremos.' \\
We will all go. & op_2-2-07_054
\end{tabular}
He tazo ipi imatax iha.
1Pro one INTNS SN-N-go DCL
'Ninguno de nosotros ha ido.'
Not one of us went. OP \(2-2-07-055\)

The pronoun may be followed by a name, taken as coreferent. In such a situation, it is common for the pronoun to be repeated after the Pronoun-Name sequence.
He Pablo he ma hsaaipot haa hi.
1Pro \(\quad\) 1PRO \(\quad\) 2SGDO 1SGS.TR-Ir.ID-pay AUX DCL
'Yo, Pablo, te pagaré.'
I, Paul, will pay you. (Phm 1:19) RMH_10-15-07_75

\subsection*{16.1.2 Second person me}

The examples in this section illustrate the usage of the second person pronoun me with both singular and plural reference in a variety of constructions.

As subject of a verbless predicative construction (§10.1):
\begin{tabular}{lllllll} 
(28) & Me siip iha. & (29) & Me siipilc & quih & coocj & iha. \\
2PRO young.man DCL & & 2PRO young.man-PL the.FL & SN-two DCL \\
& 'Eres un joven.' & OP_2-2-07_057 & & 'Ustedes son dos jóvenes.' & \\
You are a young man. (HE2) & & You are two young men. (HE6) OP_2-2-07_058
\end{tabular}

As subject of a deverbal noun in a predicative construction (§10.4):
(30) ¿Me áz casiijim -ya? \({ }^{10}\)

2Pro what? SN-Tr-do QM
'Qué estás haciendo?'
What are you (sg.) doing? (DS 2005, casiiim) OP_2-2-07_059
(31) ¿Me áz caseaalam -ya?

2Pro what? SN-Tr-do-Pl QM
'Qué estan haciendo Uds.?'
What are you (pl.) doing? op_2-2-07_060
(32) Me he him isal caha.

2Pro 1 Pro 1 SgDO Ir.Id-accompany Aux.SN-Dcl
'Me acompañarás A MÍ.'
You will accompany ME. Op_2-2-07_061
(33) Me cmotet iha.

2Pro SN-heavy Dcl
'Pesas mucho.' OP_2---07_-062
(34) iMe \({ }^{\circ}\) hant caacj \({ }^{\circ} \quad\)-ya?

You are heavy. (DS2005, cmotet) Are you two years old? (DS2005, caaj) OP_2-2-07_063
As subject of a finite verb (cross-referenced by morphology on the verb, see §17.1.2.1, indicated by the underscoring):
¿Me maal quih intacatx?
2Pro 2P-spouse the.Fl 2SGS-Rl-release
‘¿Abandonaste (divorciaste) TÚ a tu esposo/a?’
Did YOU (sg.) leave (divorce) your spouse? (DS2005, all) OP_2-2-07_064
(36) ¿Me zó matooza?

2Pro how? 2PlS-Rl-speak.Pl
'Qué están diciendo UDS.?'
What are YOU (pl.) saying? (MI. 16:15) OP_2-2-07_065 LHC_2-05-07_140
As with the other pronouns in situations with an inflected verb, this pronoun is grammatically omissible in this context and its presence is taken as contrastive.

As object of a finite or nominalized verb (cross-referenced by morphology on the verb, see §17.1.2.3):

\footnotetext{
\({ }^{10}\) The expression ¿Áz me casiijimya? cannot mean What are you doing?, but it is grammatical on the reading What is s/he doing to you?, where me is indirect object agreement and not the pronoun me discussed in this chapter.
}
(37) ¡Me ma hxooh!

2Pro 2SGDO 1SGS.Tr-Em-say
'A TI te digo.' OP_2--207_066
I'm speaking to YOU (sg.)! (nt. : :6)
(38) ¡Me mazi hxooh!

2Pro 2PlDO 1SGS.Tr-Em-say
'A UDS. les digo.' op_2-2-07_067
I'm speaking to YOU (pl.)! (Ac. 19:13)
```

me ma cmistaj coi
2Pro 2SGDO SN-Tr-resemble-Pl the.PL
'los que se parecen A TI'
(those) who resemble YOU (sg.) OP_2---07_068

```

As possessor of a noun or proposition/oblique deverbal noun (cross-referenced by morphology on the noun, §13.2.3):
(40) Me nyaaco cop caacoj iha.

2Pro 2P-house the.Vt SN-big DCL
'Tu casa es grande.'
Your house is big. (ALIM 76) OP_2-2-07_069
¿Me miixz -ya?
2Pro 2P-pet QM
‘¿Es TU mascota?’
Is it YOUR pet? OP_2-2-07_070a
(42) \(\quad\) ¿Me nyaa \({ }^{\circ}\)-ya?

2Pro yours QM
‘¿Es TUYO/TUYA?’ OP_2-2-07_070b
Is it YOURS? (Overheard) LHC_2-5-07_143a
(43) iMe moyaat \({ }^{\circ}\)-ya?

2Pro yours.Pl QM
‘¿Es de UDs.?’
Is it YOURS (plural possessor)? OP_2-2-07_070c
This pronoun may head a relative clause that may be a predicate nominal construction (see Figure 16.1) or a normal relative clause (§8.4).
(44) Me ctamcö, me hizac oo iti masoii aha. 2Pro man-Pl 2Pro Px.Lc Dl 3P-on 2PlS-Ir.Id-be.Fl.Pl Aux-Dcl
'Ustedes hombres deben quedarse aquí.'
You men should stay here. Op_2-2-07_071
(45) ¡Me [ \({ }^{\circ}\) xiica quiistox \({ }^{\circ}\) hiicot coii ] coox oo hooctam!

2Pro people 1P-with.Pl SN-stand.Pl all Dl Im-look.at-Pl
'Todos Uds. personas que están aquí con nosotros, ¡miren!'
All of you people here with us, look! (Ac 25:24) RMH_08-21-07_112
(46) Me [ \({ }^{\circ}\) xiica quiistox \({ }^{\circ}\) (quih) imihiimtoj, \(]\) iij iiqui aii, 2Pro people the.Fl SN-N-married-Pl apart 3P-toward Im-stand.Pl
toc cöaii.
there 3IO-Im-stand.PL
'Ustedes que no son casados, pónganse a un lado'
You who aren't married, stand to one side! RMH_08-04-07_153
(47) Me [satoj quih quiiitoj] masmoqueept aha. 2Pro mussel(s) the.Fl SN-Tr-eat-Pl 2PlS-Ir.Id-N-sick-Pl Aux-DCl 'Ustedes que comieron los mejillones van a estar enfermos.'
You who ate mussels are going to be sick. RMH_10-16-07_11d

\subsection*{16.1.3 Expletive phrase complement}

A phrase that refers to one's being may modify a simple personal pronoun. While the expletive complement may be used for emphasis in some situations, the function is not entirely clear. Such expressions are not at all uncommon. \({ }^{11}\)

An example of a complete expression he hapi hisoj hipquij (1Pro Intns 1P-self this) I my being this, or less literally I myself. \({ }^{12}\) See others in Table 16.2. The personal pronoun at the beginning of the phrase is sometimes omitted (or replaced by a null pronoun). The most common determiner used in them is the demonstrative hipquij, as shown, but hipcop and hipcom are also possible if the singular referent is standing or lying (respectively) rather than sitting. Occasionally (and especially with the forms quisoj and quisolca) the articles quij and coi are used.

The following examples illustrate the use of these expressions.
(48) He hipi hisoj hipquii ihyooho.

I myself 1SGS.Tr-Dt-see
'Yo mismo lo ví.'
I myself saw it. \({ }^{13}\) OP_2-2-07_025
(49) He hapi hisoj hipquii quihehe \({ }^{\circ}\) caacoj quij ihyooho.

I myself ruler SN-big the.Cm 1SGS.Tr-Dt-see
'Yo mismo ví al gobernador.'
I myself saw the governor. RMH_08-04-07_154
(50) He hipi hisoj hipquii, icatoomec quih tazo

I myself week the.Fl one

\footnotetext{
\({ }^{11}\) As this expression seems a bit ponderous, I inquired about it more in 2007. My consultant that day chuckled as he reflected on how commonly it is in fact used.
\({ }^{12}\) The head noun is translated being here. The most basic meaning of the word is body, but the choice of article makes a difference; see the examples and discussion in \(\S 11.2 .1\). Many speakers prefer the dialectal variant hapi for the intensifier hipi.
\({ }^{13}\) This is like saying that one was an eyewitness to the event. Another way of saying it is Hapi hitoj hizcoi cohyóoho. (INTNS 1P-eye-PL PX-PL 3IO-1SGS.TR-DT-see) I saw it with my own eyes.
}

(51) He hipi hisoj hipquii Yooz quij oo hin tah ma,

I myself God the.Cm DL 1SGDO Rl-do DS
he hiz cömoca ha.
1Pro here 3IO-Twd-SN-move Dcl
'He venido porque Dios me mandó.'
I have come here because God caused it. (Lk 11:30) Op__2--07__028

\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{5}{|c|}{Table 16.2: Pronoun modified by expletive noun phrase} \\
\hline & Pronoun & Intensifier* & Noun & Determiner** \\
\hline I myself & (he) & hapi & hisoj & hipquij \\
\hline you yourself & (me) & hapi & misoj & hipquij \\
\hline she herself, he himself, it itself & & hapi & isoj & hipquij \\
\hline oneself (unspecified) & & hapi & quisoj & quij \\
\hline we ourselves & (he) & hapi & hisolca & hizcoi \\
\hline you yourselves & (me) & hapi & misolca & hizcoi \\
\hline they themselves & & hapi & isolca & hizcoi \\
\hline
\end{tabular}
*The intensifier has two dialectal variants: hipi and hapi.
**The singular determiner may vary to other forms such as hipcop under appropriate conditions.

\footnotetext{
\({ }^{14}\) The negative part of not even comes from the negative verb that comes later in the sentence.
}

'Ni siquieras sabes lo que estás diciendo.'
You have no idea what you are saying. \({ }^{15}\)
\begin{tabular}{|c|c|c|c|}
\hline Hipi quisoj cop & \({ }^{\circ} \mathrm{miiz}\) & spaii \({ }^{\circ}\) & (a)ha. \({ }^{16}\) \\
\hline oneself the & well & Ir.Id-P & Aux-Dcl \\
\hline 'Uno debe cuidars & a si mis & mo.' RM & \\
\hline One should take car & e of o & eself. (0) & \\
\hline
\end{tabular}

It is suggested there that a phrase such as he hipi hisoj hipquij is built around the possessed noun hisoj, which has a pronoun in the complement position (§8.5), as depicted in Figure 16.2.

This analysis does not directly account for the common examples in which the subject inflection on the main verb of the clause varies between first, second and third person. One would expect, a priori, only third person inflection. However, as shown in \(\S 8.5\), the same issue arises with partitive expressions generally.

The following example, although it does not appear to be the most common way to express the thought (compare with (48), for example), illustrates that this pronoun with expletive phrase may occur with third person inflection in at least some cases. \({ }^{17}\)


\footnotetext{
\({ }^{15}\) This example was adapted from Mk 9:6 to show the person morphology more clearly (in second person). This utterance is considered very colorful speech and representative of Seri phraseology. An appropriate context is when someone, because of fear or surprise, begins saying things without thinking - just starts babbling.
\({ }^{16}\) This cannot be said in the plural: * Hipi quisolca coi ....
\({ }^{17}\) This particular example surprised me, but all of the consultants judged it completely acceptable. It is certainly more common to use the subject person inflection that agrees in person with the possessor of the head noun.
}
(56) He hipi hisoj hipquii iyooho. \({ }^{18}\)

I myself 3:3-DT-see
'Yo mismo lo ví.'
I myself saw it. OP_2-2-07_031
The expletive phrase may be used with or without an overt pronoun. The pronoun is commonly, but not necessarily, omitted when the phrase is the complement in a partitive expression.

‘Algunos de ustedes están allí, ...'
Some of you are there, ... (2 \(2012: 16\) ) RMH_08-04-07_158a
(58) a [[Me hipi misolca coi ] zo ] haa piij, ... you yourselves a/one there Ir.Dp-sit
b. * Me hapi misolca coi zo haa mpiij, ...
'Si uno de ustedes está allí, ...'
If one of you is there, ... (Mk 10:43) RMH_08-04-07_158b

'Si dos de ustedes están en algún lugar, ...'
If two of you are somewhere, ... (MA 18:19) (a) RMH_08-04-07_158c (b) RMH_11-20-07_123
The expression for each is rather complex (see \(\S 8.5\) for details). It may take a simple second person pronoun complement to express each of you, or it may take a complement with the expletive phrase. The entire phrase is third person as it determines third person inflection.
(60) Me iij càap tazo cah quiya ha.

2Pro each the.Fl-Foc SN-Tr-know Dcl
'Cada uno de Uds. lo sabe.'
Each of you knows it. RNH_08-04-07_158e

\footnotetext{
\({ }^{18}\) Also possible: He hipi hisoj hipquij quiho ha. (1PRO INTNS myself this seeing DCL) I myself saw it.
}
(61) \(\quad \mathbf{~} \mathrm{Me}\) iij càap tazo quih haa -ya tooit?

2Pro each the.Fl-Foc Aux QM Rl-dance
‘¿Bailaron cada uno de ustedes (aparte)?’
Did each of you dance (separately)? RMH_11-20-07_124
(62) Hipi misolca hizcoi iij càap tazo cah quiya ha. yourselves each the.Fl-Foc SN-Tr-know DCL
'Cada uno de Uds. lo sabe.'
Each of you knows it. RMH_08-04-07_158f

\subsection*{16.1.4 Third person ee}

The third person human pronoun ee is rarely used and generally has a derogatory connotation, although, at least when used in combination with the intensifying adverb hapi (see §24.2.1), this connotation may be defused. \({ }^{19}\) A demonstrative pronoun is commonly used when one wants to make simple reference to a third person (see §16.2).
(63) Ee \({ }^{\circ}\) ziix quih coox cah \({ }^{\circ}\) seehe cöitaa camoz iha. 3Pro everything to.do.(it) 3IO-3:3-Rl-know SN-think DCL
'ÉL/ELLA piensa que puede hacer cualquier cosa.'
S/HE thinks that s/he can do anything. op_2-2-07_074
(64) Ee ha tahtxima xah yoomoz.

3Pro Aux Rl-rich - Dt-think
'ÉL/ELLA se cree rico/a.'
S/HE \({ }_{i}\) thinks s/he e's rich. (DS2005, ee) OP_2-2-07_076
(65) Ee ha tahtximj xah yoomjöc.

3Pro Aux Rl-rich-Pl - Dt-think-Pl
'ElLOS/ELLAS se creen ricos/as.'
THEY think they're rich. (Offered) RMH_08-04-07_159
(66) Ee ha áno yazalca \({ }^{\circ}\), ziix quih hant quih iti tahca ma \(x\).

3Pro Aux they.meddle thing the.Fl place the.Fl 3P-on Rl-be.located DS UT
'ElLOS/ELLAS siempre se meten en cualquier asunto.'
THEY are always sticking their noses into things. (DS2005, ee) OP_2---07_077
(67)

Juan quij, ee hipi mos mino ntica itamzo, ...
the.Cm 3Pro Intns also 2P-in Aw-Infmove 3:3-Rl-want
'Juan mismo quiere visitarles a Uds.'
Juan himself wants to visit you ... Op_2-2-07_078

\footnotetext{
\({ }^{19}\) This pronoun occurs less than 25 times in the NTT, whereas first person he and second person me are used thousands of times.
}
(68) ... ee mos isiihit ta siimoz aha, ... 3Pro also 3:3-Ir.ID-eat Aux.RL Ir.Id-think Aux-DcL
‘... posiblemente ÉL/ELLA decidirá a comerlo también ...'
... S/HE might think to eat it ... (1 Co 8:10) Op_2-2-07_079

\subsection*{16.1.5 First person emphatic hatee}

The pronoun hatee is used emphatically (or perhaps, contrastively) by the speaker to refer to himself or herself. It most commonly (if not exclusively) co-occurs with special morphology on the verb (the first person emphatic subject inflection \(\mathbf{a}-/ \varnothing-/ \mathbf{c a}-\), §17.1.2.1) or on the noun (the first person emphatic possessor hati-, §13.2.3).
(69) Hatee smaahit aha.

1Em.Pro Ir.Id-N-1Em.S.Tr-eat Aux-Dcl
'Yo no lo comeré.'
I won't eat it! (DS2005, aa-) OP_2-2-07_080
Hatee somcaatax aha.
1Em.Pro Ir.Id-N-1Em.S.In-go Aux-Dcl
‘YO no iré!’
I won't go! (DS2005, caa-) OP_2-2-07_081
(71) Hatee squiim aha.

1Em.Pro Ir.Id-1Em.S.In-sleep Aux-Dcl
¡YO dormiré!’
I will sleep! (DS2005, caa-) OP_2-2-07_082
\begin{tabular}{ll} 
Hatee \(\quad\) hatyaa \({ }^{\circ}\) & ha. \\
1Em.PRo & mine! \\
'iEs MÍ!' & DCL \\
It's MINE! op_2-2-07_083 &
\end{tabular}
(73) Hatee hap zo quicö, hax maacta. 1Em.Pro mule.deer a SN-Tr-kill just Px-1Em.S.Tr-think 'Mató un venado bura, creo.'
I think he killed a mule deer. (DS2005, hatée) OP_2--207_084

\subsection*{16.1.6 Possessive pronouns}

The possessive pronouns (see Table 16.1) are obviously derived from the verb \(\sqrt{\text { yaa }}\) own, possess. The first and second person plural forms, in fact, are identical to what one would expect as the object-oriented deverbal nouns based on this verb.
(74) \begin{tabular}{llclll} 
Plural possessive pronouns & Possessor & Nominalizer & Root & Plural \\
hoyaat & \(<\) & hi- & \(\mathbf{o}_{\mathrm{Abl}^{-}}\) & yaa & -t \\
moyaat & \(<\) & mi- & \(\mathbf{o}_{\mathrm{Abl}^{-}}\) & yaa & -t
\end{tabular}

These forms are therefore not actually pronouns in any strict sense, but deverbal nouns meaning literally what we/you possess.

The singular and the third person plural forms, however, are a bit irregular in that the
expected nominalizer \(\mathbf{o}_{\text {Abl }}\) - does not occur. If one were to posit an irregular allomorph here, then these would also be simple deverbal nouns. The alternative analysis, followed here, is that they are actually possessed nouns with the structure Possessor + Root. Thus ihyaa is my possession(s), inyaa your possession(s), yaa its/her/his possession(s), and yaat their possession(s). The vowel at the beginning of the first and second person forms is the same epenthetic vowel that appears under the conditions described in §27.1.1.

The possessive pronouns do not have the same range of usage as in many other languages due, one presumes, to their relationship to the verb \(\sqrt{ }\) yaa own, possess, although they are glossed here as simply possessive pronouns. They cannot generally be used with reference to people, body parts or other items that one does not actually own. \({ }^{20}\)

The historical source of the possessive pronoun as a deverbal noun also shows itself in the syntax of the noun phrase; it is exactly what is expected with the analysis of an internally-headed relative clause (§8.4). Therefore the possessor (=subject) commonly precedes the possessed noun (=object) followed by the possessive pronoun (=verb). And just as in standard relative clauses, the head noun (=possessed noun) may occur clause-initially. This is illustrated by the following examples. \({ }^{21}\)

\section*{a. [Juan quih trooqui yaa \({ }^{\circ}\) quij] caacoj iha.}
the.FL vehicle his/hers the.Cm SN-big Dcl
'El vehículo de Juan es grande.'
Juan's vehicle is big. LHс_2-05-07_141a
b. [Trooqui (quih) Juan quih yaa \({ }^{\circ}\) quij] caacoj iha. vehicle the.FL the.Fl his/hers the.CM SN-big DCL
'El vehículo de Juan es grande.'
Juan's vehicle is big. LHC_2-05-07_141b
The possessor need not be explicitly present, of course.
(76) trooqui yaa \({ }^{\circ}\) quij (77)
canoaataj hoyaat coi
boat-PL 1P-ON-own-PL the.PL
'nuestras pangas'
our boats LHC_2-05-07_142b

\footnotetext{
\({ }^{20}\) Body parts can only use the morphological possessor, and the same is true of kinship terms. Expressions built on deverbal nouns utilize the appropriate morphology for possessor. For example, my belt is 'what I put around my waist' (see §14.3). Relationship to items that cannot be possessed must be expressed in some appropriate way. For example, our land is hant iti hayaii, more literally the land on which we live.
\({ }^{21}\) When the possessed noun occurs before the possessor, an article may follow the possessed noun. See the discussion of these facts in §8.4.
}

The intensifier hapi used with possessors (see \(\S 11.3\) and \(\S 24.2 .1\) ), even non-overt ones, may appear, as in (78).
\begin{tabular}{llll} 
zaah & hipi & hyaaa \(^{\circ}\) & quij \\
watch INTNS & mine & the.CM \\
'MI reloj' & & \\
MY watch & LHC_2-05-07_142c &
\end{tabular}

When there is no nominal head, the possessive pronoun may easily function as head of the construction, although in this situation typically something overt in the possessor position. Or at least an adverb should be present for the example to be considered well-formed. Compare the following grammatical examples with the generally unacceptable (85) and (86). \({ }^{22}\)
¿Hapi yaa \({ }^{\text {¿Ha }} \quad\)-ya?
INTNS his/hers QM
‘¿Es_SUYO/A?
Is it HIS/HERS? RMH_08-04-07_160
¿Me nyaa \({ }^{\circ}\)-ya?
2Pro yours QM
‘¿Es TUYO/A?
Is it YOURS? (Overheard) LHC_2-5-07_143a
¿Tiix yaa \({ }^{\circ}\)-ya?
DDS his/hers QM
‘¿Es SUYO/A?
Is it HIS/HERS? LHC_2-5-07_143b
(82) Juan quih yaa \(^{\circ}\) quij ihxoqueepe.

Juan the.Fl his/hers the.Cm 1SGS.Tr-Em-like
'Me gusta mucho el (p.ej., reloj) de Juan.'
I really like Juan's (e.g., watch) LHс_2-507_143c
¿Cói nyaa \({ }^{\circ}\) oo -ya? still yours DL QM
'Todavía lo estás poseyendo?'
Are you still owning it? (offered) RMH_08-21-07_113
¿Haptco yaa \({ }^{\circ}\)-ya?
already his/hers QM
‘¿Ya es suyo/a?'
Is it already his/hers? (Offered) RMH_08-21-07_114a

\footnotetext{
\({ }^{22}\) Although in normal conversation such sentences are considered bizarre, consultants came up with different situations in which such sentences could be used easily. One was as an expression of amazement. Another is in coordination with an alternative, such as ¿Yaa -ya x? ¿Ipasot -ya x? Does s/he own it or has s/he borrowed it? Or ¿Inyaa -ya x? ¿Minyaa -ya x? Is it yours or is it not yours? The plural possessive pronouns hoyaat, moyaat, and yaat seem to have the same restriction on usage in that something overt should precede them if they are the head of the construction.
}
(85)
? ¿Yaa \({ }^{\circ} \quad-\mathbf{y a}\) ?
his/hers QM
'¿Es suyo?'
Is it his/hers? RMH_08-21-07_114b
```

? ¿Inyaa}\mp@subsup{}{}{\circ}-ya
yours QM
`¿Es tuyo?'
Is it yours? RMH_08-21-07_114c

```

An expression like (80) may be used felicitously with reference to possessions that never occur syntactically with the possessive prononoun yaa, such as a scarf, a house, or shoes. Possession of these nouns is always indicated morphologically, and not with a possessive pronoun. But the fact that they are still possessions allows for the use of a question such as (80).

\subsection*{16.2 Demonstrative pronouns}

Eight demonstrative pronouns (see Table 16.3) are distinguished by number, relative distance from the speaker (when used exophorically), and a factor of contrastive/non-contrastive emphasis (§16.2.5). The distal pronouns are also very commonly used anaphorically ( \(\S 16.2 .2\) ) while the proximal pronouns may be used cataphorically ( \(\$ 16.2 .3\) ). The distal pronouns are commonly used following a nominal to show focus (§16.2.4). The referents of these pronouns may be human or non-human, animate or inanimate, but the referent must be specific. \({ }^{23}\)

\subsection*{16.2.1 Exophoric use}

The following examples illustrate the use of these pronouns to make explicit reference to a physical object in the location of the speech act.

Proximal hipiix and hizaax:


\footnotetext{
\({ }^{23}\) These pronouns are common, but the use of taax (more than 11,000 occurrences in the NTT) outstrips tiix (more than 1400) in part because of the varied meanings of the former.
\({ }^{24}\) The source of this example had ... chaa ha instead of ... quij haa ha. Both are apparently correct, but the person recording this example preferred the version given here.
}

Table 16.3: Simple Demonstrative Pronouns
\begin{tabular}{lllll}
\hline \multicolumn{4}{c}{ Cable 16.3: } & Simple Demonstrative Pronouns \\
& Proximal & Proximal & Distal & Distal \\
& & Certain & & Certain \\
Singular & hipiix & hipii & tiix & tii \\
Plural / Mass / Abstract / Area & hizaax & hizaa & taax & taa \\
\hline
\end{tabular}
(90) Hizaax hiteen hac haa ha.

DPP 1P-mouth the.LC SN.EQ DCL
'Ésta es mi boca.'
This (area) is my mouth. (HE 61, modified) \({ }^{25}\) OP_2-2-07_088
Distal tiix and taax:
(91) Tiix xomiha.

DDS Em-N-fast
'Ése no va muy rápido.' OP_2-2-07_089
That one's not going fast. (DS2005, tiix)
(92) Taax mos siilx caha. DDP also Ir.Id-go-Pl Aux.SN-Dcl
'Aquéllos también van a ir.' op_2-2-07_090 Those will also go. (DS2005, tax)
(93) Taax inscmahit aha.

DDP 2SGS-Ir.Id-N-eat Aux-Dcl
‘¡No comas eso (p.ej. atole)!’
Don't eat that (e.g., porridge)! op_2-2-07_091
(94) Taax ano piij ta \(x\), masiiht haa hi.

DDP 3P.in Ir.Dp-sit DS UT 2PlS-Ir.Id-see-Pl Aux DCL
'Estará allí, ustedes lo verán.'
He will be there, you will see him. (Mt 28:7) RMH_08-04-07_161

\subsection*{16.2.2 Anaphoric use}

The demonstrative pronouns are a common way to refer to a third person, especially (but not exclusively) the distal pronouns. They thus have an anaphoric use in that they refer, in these contexts, to something previously mentioned in the discourse rather than to something situated physically in the location of the speech act.
```

(95) Taax toc cömotat ma,...
DDP there 3IO-TwD-RL-move-PL DS
‘Aquéllos venían allí, ...'
They were coming there, ... (Hipocampo_7.1)

```

\footnotetext{
\({ }^{25}\) The source of this example had ... chaa ha instead of ... hac haa ha. Both are apparently correct, but the person recording this example preferred the version given here.
}
```

(96) Tiix }\mp@subsup{}{}{\circ}hant haaco iima * quih hoopatj quih caacoj quih
DDS worldwide.disaster the.FL wave the.FL SN-big the.FL
iti caap, tiix haa [ha].
3P-on SN-stand DDS SN.EQ Dcl
`Era una persona seri, ...'
He was a person, ... (Hipocampo_27)
(97) Taax ah aa itáh ma, ...
DDP Foc - 3:3-Rl-do DS
'Por eso, ...'
Because of that, ... (Lit., That causing it, ..., a very common phrase.) op_2.207_095
(98) Taax ihyomoozi.
DDP 1SGS.Tr-Dt-dream.about
'Soñé de eso.'
I dreamed about that. OP_2.0.07_097

```

As with the personal pronouns (see \(\S 8.5\) ), the demonstrative pronoun taax may occur with the pronoun coox all or the adjective/pronoun tazo one.
(99) Taax coox oo cöitzáxö ma, ...

DDP all DL 3IO-3:3-RL-discuss DS
'Cuando le habló de todo eso, ...'
After he had had told him about all that, ... (Ac 24:25) RNH_-08-2:-07_115
(100) Taax tazo ipi zo yomatax.

DDP one Intns a Dt-N-go
'Ninguno de ellos fue.'
Not one of them went. Op_2-207_098
Unlike personal pronouns, however, the demonstrative pronouns do not occur as heads of relative clauses. Compare grammatical (101) with a headless relative clause as subject (the ones hunting mule deer), and ungrammatical (102) with a demonstrative pronoun as head of the relative clause (those hunting mule deer).
[ Hap quicötoj coi ] ox mimjöc. mule.deer SN-Tr-kill-PL the.PL thus Px-think-Pl
'Así piensan los cazadores expertos de venado bura.'
That's how the expert mule deer hunters think. op _2:-07_ 099
(102) \(*\) [Taax hap quicötoj] (coi) ox mimjöc.

DDP mule.deer SN-Tr-kill-PL the.PL thus Px-think-PL
('Así piensan aquellos que son cazadores expertos de venado bura.')
(That's how those who are expert mule deer hunters think.)

\subsection*{16.2.3 Cataphoric use}

When reference is being made to something that is coming up in the discourse, the proximal demonstrative pronouns are most commonly used, as shown in the following examples.


\subsection*{16.2.4 Focal use for contrast}

The demonstrative pronouns tiix that one and taax those, that (abstract) commonly appear following a noun phrase, either an NP or a DP (which may be a pronoun). A common effect of this is contrastive emphasis on the nominal that precedes the pronoun. Sometimes there is a slight pause before the pronoun, and the pronoun begins at a slightly higher pitch than the preceding syllable because it is stressed.
(107) Ctam quii, tiix \({ }^{\circ}\) ziix hast iizx ano coom \({ }^{\circ}\) com imhaa. male the.Cm DDS northern.chuckwalla the.Hz SN-N-EQ 'El hOMBRE se volvió la iguana de la piedra.'
THE MAN became the northern chuckwalla. (ES2007, acaam_ccaa_20)
(108) Hant Ihiin ticom, tiix contitat, yoque. Baja California Md-Hz DDS 3IO-Aw-Rl-move-Pl DT-US-say 'Iban hacia Baja California, se dice.'
They were headed for BAJA CALIFORNIA, it is said. (Dos_Hermanos_20)

(110) \({ }^{\circ}\) Xiica quih quiistox \({ }^{\circ}\) quih oyácalcam quih ziix quih people the.FL 3P-ON-call.sibling-Pl the.Fl thing the.FL
cöicamsisiin quih iti cöiihj hac,

3IO-3P-PON-US-pitiful the.Fl 3P-on 3IO-3P-PON-be-PL the.Lc
```

taax ah cöinzáxö.
DDP FOC 3IO-3:3-Px-discuss

```
'Las cosas tristes que habían pasado a sus "hermanos y hermanas" - les habló acerca de ellas.'
The sad things that had happened to their "brothers and sisters" - he talked to
them about them. (Es2007, Azoj_Cano_Imatax 05)
(111) Comcaii, tiix zaah quih coox cah aal quih old.woman DDS sun/day the.Fl all the.Fl-Foc 3P-spouse the.FL cöyacaai.
3IO-Dт-?
'ESA ANCIANA siempre acompaña a su esposo.'
THAT ELDERLY WOMAN always accompanies her husband. (DS2005, zaah) RMH_07-11-07_28b
(112) He quihehe \({ }^{\circ}\) isoj, tiix he haa ha.

1Pro ruler 3P-self DDS 1Pro SN.EQ Dcl
'Yo soy el JEFE.'
I am the CHIEF. RMH_07-11-07_280
In some cases this might appear to be left dislocation, with the noun phrase in a clauseinitial position and the demonstrative pronoun in the argument position; indeed, that may be the correct analysis for some examples. However, this cannot be the whole story as in some cases (114), for example - the noun phrase is not in clause-initial position.
Toc cöiyaii iti, quisil quij taa oo cötiij ma,
there 3IO-3P-PON-be.Fl.PL 3P-on SN-small the.Cm DDP DL 3IO-RL-sit DS
ctam caii tintica, tiix taanpx, yoque. man mature MD-Aw DDS Rl-go.home DT-US-say
'Mientras estaban allí, el menor se quedó, y EL MAYOR regresó a casa.'
While they were there, the younger brother remained there, and the OLDER BROTHER
went home, it is said. (Dos_Hermanos_491-3)
(114) Moxhamt cmiique, tiix \({ }^{\circ}\) iquiisax \(\mathbf{z}\) imacapat \({ }^{\circ}\). last.year Seri DDS one's.spirit a 3:3-Px-cause.fly
'El año pasado, ESA PERSONA SERI quitó una vida humana.'
Last year THAT SERI PERSON took someone's life. (DS2005, cacápat) RMH_07-11-07_29b
(115) Hapnaail \({ }^{\circ}\), tiix ¿zó hapacta -ya? Abs-skirt DDS how? SN-be.in.appearance QM
‘¿De qué color es ESA FALDA?'
What color is THAT SKIRT? (ALIM 78) RMH_07-11-07_29c
(116) Ziic tiquij, hast ancoj com, tiix an hant imooit iha. bird \(\mathrm{MD}-\mathrm{Cm}\) stone 3P-area-Pl the.Hz DDS 3P.in land SN-N-arrive DCL 'Esa ave no aterriza en UN LUGAR DE PIEDRAS.'
That bird doesn't land on A ROCKY PLACE. \({ }^{26}{ }^{(E S 2007}\), ac 08)
(117) He Pedro González, tii haa ha.
1Pro DDS SN.EQ DcL
'Yo soy Pedro González.'
I am Pedro González. RMH_05-16-08_83
(118) Pedro González, tiix he haa ha. DDS 1Pro SN.EQ DcL
'Yo soy Pedro González.'
I am Pedro González. RMH_05-16-08_84
(119) He tiix yaazio tiix he haa ha.

1Pro DDS his.child DDS 1Pro SN.EQ Dcl
'Yo soy el HIJO DE ÉSE.'
I am THAT ONE 'S SON. RMH_07-11-07_28d
The definite nominal may have a determiner or it may be without one, despite being definite; see examples (114) and (115).

The demonstrative pronoun in this construction is only used anaphorically. Therefore, in an example like (114) the person is probably not in view, and in (115) the skirt is not physically present with the speaker. The referenced people or things are known from the discourse context.

A place name may have the noun hant land, place after it, to indicate that one is speaking of the area of that place name. This phrase may in turn be followed by either tiix or taax, and there is a slight difference in meaning. The pronoun tiix suggests that the general area of the place name is being referred to whereas the pronoun taax indicates specifically the very place that is named.

\footnotetext{
\({ }^{26}\) The author of this text verified that the pronoun tiix here is referring to the place and not to the bird.
}
\(\cdots \frac{\text { Haaca Caacoj quih Inoohcö }}{\text { quij hant xah, }}\) the.FL 3P-PON-concave the.CM place - \(\frac{\text { tix }}{\text { DDS }}\)
        ano ntita, ...
        3P.in/from Aw-RL-move
    ‘... pasó por la zona de Bahía Haaca Caacoj, ...’
    ... he went through the area around "Haaca Caacoj" Bay, ... (Hipocampo_12.2)
..., \(\frac{\text { Hajháx hant, }}{\text { Tecomate place }} \frac{\text { taax }}{\text { DDP }}\) iti \begin{tabular}{l} 
3P-on \\
RL-be.Fl.PL
\end{tabular}\(..\).
‘ ..., estaban viviendo en Tecomate, ...'
..., they were living at Tecomate, ... (Dos_Hermanos_1.2)
This construction is very commonly used following phrases headed by deverbal nouns or any kind of "heavier" nominal phrase, to restate them in an abbreviated fashion, it would seem, and thus aid in processing.

Jesús quij hant com iti cöiitax hac
the.Cm land the.Hz 3P-on 3IO-3P-PON-go the.Lc
icaaitim quih quiipe, taax imaai.
3P-PON-US-make-ImpF the.Fl SN-good DDP 3:3-Px-make
'Jesús anduvo haciendo bien.'
Jesus went around doing good deeds. (Ac 10:38) RMH_07-11-07_30a
\({ }^{\circ}\) Heme cöiquiin \({ }^{\circ}\) hac, ziix quih hayaa quih hipi \({ }^{\circ}\) seehe cöhapaa \({ }^{\circ}\), one's.engagement the.Lc thing the.Fl SN-Pv-own the InTNS possible
```

taax oo speque (a)ha.
DDP DL Ir.ID-Pv-give.gift Aux-DCL

```
'Cuando uno está de novio, puede regalar cualquier cosa.'
When one is asking for someone in marriage, any kind of gift can be given. (Ds2005, quique improved) RMH_07-11-07_30b

Hant com cmaa cöipaxi, taax ano cömota,... earth the.Hz now 3IO-3P-PON-Pv-finish DDP 3P.in/from 3IO-TwD-Rl-move 'Desde el principio del mundo, ...'
Ever since the beginning of the world, ... (Jn \(9: 32\) ) RMH_08-13-07_36
(125) \({ }^{\circ} \underline{Z i i x ~ h a p a h i t ~}^{\circ}\) quih \({ }^{\circ} \underline{m o s}^{\text {áno }}{ }^{\circ}\) quiipe quih food the.FL InTNS SN-good the.FL
\begin{tabular}{llllll} 
cmiique \(^{27}\) & quii & oohit, & taax & iiqui & hapasx \\
\hline person/Seri & the.CM & 3P-ON-eat & DDP & 3P-toward SN-Pv-count DCL
\end{tabular}
'Entre las mejores comidas que una persona come, ése [molusco] se incluye en ellas.'
Among the best foods that a person eats, that [mollusk] is included in them. (Es2007, Satoj 03)
(126) Pedro quih, tiix inszáxö aha. the.Fl DDS 2SGS-Ir.Id-discuss Aux-Dcl
‘¡Habla con Pedro!’
Speak with PEDRO! op_2-2-07_104
(127) ... xo hax cpaaisx, taax ipi \(z\) imasi ha. but water SN-clean DDP even a SN-TR-N-drink DCL
'...- ni siquiera toma AGUA LIMPIA.'
... it doesn't even drink CLEAN WATER. (ES2007, acaam_ ccaa 09b)
(128) Ctam quii, tiix \({ }^{\circ}\) ziix hast iizx ano coom \({ }^{\circ}\) com imhaa.
man the.CM DDS northern.chuckwalla the.Hz SN-N-EQ 'ESE HOMBRE, él se volvió la iguana de la piedra.'
THAT MAN, he became the northern chuckwalla. (ES2007, acaam_ccaa 020)
(129) Hipiix, tiix ihyaazi \(^{\circ} \quad{ }^{\circ}\) himoz hiipe \({ }^{\circ}\) chaa ha. DDS DDS my.child.ME one.that.I.love SN-EQ DCL
'ÉSTE es mi hijo amado.'
THIS is my beloved son. (Mk 9:7) RMH_08-21-07_116a
(130) Hizcoi, taax hipi hsiihit aha.
these DDP Intns 1SGS.Tr-Ir.Id-eat Aux-Dcl
'ÉSTOS, yo mismo los voy a comer.'
THESE, I'm going to eat them myself. (gigante comelón 167) RMH_08-21-07_116b
Most commonly the demonstrative pronoun immediately follows the DP or NP. Nevertheless, it may be separated from the nominal phrase by an adverb such as cmaax now, then, as in the following example.


\footnotetext{
\({ }^{27}\) The word emiique here is reportedly not referring to a person of any particular ethnic group, but rather to any person in the world.
}
'... entonces EL COYOTE dijo que la iba a brincar, ...' RMH_08-21-07_117
..., then THE COYOTE said that he was going to jump over it, ... (Saltar_Luna_18)
The difference between an example like (132) — following an NP — and one like (133) following a DP - is not entirely clear, but somehow the latter is more specific.
\(\frac{\text { Ctam, }}{\text { man }} \frac{\text { tiix }}{\text { DDS }} \quad\) inszáx \(\quad\) 2SGS-IR.ID-discuss AUX-DCL
‘¡Habla a ESE HOMBRE!’
Speak to THAT MAN! (The person is not in sight.) op_2-2-07_103
Ctam ticop, \(\quad\) tiix \(\quad\) inszáxö \(\quad\) aha.
man Md-VT
'¡Habla a ESE HOMBRE!'
Speak to THAT MAN! LHc_-2-507_144

While a sequence like ctam, tiix may be translated similarly to ctam ticop that man (using a demonstrative adjective, discussed in §4.3.2), they are not at all equivalent either in meaning or in syntax. The phrase ctam ticop that man is a simple DP, whereas ctam, tiix is an NP followed by a pronoun. The expression with the demonstrative adjective is primarily used exophorically (although not exclusively so, see \(\S 4.3 .2\) ), whereas the expression with tiix indicates that the referent is not physically present. See the following examples.
(134) \({ }^{\circ} \underline{\text { Xiica quiistox }}{ }^{\circ}\), taax pti ixacomcaac. people DDP RCP 3:3-Em-cause.Seri.person-PL
'ESAS PERSONAS se respetan.'
THOSE PEOPLE respect each other. (DS2005, caamiquet) RMH_05-16-08_85
(135) Cmaam iiquet \({ }^{\circ}\) quih caheetot cop tom coi, tiix
woman her.child the.Fl \(\mathrm{SN}-\mathrm{Tr}\)-lie.for the.Vt money the.PL DDS
imexl, teeme.
SN-Tr-N-take Px-say
'La mujer que mintió por su hijo dijo que ÉL/ELLA no tomó el dinero.' op_2---07_106 The woman who lied for her child said that S/HE didn't take the money. (Ds2005, cahéetot)
(136) Ctam caii tintica, tiix taanpx, yoque.
man mature MD-AW DDS RL-go.home DT-US-say
'El HERMANO MAYOR regresó, se dice.'
THE OLDER BROTHER returned home, it is said. (Dos_Hermanos_112) OP_2-2-07_107
While some of the above examples (such as (131)) should perhaps be analyzed differently, evidence suggests that the DP plus pronoun sequence is a single constituent, as demonstrated in Figure 16.3 for example (136). Note that in examples (137) and (138), the combination DP plus
pronoun occurs in sentence-final position.
(137) Zacaam hapáh quih zo haa, yoque,
young.woman SN-Pv-say the.FL a
'Era una jovencita-ésa.'
SN.EQ
She was a young woman - that one.
(138) Zacaamalc, yoque, xiica taax cömocat, taax. young.woman-PL DT-US-say thing.PL DDP 3IO-TwD-SN-move-PL DDP 'Eran jovencitas, se dice, esas personas que venían.'
They were young women, it is said, those persons that were coming toward them.
(Dos_Hermanos_15.1)
Other evidence for constituency comes from the adverb hipimax even (§24.1.3), which wraps an NP by including the intensifying adverb ipi after the relevant constituent. Note that in example (139) the adverb hipimax precedes the NP and the adverb ipi follows demonstrative pronoun taax.

'... el hombre llamado Jesús - de donde viene, hasta eso no sabemos.' RMH_08-24-07_29 ...the man named Jesus - where he comes from, even that we don't know. (un \(9: 29\) )

\subsection*{16.2.5 Pronouns of non-contrastive identity}

The pronouns tii and taa are much less frequently used than their counterparts tiix and taax, and
Figure 16.3: DP with focal pronoun (example 136)

tii much less frequently than taa. In some contexts taax and taa are interchangeable, as illustrated by the following pair of sentences.
(140) He taax zo haa ha.
1Pro DDP a/one SN.EQ DCL
'Soy uno de ellos.'
I am one of them. (see Jn 21:24) RMH_08-21-07_118a
(141) He taa zo haa ha. 1PRo DDP a/one SN.EQ Dcl
'Soy uno de ellos.'
I am one of them. (see Ac 22:27) RMH_08-21-07_118b
Frequently, however, the pronouns are not interchangeable. \({ }^{28}\) The difference between these pronouns is clarified by examples such as the following for which judgments are clear and there is no variability. The pronoun tiix in (142) implies the choice of one out of a group and is appropriately - necessarily - translated with that one pronounced with contrastive stress. The pronoun tii in (143), on the other hand, is used when there is not a choice and so contrastive stress on the pronoun in the translation is inappropriate.


Similar contrasts may be detected in the following pairs.
\begin{tabular}{lll} 
iHipiix & haa & -ya? \\
DPS & SN.EQ QM
\end{tabular}
¿¿Es ésta?
Is it this one? RMH_11-20-07_125
(146) Tiix haa ha.

DDS SN.EQ Dcl
'Es ÉL/ELLA.'
It's HIM/HER. RMH_11-20-07_127
(145) iHipii haa -ya?
DPS SN.EQ QM
‘¿Es ésta?'
Is this it? RMH_11-20-07_126
(147) Tii haa ha.
DDS SN.EQ Dcl
'Es él/ella.'
That's him/her. That'S the one.
(Offered) RMH_08-21-07_118e RMH_08-21-07_118j

\footnotetext{
\({ }^{28}\) The 2005 dictionary erroneously lists them as simple alternative forms.
}
(148) Taax haa ha.

DDP SN.EQ DCL
'Son ELLOS/ELLAS.'
It's THEM. RMH_11-20-07_128
(149) Taa haa ha.

DDP SN.EQ Dcl
'Son ellos/ellas.'
It's them (exactly). \({ }^{29}\) RMH_08-21-07_118i

In response to a question such as \(\mathbf{i}\) Hehe iti icoohitim com iti tiij? Is it on the table?, one can answer with:
(150) Tíi iti yiij.

DDs 3P-on DT-sit
'Está en ella.'
It is on it. RMH_11-20-07_129
And in response to a question such as ¿Hameen hac ano tiij? Is it inside the house?, one can answer with:
(151) Taa ano yiij.

DDP 3P.in DT-sit
'Está allí.'
It is there. RMH_11-20-07_130
But an answer with tiix or taax is not possible because contrast is not being made with another location.

\subsection*{16.3 Quantitative pronouns}

Two quantitative pronouns have been identified. One of these is the relatively uncommon word antá some. Examples of this pronoun are given in \(\S 8.5\) since it occurs only in a partitive construction.

The word coox all is a pronoun as well as an adjective (altough rarely as the latter; see \(\S 23.1)\) and an adverb (§24.3.1.7). \({ }^{30}\) As a pronoun, it may refer to the entirety of something that is viewed as a mass, and this most typically is a mass noun, such as a liquid, but it may also be a group of items that are expected to share characteristics. It may occur in construction with a DP that gives more information about the referent. If coox (or the more complex nominal) is the subject, the verb occurs in the form appropriate for a singular subject.

\footnotetext{
\({ }^{29}\) This also means It's exactly there.
\({ }^{30}\) The rarity of the use of coox as an adjective induces the categorization of it as a pronoun here rather than as an adjective functioning as head of the construction. In addition, as a pronoun it occurs without any determiner.
}
(152) (Cafee quih) coox \({ }^{\circ}\) himo yopazjc \({ }^{\circ}\). coffee the.FL all it.spilled.out
'Todo (el café) se derramó.'
All of it (coffee) spilled out. RMH_11-20-07_131
(153) Sahmees quih coox yojizi.
orange(s).FL the.Fl all Dt-sour/rotten
(*yojiztaj)
'La totalidad de las naranjas está podrida.'
The entirety of the oranges is rotten. RMH_11-20-07_132
iCoox casi!
all Im-drink
‘¡Tómatelo todo!’
Drink all of it! (DS2005, coox) RMH_08-04-07_162a
The pronoun coox may also be used in construction with a plural count noun, \({ }^{31}\) but the meaning in these cases is usually a bit special, apparently. First, it should be pointed out, examples with a plural noun and a singular verb were rejected. \({ }^{32}\)
* Ziicalc quih coox hant yaait.
bird-Pl the.Fl all land DT-arrive
('Todas las aves descendieron.') (All of the birds descended.)
Examples with plural count nouns in construction with coox and plural verbs have interesting semantics, referring to the last one of a group.
(156) Ziicalc quih coox hant cöyoome.
bird-Pl the.Fl all land 3IO-DT-arrive-PL
'El último de las aves descendió.'
The last one of the birds descended. RRR
(157) Háxaca quih coox yaxyat. \({ }^{33}\)

Abs-pet-Pl the.Fl all DT-die-Pl
'El último de los perros murió.'
The last one of the dogs died. RRR

\footnotetext{
\({ }^{31}\) It is important to choose a noun that, unlike sahmees orange, has a distinct plural form and is not the type of noun that is usually viewed as a homogeneous set.
\({ }^{32}\) The natural expression for the intended reading here is one with the verb \(\sqrt{ } \mathbf{c o o o}\) all and a plural verb for descend:
(i) Ziicalc quih tcooo \({ }^{\circ}\) hant cöyoome \({ }^{\circ}\). bird-PL the.FL RL-all land 3IO-DT-move.PL 'Todas las aves descendieron.' / All of the birds descended.

The use of the adverb hanso (§24.1.1) before the verb tcooo in this sentence gives an emphatic reading on all. \({ }^{33}\) To say All of the dogs died, one uses the verb (with the presence of hanso given the emphatic reading):
}

The preceding examples are apparently acceptable in the cases where, for example, the birds have been coming down one by one and then the last one came down; or the dogs were dying one by one from a disease and then the last one died. For some unknown reason, however, the following example was rejected.
(158) * Xicacaziil quih coox yoolx. \({ }^{34}\)
child-PL the.Fl all Dт-go-PL
'Todos los niños fueron.'
All of the children went. QQQ check again \(x x x\)
The following example shows the ungrammaticality of coox with a singular noun to refer to a group of birds that might be viewed as arriving .
(159) a. * Ziic quih coox yoofp. bird the.Fl all Dт-arrive
b. \(\quad *\) Ziic quih coox yoozcam. bird the.Fl all DT-arrive.PL
('Todas las aves llegaron.') (All of the birds arrived.)
Coox may also have a plural referent and refer to the entire set. In this situation it determines plural inflection on the verb when it is subject. If the noun occurs, it is in the plural form.
(160) Coox hant cötoii ma, tahmiiitim, yoque.
all land 3IO-RL-stand.Pl DS Rl-Pv-ask-ImpF Dt-US-say
'Todos bajaron y fueron preguntados, se dice.'
All of them landed and were asked, it is said. (Apostador_116-117) RMH_08-04-07_162b
(161) Coox miizcam. (*miifp)
all Px-arrive.PL Px-arrive
'Todos llegaron.'
All of them arrived. RMH_08-04-07_162d
(ii) Háxaca quih hanso tcooo yaxyat. dog-PL the.FL just RL-all DT-die-PL 'TODOS los perros murieron.' / ALL of the dogs died. RRR
\({ }^{34}\) The singular verb yootax was also rejected here. The natural way to say this again involves the verb \(\sqrt{ }\) cooo.
(iii) Xicacaziil quih tcooo yoolx. child-PL the.FL RL-all DT-go.PL
'Todos los niños salieron.' All of the children left. (perhaps not every last one, but at least all of a particular subset) RRR
(iv) Xicacaziil quih hanso tcooo yoolx. child-PL the.FL just RL-all DT-go.PL
'TODOS los niños salieron.' / ALL of the children left. RRR
(162) a. Ziicalc quih coox yoozcam. \({ }^{35}\) bird-Pl the.Fl all DT-arrive.PL
b. * Ziicalc quih coox yoofp. bird-Pl the.Fl all DT-arrive
'Todas las aves llegaron.'
All of the birds arrived.
Of course, in certain contexts the interpretation is uncertain.
```

¡Coox hexl!
all Im-take
``Toma todo(s)!'
Take all of it/ them! RMH_08-04-07_162c

```

The pronoun coox may be used in a construction analogous to the partitive construction (§8.5) as the head of a nominal phrase that has a determiner phrase or pronoun as its complement. \({ }^{36}\)
(164) i[[Xiica hizcoi ] coox ] hexl! thing.Pl Px-Pl all Im-take
‘¡Agarra todas estas cosas!’
Take all these things! RмH_-08-04-07_163a
... [ [ \({ }^{\circ}\) xiica quih quiistox \({ }^{\circ}\) coi ] coox oo \(]\) ox yaza: ... people the.Pl all DL thus Dt-speak.Pl
'... todas las personas dijeron: ...'
... all the people said: ... (MA 27:25) RMH_08-04-07_163b
[ [ He ] coox oo ] siilx caha. 1Pro all Dl Ir.Id-go-Pl Aux.SN-Dcl
'Todos nosotros iremos.'
We all (all of us) will go. OP_2-2-07_054
The effect of the adverb \(\mathbf{0 0}\) (§24.2.8) following coox in the preceding two examples is to indicate that the speaking and the deciding to go, respectively, were done individually and not as a group.

\footnotetext{
\({ }^{35}\) Another way to say this is with the verb \(\sqrt{ } \mathbf{c o o o}\) as a dependent clause: Ziicalc quih tcooo yoozcam. All of the birds arrived.
\({ }^{36}\) The dictionary entry for coox then is in error since it uses an example of the pronoun coox for the adjective. Examples of [ DP coox oo ] in postverbal position are found in the NTT, such as in Ac 16:32.
}

\subsection*{16.4 Interrogative pronouns}

The interrogative pronouns are quíih who?, whom?, whose? and áz what?. Unlike other pronouns, the interrogative pronouns can be used as the predicate in the verbless predicative construction (§10.1). \({ }^{37}\)


More general discussion of the use of these and other interrogative words is presented in §6.2.

\footnotetext{
\({ }^{37}\) The word háqui where? is typically followed by the article hac and so is classified in this grammar as a noun rather than a pronoun. When it occurs without the article, as it sometimes does, the analysis is more uncertain. It may be best to consider it an interrogative adverb in those cases, like the word zímjöc when?.
}

\subsection*{16.5 Locative pronouns}

Three words are classified as locative pronouns: (rare) hip here, \({ }^{38}\) (common) hiz here, \({ }^{39}\) and (very common) toc there. \({ }^{40}\) These locative pronouns occur most commonly (and perhaps exclusively) with the verbs \(\sqrt{ }\) ahca be located, nt \(\sqrt{ }\) a go, mo \(\sqrt{ }\) a come, \(\sqrt{ }\) oom be lying, \(\sqrt{ }\) iih be (cloth-like item), \(\sqrt{ } \mathbf{i i j}\) be seated, and \(\sqrt{ }\) ap be standing.

Since they are pronouns, these words do not occur with determiners. \({ }^{41}\) However, the presence of hiz or toc in a clause (like certain other oblique objects but unlike an adverb such as haa there) usually requires indirect object inflection on the verb (see \(\S 2.4\) ). \({ }^{42}\) In the case of toc, there are no exceptions.
```

(174) ... xazoj tintica hant $z$ itaao, toc contica ha.
puma Md-Aw place a 3:3-Rl-pass.by there 3IO-Aw-SN-move DCL
'... esa puma estaba pasando un lugar, allí iba.'
... that puma was passing by a place, he was going there. (Conjo_Puma_2.2)
Toc contiiha iti, ...
there 3IO-Aw-3P-PON-move 3P-on
'Mientras iba allí ...'
While he was going there ... (Conejo_Puma_4.1)
... haaco $z$ ano tiij, toc cötiij ma, ...
ABs.house a 3P.in RL-sit there 3IO-RL-sit DS
'... estaba allí en una casa, ...'
...he was there in a house, ... (Mk 2:1) OP_2-2-07_131

```

In the case of hiz, the exceptions are extremely few; (177)-(178) are two such exceptions. This pronoun typically determines indirect object inflection.

\footnotetext{
\({ }^{38}\) This word was missing in the 2005 dictionary.
\({ }^{39}\) The 2005 dictionary erroneously listed hiz as a noun.
\({ }^{40}\) The word toc occurs more than 3500 times in the NTT, whereas the word hiz occurs approximately 170 times and hip only 10 times. Two of these pronouns are the etymological sources of the locative part of many complex demonstrative pronouns (§4.3.2) such as hipcop PX-VT, hipquij PX-CM, hizcoi PX-PL, and hizmocat PX-TwDPL.
\({ }^{41}\) See, however, the demonstrative adjective and pronoun hizac PX-LC (§4.3.2), which obviously is composed etymologically of hiz and the determiner hac.
\({ }^{42}\) The combination of the final consonant of toc just before co- or its allomorph cö-, especially when the latter precedes a sibilant, is hard to hear.
}


The word hip itself is quite uncommon, and is apparently used only when the subject is singular and the clause is not negative; it also appears to be replaced totally by hiz in the speech of some people. Unlike hiz, it does not determine indirect object inflection on the verb.
```

(182) iHip ihpxoop!
here 1SGS.In-Em-stand
'¡Aquí estoy!'
Here I am! (Offered) RMH_08-04-07_164d

```

\section*{17. Verb inflection}

This chapter discusses the inflection of verbs. A very brief synopsis of how different verb forms relate to basic sentence types is given in §17.1. An overview of verb inflection is given in \(\S 17.2\). Finite verb forms are discussed in detail in \(\S 17.3\) and nonfinite forms (infinitives and imperatives) in §17.4. Deverbal nouns are discussed in chapter 14, but the some facts in this chapter are relevant since the deverbal nouns share some of the inflection of finite verbs.

\subsection*{17.1 Sentence types and verb forms}

Three basic sentence types may be identified with respect to form: declarative, interrogative, and imperative.

Imperative forms are always and only used to express commands. The morphology of these non-finite forms is given in §17.4.2.

Interrogative forms are primarily used to express requests for information, although with a special morpheme and appropriate intonation they may express a sarcastic comment. See chapter 6. Irrealis interrogatives always use a question marker; see §20.2.1.1. Finite realis interrogatives always use the realis prefix \(\mathbf{t}\) - (which happens to be homophonous with the dependent realis prefix) and no question marker on the verb; see \(\S 17.3 .1 .5\). Interrogatives without finite verbs use the question marker; see \(\S 10.2\).

Declarative forms are primarily used to express assertions; they are not used to express questions. The verb of an irrealis independent clause with si- is typically accompanied by an auxiliary and modal; see \(\S 20.2 .1 .1\). With the proper modal, such a clause may be taken as something like a strong suggestion. An irrealis independent clause formed with the Subjunctive Irrealis prefix tm- on the verb may also be taken as a strong suggestion; see §17.3.1.4. Realis clauses formed with any of the realis mood prefixes other than \(\mathbf{t}\) - are always taken as declaratives.

\subsection*{17.2 Overview of verb inflection}

Verbs and deverbal nouns in Seri have the possibilities for inflection shown in Table 17.1. Some of these inflections may be considered obligatory: mood (see (1)), aspect (see (2)), subject number (see (3)), and person marking for subject, direct object, and indirect/oblique object (see (4)).
(1) Mood.

Finite verbs must have one explicit mood prefix; deverbal nouns are explicitly marked with one of three nominalizing prefixes (although for each there is one zero allomorph under specific conditions). No mood is unmarked morphologically. See §17.3.1. A simple example: yopanzx \(s\) /he/it ran.
(2) Aspect.

It may be argued that verbs are obligatorily inflected for aspect (§17.3.8). Imperfective aspect is overtly indicated whereas perfective aspect generally is not. See (3) for simple illustrative examples.
(3) Subject number.

Every stem carries information about number, either explicitly or implicitly. Plurality of subject is the marked value. The morphology of subject number is often closely intertwined with the morphology of aspect (see §17.3.3 and §17.3.8). A simple set of examples using forms of the verb for see with the power of a shaman: \(\sqrt{ }\) acaaso (singular subject, perfective), \(\sqrt{\text { acaaso-tim (singular subject, imperfective), }}\) Vacaaso-taj (plural subject, perfective), Vacaaso-tolca (plural subject, imperfective). A slightly more complicated example: لatp spit out (singular subject, perfective), Vatop-im spit out (singular subject, imperfective), Vatop-oj spit out (plural subject, perfective), لatop-olca spit out (plural subject, imperfective).

\section*{Subject, Direct Object, and Indirect/Oblique Object.}

Every verb form carries information about the person (and usual number) of these categories, either explicitly or implicitly. Third person is formally unmarked except in two situations: third person acting on third person, and third person indirect/

Table 17.1: Inflectional possibilities for verbs and for deverbal nouns
\begin{tabular}{lcccc}
\hline \multicolumn{5}{c}{ Table 17.1: Inflectional possibilities for verbs and for deverbal nouns } \\
\hline & Finite & Deverbal nouns & Imperative & Infinitive \\
Mood \((\S 17.3 .1)\) & \(\bullet\) & Realis/Irrealis & - & - \\
Aspect \((\S 17.3 .8)\) & \(\bullet\) & \(\bullet\) & \(\bullet\) & - \\
Subject \((\S 17.3 .2 .1)\) & \(\bullet\) & (as Possessor) & - & - \\
Unspecified subject \((\S 17.3 .5)\) & \(\bullet\) & - & - \\
Negation \((\S 17.3 .4)\) & \(\bullet\) & \(\bullet\) & - \\
Subject number \((\S 17.3 .3)\) & \(\bullet\) & \(\bullet\) & - \\
Direct Object \((\S 17.3 .2 .3)\) & \(\bullet\) & \(\bullet\) & \(\bullet\) \\
Indirect/Oblique Object \((\S 17.3 .2 .4)\) & \(\bullet\) & \(\bullet\) & \(\bullet\) \\
Directionals \((\S 17.3 .6)\) & \(\bullet\) & \(\bullet\) & \(\bullet\) \\
Passive \((\S 17.3 .5)\) & \(\bullet\) & \(\bullet\) & \(\bullet\) \\
\hline
\end{tabular}
oblique object. Each of these is explicitly and individually marked in many situations, but when direct object and indirect/oblique object morphology co-occurs, a morphological fusion takes place (see §17.3.2.5).

The word me hyonípatim I was hitting you with it (e.g., a stick) displays all four pieces of inflection overtly: me is \(3 \mathrm{IO}+2 \mathrm{SGDO}\) (third person indirect/oblique object fused with second person singular direct object, as described in §17.3.2.5), \({ }^{1} \mathbf{h}\) - is \(1 \mathrm{SGS.TR}\) (first person singular transitive subject), yo- is Dt (distal realis), \(\sqrt{ }\) nipa is the root form appropriate for singular subject and imperfective aspect), and -tim is IMPF (imperfective aspect in the form appropriate for singular subject).

The word cöiyonípatim I was hitting him/her/it with it (e.g., with a stick) is also fully inflected, but some of the morphology is not overt. The prefix cö- is 3IO (third person indirect/oblique object), \(\mathbf{i}\) - is 3:3 (third person subject acting on third person direct object; the morpheme is part of the subject inflection set; see \(\S 17.3 .2 .1)\). In some sense, trivially, there is no overt marking for direct object in this form, although the prefix \(\mathbf{i}\) - leaves no doubt that there is a third person direct object.

The word hin yotís \(s / h e\) signaled to \(m e, s / h e\) pointed at me is fully inflected but has no indirect/oblique object. The prefix him (which is hin by assimilation) indicates first person singular direct object. The subject is third person, which is unmarked. yo- is DT (distal realis), \(V\) tis is the only root form that this verb has, and there is no overt suffix for perfective aspect, just as is typically the case.

The word me hpyeeti I fetched for you is a fully inflected intransitive verb that has an indirect object; no direct object is possible grammatically with this verb (see §18.4.3 for details). The prefix me is 2 SGIO (second person singular indirect/oblique object, representing the beneficiary), hp- is 1 SGS.InTR (first person singular intransitive subject), \(\mathbf{y}\) - is an allomorph of Dт (distal realis), \(\sqrt{ }\) eeti is the root form appropriate for singular subject); there is no overt suffix for perfective aspect.

The word yopanzx s/he/it ran is also fully inflected, but even less of the morphology is overt. The subject is third person, which is unmarked; yo- is DT (distal realis), \(\sqrt{ }\) panzx is the root form appropriate for perfective aspect, and there is no overt suffix for perfective aspect.

\footnotetext{
\({ }^{1}\) For better or worse, the tradition for the past half century has been to write first and second person direct object prefixes and the corresponding portmanteau prefixes as separate words, like the clitics in Spanish, although it is obvious that the Seri morphemes are true prefixes. This has actually proven to be a fairly useful way to write the words. (Third person fuses with the verb phonologically in ways that makes it impossible to write it as a separate word.)
}

The five verbs mentioned in the preceding paragraphs are presented in (5).
(5)
\begin{tabular}{l|l|l|l|l|l}
\hline \begin{tabular}{l} 
Oblique/Indirect \\
Object
\end{tabular} & \begin{tabular}{l} 
Direct \\
Object
\end{tabular} & Subject & Mood & Root & Aspect \\
me & & h- & yo- & nipa & -tim \\
cö- & (implicit) & i- & yo- & nipa & -tim \\
me & hin & (implicit) & yo- & tis & (implicit) \\
& & hp- & y- & eeti & (implicit \()\) \\
& & (implicit) & yo- & panzx & (implicit) \\
\hline
\end{tabular}

Three of the remaining inflectional properties in Table 17.1 are different in that verbs exist with them and without them.
(6) Unspecified Subject and Passive. (§17.3.5)

An intransitive stem may be inflected for a referential third person subject (unmarked) or a nonreferential subject (marked). Simple example: yopanzx s/he/it ran, yocapanzx one (unspecified) ran. The counterpart to this for transitive stems is that they may be active or passive. Simple example: iyoozt \(s /\) he tattooed him/her, yopazt \(s\) /he was tattooed. \({ }^{2}\)
(7) Negation. (§17.3.4)

Almost any verb form may be presented as negative (marked) or non-negative.
Simple example: yopanzx s/he/it ran, yompanzx s/he/it didn't run.
Directional marking (§17.3.6) is not possible with most verbs, and it is obligatory with a few. Most allow the choice between toward (mo-) and away (nt-) from the referent. This morphology is preceded in the word only by the indirect/oblique object prefix, as in contiya (co-nt-iy-a, 3IO-Aw-Dт-move) \(s\) /he was going away.

\subsection*{17.3 Inflection of finite forms}

Finite verbs display an array of properties, but the ones that distinguish them most sharply from other verbal or deverbal forms are the presence of mood prefixes (§17.3.1) and a full set of subject person inflection markers (§17.3.2.1). Infinitives and imperatives lack both of these (see \(\S 17.4 .1\) and \(\S 17.4 .2\) ), and deverbal nouns show only a realis/irrealis distinction plus limited subject person marking through possessor morphology in two of the three types (chapter 14).

\footnotetext{
\({ }^{2}\) The passive stem cannot be inflected for an unspecified subject: *Yocapazt (One was tattooed).
}

The simplest finite forms are intransitive verbs with third person subjects since there is no overt inflection for third person subject on finite intransitive verbs. The mood prefixes are illustrated by their occurrence with two verbs in (8): the consonant-initial root \(\sqrt{ }\) cap \(f l y\) and the short-low vowel initial root \(\sqrt{ }\) ap stand. In addition, the negative forms of \(\sqrt{ }\) cap fly and \(\sqrt{ }\) ap stand are also given in (8). Allomorphy of the mood prefixes in these and other contexts is discussed in chapter 27.
fly not fly stand not stand
\begin{tabular}{llllll} 
a. & t- & \(\underline{\text { tcap }}\) & tomcap & \(\underline{\text { tap }}\) & \(\underline{\text { tmap }}\) \\
b. & tm- & \(\underline{\text { tomcáp }}\) & - & \(\underline{\text { tmap }}\) & - \\
c. & po- & \(\underline{\text { pocáp }}\) & \(\underline{\text { pomcap }}\) & \(\underline{\text { poop }}\) & \(\underline{\text { pomáp }}\) \\
d. & yo- & yocáp & \(\underline{\text { yomcáp }}\) & \(\underline{\text { yoop }}\) & \(\underline{\text { yomáp }}\) \\
e. & xo- & \(\underline{\text { xocáp }}\) & \(\underline{\text { xomcáp }}\) & \(\underline{\text { xoop }}\) & \(\underline{\text { xomáp }}\) \\
f. & si- & \(\underline{\text { scap }}\) & \(\underline{\text { somcap }}\) & \(\underline{\text { siip }}\) & \(\underline{\text { smap }}\) \\
g. & mi- & (i)mcáp & - & \(\underline{\text { miip }}\) & -
\end{tabular}

\subsection*{17.3.1 Mood}

A finite verb is inflected as one of seven forms, referred to here as mood forms, shown schematically in Table 17.2. The forms are not neatly characterized as being just mood except the binary choice in dependent clauses (either po- or t-). "Emphatic", for example, obviously has nothing to do with either tense or mood. The difference between the so-called "Distal" and the "Proximal" realis forms is quite unclear; it may have originally been recent past versus distant past, but if so, the facts have become more complex. \({ }^{3}\) The Distal and Proximal forms translated as present or past tense might also be rendered as habituals in certain contexts, as inchoatives in others, or as perfect tenses in yet others; such distinctions that are common in English or Spanish are not prominent in Seri.

The evidence is clear that the forms are most importantly divided between Realis and Irrealis, however, in that certain co-occurrence possibilities fall out along that parameter; see chapter 3.

\footnotetext{
\({ }^{3}\) I would have liked to have figured this out more satisfactorily, but I have been unable to do so. Sometimes the "Distal" and the "Proximal" are quite interchangeable, but sometimes not. In a discussion (early 2010) on the choice of forms in a particular context in which Proximal was possible but Distal was not, Xavier Moreno made as clear a spontaneous statement that I have ever heard that indicated that the Proximal form was required because the event was so proximal to the other event. That explanation simply does not cover all of the cases attested, however.
}

In dependent clauses - those that cannot occur as the main clause of a sentence, and most typical adverbial clauses without subordinators - the choice is between only two forms, which are referred to here as Dependent Irrealis and Dependent Realis. Only clauses with these dependent, or medial, forms carry a Different Subject marker (see §3.6). The relationship between a dependent clause and the following clause varies greatly, especially since the clauses typically occur without any indicator of their semantic relationship (see §3.8).

In independent clauses - those that can occur as the main clause of a sentence and in certain other limited contexts - the choice is between six forms, five of which are very common. The \(\mathbf{t}\) - form is much rarer in non-interrogative main clauses, and even then it requires a modal. As an interrogative it is very common, of course, and does not require a modal (see chapter 2). The Subjunctive Irrealis verb forms using the prefix tm- (§17.3.1.4) are not extensively used, it seems.

The following sections present the general usage of these forms without discussing details of the allomorphy (see chapter 27) or the syntax (see chapter 3). The examples here are purposefully relatively simple.

\subsection*{17.3.1.1 Dependent irrealis}

The dependent irrealis form, using the prefix po-, is required in dependent clauses that are in the irrealis mood (see §3.8), except for purpose clauses, as illustrated by the following examples. The dependent clause may represent a potential event in the future or an unrealized event in the past.
\begin{tabular}{lllll} 
Siimet pac ihpaaitim & ta & miihit & ihmiimzo. \\
bread some & 1SGS.TR-Ir.Dp-make-IMPF & DS & 2P-PON-eat & 1SGS.Tr-Px-want \\
'Si hago pan, quiero que lo comas.' & & \\
If I make bread, I want you to eat it. RMH_11-19-07_105a &
\end{tabular}
(10) Taax toii cöhiheetol hac ihpoocatx ta \(\mathbf{x}\), DDP elsewhere 3IO-1P-PON-push the.Lc 1SGS.Tr-Ir.Dp-release DS UT

(11) Ziix zo hpoaa, xepe iiqui hpiin, toc thing a 1 SGS.Tr-Ir.Dp-know sea 3P-toward 1 SGS.In-Ir.Dp-go there
\begin{tabular}{lllll} 
conthàpa & \(\mathbf{x}\), & xepe com & cohpsiifp & aha \\
3IO-AW-1SGS-Ir.Dp-move & UT & sea & the.Hz & \(3 I O-1 S G S\).In-Ir.Id-arrive AUX-DCL
\end{tabular}
xo ziix isahii ha zo himaa ha yax, aama.
but thing 3P-Ir.Id-Pv-feel Aux a 1P-PON-N-know DCL because Px-be
'Si hubiera sabido mejor, si hubiera ido hacia el mar, hubiera llegado al mar, pero no sabía nada.'
If I had known better, if I had gone toward the sea, I would have arrived at the sea, but I didn't know anything. (Topete_66) RMH_05-16-08_86

The next examples use the dependent irrealis in hypothetical situations embedded under a form of a speech verb.
(12) Ipocaiit ta, hpoocta, xoque.

3:3-Ir.Dp-spear DS 1SGS.Tr-Ir.Dp-look.at Em-US-say
'Me gustaría verlo meterle el pollero.'
How I would like to see him spear it! RMH_08-24-07_92a
(13) Hapoolx, \(\quad\) xoque. \({ }^{4}\)

1PLS-Ir.Dp-go-Pl Em-US-say
'Quisiera que pudieramos ir.'
I wish we could go! (DS2010, teeque) RMH_05-16-08_87
(14) iImpooho, xoc! XXXXXXX

2SGS-Ir.Dp-see Em-US-say
'Ojalá veas uno!’
I hope you see one! rмн_05-16-08_88
Moreover, the dependent irrealis form is used in cases of subordination under a negated past event.
(15) Him ipal, imatax iha.

1SGDO Ir.Dp-accompany SN-N-go DCL
'No me acompañó.'
S/he didn't go with me. RMH_08-24-07_92b

\footnotetext{
\({ }^{4}\) This expression has apparently evolved further, such that xoque has an innovative form xoc, and the new form has a slightly different meaning. ;Hapoolx xoc! can be used with a more exclusive usage. Xoc has a stronger or more direct meaning than xoque.
}
(16) Paziim áa, hax yoma. \({ }^{5}\)

Ir.Dp-pretty Intns just Dt-N-be \({ }_{\text {rreg }}\)
'No es/era muy bonito/a.' RMH_08-24-07_92c
S/he/it isn't/wasn't very pretty. (Yes, s/he/it is pretty but s/he/it still lacks.)
(17) Pojizi áa hax tama ho.

Ir.Dp-hurt Intns just Rl-N-be Irreg DcL
'No es muy chiloso.'
It's not very picante. RMH_09-28-07_116g
(18) Ptcamn zo poxtamt ta, himacötoj iha.
lobster a Ir.Dp-abundant DS 1P-PON-N-kill-Pl DcL
'No matamos a muchas langostas del mar.'
We didn't kill many lobsters. RMH_08-24-07_93
(19) Zixcám \({ }^{\circ}\) zo poxtamt ta, tompaho ho. \({ }^{6}\)
fish a Ir.Dp-abundant DS RL-N-Pv-see Dcl
'No se vieron muchos peces.'
Not many fish were seen. RMH_11-20-07_134
The dependent irrealis form with the modal (i)ho (§20.7) is also used in past time narratives to indicate an uncertainty about some situation or event.

\footnotetext{
\({ }^{5}\) One can also say Paziim áa hax sama. It won't be very pretty
\({ }^{6}\) This could also be translated as Not many fish are seen [these days]. It was also pointed out to me that the narrator of this is clearly part of the group that was on the trip during which the fish were not seen. If \(\mathrm{s} / \mathrm{he}\) were not, \(\mathrm{s} /\) he would have used the verb itcmaht iho (3:3-RL-N-see.PL DCL) they didn't see them in the second clause instead of the passive verb.
}
```

(20) ... hapxa zo toc copom iho x,
cottontail a there 3IO-Ir.Dp-lie DCL or
toc cöpoop iho, ox xah zo haii ha.
there 3IO-Ir.Dp-stand DcL thus Atten a/one SN-Pv-feel DcL
` ... un conejo estaba allí acostado, o estaba allí parado, parece.'
... a cottontail rabbit was there lying down, or it was standing there, it seems.
(Conejo_Coyote_07-09)

```

\subsection*{17.3.1.2 Dependent realis}

The dependent realis form, using the prefix \(\mathbf{t}\)-, is required in dependent clauses that are in the realis mood. On the variety of possible interpretations of the dependent clauses, see \(\S 3.8\). The example given here is a common use to describe events that precede the event of the main clause.
\begin{tabular}{|c|c|c|c|c|}
\hline (21) & ŁOx tpacta ma」, cmaax then now & \begin{tabular}{l}
taax \\
DDS
\end{tabular} & \[
\begin{array}{ll}
\mathbf{i t i} & \text { tiij, } \\
3 \text { P-on } & \text { RL-sit }
\end{array}
\] & \\
\hline & Łhapx taailx」 outside RL-release-ImpF & max, DS UT & imooctam, 3:3-Px-look.at-PL & comcaac coi. person.PL the.PL \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline \multirow[b]{2}{*}{Irrealis} & \multirow[b]{2}{*}{(simple)} & \multicolumn{2}{|l|}{Table 17.2: Mood prefixes} \\
\hline & & Dependent po-, si-* & Independent si- \(\dagger\) \\
\hline & Subjunctive & & tm- \(\ddagger\) \\
\hline Realis & (simple) & t- & t- ** \\
\hline & Distal & & yo- \\
\hline & Proximal & & \(\mathrm{mi}-\ddagger\) \\
\hline & Emphatic & & x0- \\
\hline
\end{tabular}
* Only in purpose clauses that are formed using an auxiliary verb as well.
\(\dagger\) Generally requires an auxiliary and modal.
\(\ddagger\) Does not co-occur with negative.
**Requires negation and a modal when used in independent clauses; very limited usage.
'Entonces, sentada allí, demostró su poder mágico, y la gente la miraba.'
Then, sitting there, she demonstrated her magical powers, and the people watched her. (ES2007, cmaam ipca quiho 8w)

\subsection*{17.3.1.3 Independent irrealis}

Independent clauses in the irrealis mood have verbs formed with the prefix si-. The independent
irrealis verb form very rarely occurs by itself in the verb phrase, however; it is almost always followed by an auxiliary and modal sequence (see chapter \(\S 20.2 .1 .1\) ) that indicate something about the attitude of the speaker. An inventory of these words that may help complete an irrealis clause - probably not exhaustive - is given in (22) with an illustrative verb in each case. \({ }^{7}\) The most common combinations are those in (22a-b), which utilize the auxiliary ha (§20.2.1) despite its phonetic reduction to a or even null in situations like (22a) and its prolongation to haa when stressed as in (22b).
\begin{tabular}{|c|c|c|c|c|}
\hline a. & Ihpsiitax 1SGS.In-Ir.Id-go & \begin{tabular}{l}
aha. \\
Aux-Dcl
\end{tabular} & 'Iré.' & \begin{tabular}{l}
I will go. \\
RMH_11-20-07_135a
\end{tabular} \\
\hline b. & ¿Ihpsiitax & \begin{tabular}{l}
haaya? \\
Aux-QM
\end{tabular} & '¿Iré? & \begin{tabular}{l}
Shall I go? \\
RMH_11-20-07_135b
\end{tabular} \\
\hline c. & Ihpsiitax & \begin{tabular}{l}
(haa hi.) \\
Aux Dcl
\end{tabular} & 'Pues, iré.' & \begin{tabular}{l}
I guess I'll go. \\
RMH_11-20-07_135c, RMH_11-20-07_135i
\end{tabular} \\
\hline d. & ;Ihpsiitax & \begin{tabular}{l}
xo! \\
Emphatic
\end{tabular} & 'Iré!' & \begin{tabular}{l}
I will go! \\
RMH_11-20-07_135d
\end{tabular} \\
\hline e. & Ihpsiitax & is. of.course & 'Por supuesto iré.' & \begin{tabular}{l}
Of course I'll go. \\
RNH_11-20-07_135e
\end{tabular} \\
\hline f. & Ihpsiitax & \begin{tabular}{l}
poho. \\
Doubt
\end{tabular} & 'Tal vez iré.' & \begin{tabular}{l}
Perhaps I'll go. \\
RMH_11-20-07_135f
\end{tabular} \\
\hline g. & Ihpsiitax & \begin{tabular}{l}
ii. \\
first
\end{tabular} & 'Iré primero.' & \begin{tabular}{l}
I'll go first. \\
RMH_11-20-07_1359
\end{tabular} \\
\hline h. & Ihpsiitax & i.
CRT & 'Iré (con seguridad).' & \begin{tabular}{l}
I will go (with certainty). \({ }^{8}\) \\
RMH_11-20-07_135h
\end{tabular} \\
\hline
\end{tabular}

The irrealis form with the modal ha and a subject other than first person typically has a hortative interpretation, especially when presented with the simple modal plus auxiliary sequence aha.
(23)
Inscmexl aha.
2SGS-Ir.Id-N-take Aux-DcL
'No debes agarrarlo/la.'
You shouldn't grab it. RMH_11-20-07_136a
Iscmexl aha.
3:3-Ir.Id-N-take Aux-Dcl
'No debe agarrarlo.' RMH_11-20-07_136b
S/he shouldn't grab it.

\footnotetext{
\({ }^{7}\) In addition to these possibilities, there are other options using denominal irrealis forms; see \(\S 10.4 .5\).
\({ }^{8}\) One consultant pointed out that this indicates there was some particular reason that is making the person decide to go.
}
(25) Insiitax ha, teeme.

2SG.Ir.Id-go Aux Px-say
'Dijo que fueras.'
He said that you should go. RMH_11-20-07_1360
The irrealis form with the auxiliary plus modal sequence haaya with subjects other than first person typically is questioning intentionality.
(26) Impacat it toox insiizquim haaya?

2SGS-Ir.Dp-swim far 2SGS-Ir.Id-enter Aux-QM
‘¿Vas a nadar lejos?’
Are you going to swim out far? (Is that your intention?) RMH_11-20-07_137
The independent irrealis form is used in purpose clauses (§3.4.2) without the type of auxiliary plus modal complex that is used in independent clauses, although relative time may be indicated with the realis auxiliary ta (§20.3.1) and greater uncertainty (or irreality because of negation) with the irrealis auxiliary \(\mathbf{p i}\) (§20.3.1).
Canoaa zo hataahoj, \(\quad\) ano \(\quad\) hpsiij.
boat a Im-make.ready-PL \(3 P . i n \quad\) 1SGS.IN-IR.ID-sit
'¡Preparen una barca para que me vaya en ella!'
Get a boat ready for me to go in! (NTT, Mk 3:9) RMH_-07-11-07_39d
(28) Quiimla ha, hai cah contisa taa ma.

SN-Tr-open-Pl Dcl wind the.Fl-Foc 3IO-Aw-Ir.Id-move Aux.Rl DS
'Están abiertas [las ventanas] para que pase el aire.'
[The windows] are open to let air in. RMH_07-11-07_40e
(29) Cöisahipet aha, zixcám \({ }^{\circ}\) com isiihit pi ta x. 3IO-3:3-Ir.Id-permit Aux-Dcl fish the.Hz 3:3-Ir.ID-eat Aux.Ir DS UT
'Le dejará comer el pescado.'
S/he will let him/her eat the fish. RMH_07-11-07_41a
(30) Hapapjc \({ }^{\circ}\) zo hsexl pi, hiz comhima ha. bead(s) a 1SGS.Tr-Ir.Id-buy Aux.Ir here 3IO-Twd-1P-PON-N-move Dcl
'No vine acá para comprar chaquiras.'
I didn't come here to buy beads. RMH_07-11-07_41b

\subsection*{17.3.1.4 Subjunctive Irrealis}

Verbs with the prefix tm- are not as frequently used as other verb forms. \({ }^{9}\) The Subjunctive

\footnotetext{
\({ }^{9}\) This prefix is phonetically and phonologically identical to a sequence of the simple \(\mathbf{t}\) - and negative \(\mathbf{m}-\). Both have the same allomorph tem- with the epenthetic velar stop (see §27.1.4). One Seri consultant has implied apparently because of its uncommonness - that examples with \(\mathbf{t m}\) - are simply \(\mathbf{t} \mathbf{- m}-(\) RL-N-) used in a different
}

Irrealis seems to have several uses, all non-negative and non-interrogative. The first is when the speaker is expressing a wish; the verb is in the third person.
```

`Mojet xah zo tomhaa!
bighorn - a Sb-EQ
``Que sea borrego!'
May it be a bighorn sheep! RMH_05-16-08_89

```

The second is when the speaker is indicating that something that could have happened did not in fact happen; the verb may be inflected for any person of subject. In (32) the second sentence is only making explicit the entailment that is already understood from the first sentence, and might even be omitted in natural conversation.
(32) Impoofp ta, tmaticpan. Haptco yaticpan.

2SGS-Ir.Dp-arrive DS Sb-work already DT-work
'Hubiera trabajado cuando llegues. [Pero de hecho] Ya está trabajando.'
S/he could have started working at the time of your arrival. [But in fact] S/he's
already working. (offered) RMH_05-16-08_90
The third situation is when the speaker is reluctantly giving permission for something to happen or is indicating that something should happen although one might wish the situation to be different.

\section*{Hin ntemapatje \\ is.}

1SGDO 2SGS-RL-SB-untie of.course
‘¡Puedes desatarme!’
OK, you can untie me! RMH_11-20-07_139
(34) Ox xah hizi mii: - Hapi toc cömatemoii. thus Atten 1PlDO Px-tell Intns there 3IO-2PLS-Sb-stand.Pl
'Así nos dijo: "Ustedes tienen que quedarse allí.""
Thus he told us: "You (pl.) just have to stay there." RMH_11-20-07_141
The fourth situation is with a first person plural subject and the effect is something like a mild hortative.
(35) Hatcmocoozx, \({ }^{10}\) xah meeyo.

1PlS-Sb-UO-steal-Pl — Px-say-Pl
'Robemos -dijeron.'
"Let's rob," they said. (Viaie_Tiburon_80) RMH_11-20-07_142

\footnotetext{
way. This does not seem to be a viable account, however. Moser (1978:114) referred to as the Affirmative Potential.
\({ }^{10}\) The original text has ha after this verb; this has not been checked out carefully yet.
}
(36) Hapoziit, hatemooctam - ox tee, yoque.

1PlS-Ir.Dp-go.to.Pl 1PlS-Sb-look.at-Pl thus Rl-say Dt-US-say
'Vamos allí y veámoslo - dijo, se dice.'
"Let's go there and see it," he said, it is said. (Apostador 157-159) RRRTMay2010

\subsection*{17.3.1.5 Realis in main clause}

Main clauses may occur in the simple realis form \(\mathbf{t}\)-, but there is a difference between interrogative and declarative clauses. Declarative main clauses with t- are somewhat less frequent and occur only when negative and also simultaneously with the modal ho (§20.7).
(37) Icoohit ihtemamzo ho.

Inf.In-UO-eat 1 SGS.Tr-Rl-N-want DCL
'No quiero comer.'
I don't want to eat. (DS2010, ho) RMH_11-20-07_143
(38) * Icoohit itcmamzo.
(No quiero comer.)
(I don't want to eat.)
[lacks modal]
* Icoohit ihtamzo ho.
(Quiero comer.) (I want to eat.) [lacks negative]
(40) ... cöitcomcazit ho.

3IO-3:3-RL-N-grab.away DCL
‘... no se la quitó.'
.. he didn't take it away from him. (Viento_Norte_7b)
Realis clauses with \(\mathbf{t}\) - for interrogative mood are extremely common, however; they may be affirmative or negative. They do not use a modal. The verbs are always ambiguous between present and past tense.
(41) ¿Hax chaa -ya iiqui tpam? water SN-EQ QM 3P-toward/with RL-Pv-swallow
‘¿Se toma/tomó con agua?’ RRR again since changed
Is/was it swallowed with water? (DS2010, iqui)
(42) ¿Quíih-ya tazcam?
who? QM RL-arrive.PL
‘¿Quiénes llegaron?’
Who arrived (pl.)? RMH_11-19-07_152

\subsection*{17.3.1.6 Distal realis}

Verbs with the prefix yo- typically describe events in the past. These verb forms are labeled Distal realis since speakers tend to relate them to a more distant past than the so-called Proximal
realis forms that use the prefix mi- (see §17.3.1.7). \({ }^{11}\) However, as mentioned above, the difference between clauses with yo- and clauses with mi- is very unclear when actual usage is examined.
(43) Ziix ipxasi cah tazoj oo ma x, yopahit.
thing 3P-flesh the.Fl-Foc Rl-alone Dl DS UT Dt-Pv-eat
'Sólo se comía carne.'
Only meat was eaten. RмH_11-20-07_144
(44) Haapis quih anxö him iiyoj.
cigarette the.Fl Intns 1SGDO DT-give.gift-PL
'Me dieron muchos cigarrillos.'
They gave me lots of cigarettes. (Burgos_28) RMH_11-20-07_145
Verbs with yo- are also used in clauses indicating habitual action.
(45) Ihptiim, ihyatj coox cah x,

1SGS.In-RL-sleep 1P-PON-arise all the.FL-FOC UT
\begin{tabular}{lll}
\begin{tabular}{ll} 
cafee \\
coffee
\end{tabular} & quih & hyoosi. \\
the.FL & 1SGS.TR-DT-drink
\end{tabular}
'Siempre al levantarme después de dormir, tomo café.'
I always drink coffee when I get up from sleeping. RMH_11-20-07_146

\subsection*{17.3.1.7 Proximal realis}

The realis prefix mi- indicates that the event described in the clause has already occurred or that it is presently occurring. There is no clear contrast between Proximal mi- and Distal yo- in actual usage. \({ }^{12}\) The prefix mi- does not co-occur with negation, however, unlike Distal yo-.
(46) Ihpmeejim.

1SGS.In-Px-old
'Soy viejo.'
I am old. RMH_11-27-07_64
Hant miisaquim ihmiimzo.
land 2P-PON-brush 1 SGS.Tr-PX-want
'Quiero que barras el piso/suelo.'
I want you to sweep the floor/ground. (DS2010, quisaquim) xMH_08-15-07_42b

\footnotetext{
\({ }^{11}\) Some speakers use the names "Pasado" for yo- forms and "Presente" for mi- forms.
\({ }^{12}\) Compare, for example, the clues given for each of the lizards in Montaño Herrera (2007). Each clue gives a habit or characteristic of the lizard in question. For several of these clues, the verb form used is the proximal realis and for several of them it is the distal realis. No difference in meaning is observed.
}
(48) Hahoot hac ah contita, cömiizquim.

Abs-entrance the.Lc Foc 3IO-Aw-Rl-move 3IO-Px-enter
'Entró por la puerta.'
S/he entered by the door. (DS2010, ah) RMH_07-11-07_16f
Verbs with mi- are also used in clauses indicating habitual action.
(49) Siimet quih iictim quih hmeaa.
bread the.FL 3P-PON-be.cut the.Fl 1SGS.Tr-Px-look.for 'Busco pedazo de pan (todos los días).'
I look for a piece of bread (every day). (Burgos_38) RMH_11-27-07_65
(50) Hap quih hmiicö; hooxquim miipe yax. \({ }^{13}\) mule.deer the.Fl 1SGS.Tr-Px-kill 1P-ON-shoot Px-good since 'Yo mataba venado bura; tenía buena apuntería.'
I used to kill mule deer; I was a good shot. (Burgos_50) RMH_11-27-07_66

\subsection*{17.3.1.8 Emphatic realis}

The realis forms with xo- indicate a greater amount of emotion on the part of the speaker to emphasize the statement. The Emphatic realis is possible only (it seems) when the speaker is personally involved in some way with personal observation. For this reason, it is not typically found in narrative texts except in places where a person is being cited.
(51) ¡Imxoma!

Twd-Em-N-move
‘¡No viene!'
S/he's not coming! RMH_11-27-07_67a
iXaapl!
Em-cold
‘¡Hace frío!’ o ‘¡Está frío!’ It's cold! (weather or item) RMH_11-27-07_67b

\author{
¡Anxö เhiisax hant xöaait」! \\ Intns 1P-? land Em-arrive \\ ‘¡Estoy muy feliz!’ \\ I am very happy! RMH_11-27-07_67d
}

\subsection*{17.3.2 Person inflection}

A finite verb in Seri is inflected for the person of the subject, direct object, indirect object and oblique objects of the clause; \({ }^{14}\) this inflection is indicated by a fairly simple set of prefixes.

\footnotetext{
\({ }^{13}\) The original sentence did not end in yax in the 1968 transcription. That word was added by René Montaño Herrera.
\({ }^{14}\) This statement represents a slight degree of oversimplification in different places. With respect to subjects, see \(\S 8.5\) where it is shown that the person of the complement of a partitive expression is cross-referenced as subject of the verb. With respect to direct objects, see \(\S 9.2 .2\) where impersonal passives are considered. These generalizations also side-step issues relating to the level of syntactic representation that is relevant for person
}
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|r|}{Table 17.3: Subject inflection prefixes} \\
\hline 1 singular & \(\mathbf{h}\) - (transitive), hp- (intransitive) \\
\hline 2 singular & m- \\
\hline 1 plural & ha- \\
\hline 2 plural & ma- \\
\hline 3:3 & i- \\
\hline 1 emphatic & \(\mathbf{a - /} \emptyset_{\text {- }}^{\text {Ablaut }}\) (transitive), ca- (intransitive) \\
\hline
\end{tabular}

\subsection*{17.3.2.1 Subject person inflection}

The subject person markers are given in Table 17.3. Third person is marked overtly only when the direct object is also third person; that prefix is \(\mathbf{i}-(3: 3)\) and it clearly is part of the subject person inflection set, as explained below. The allomorphy of the first person singular subject prefix is suppletive and is conditioned by the superficial transitivity or intransitivity of the clause. \({ }^{15}\)

Two simple verbs are conjugated in (55) with the simple dependent realis to illustrate these prefixes. Since epenthetic \(\mathbf{i}\) often appears before these prefixes for reasons relating to permissible onsets (see §28.3.1 and §27.1.1), these verbs are presented with vowel-final words before them so that the epenthetic vowel is not necessary. The nasal of the second person singular prefix becomes \(\mathbf{n}\) by the simple assimilation rule described in \(\S 28.5 .2\). The verb stem reflects the number of the subject (see §17.3.3).
(55) Intransitive: \(\sqrt{\mathbf{a f p}}\) arrive
\begin{tabular}{lrlrll} 
haa & hptafp & I arrived there & zo & htaho & I saw one \\
haa & \(\underline{\text { ntafp }}\) & you arrived there & zo & ntaho & you saw one \\
haa & tafp & s/he arrived there & z & itaho & s/he saw one \\
haa & hatazcam & we arrived there & zo & hataht & we saw one \\
haa & matazcam & you arrived there & zo & mataht & you saw one \\
haa & tazcam & they arrived there & z & \(\underline{\text { itaht }}\) & they saw one
\end{tabular}
inflection. They generally refer to a relatively surface level - grammatical subject rather than logical subject, for example, to use somewhat popular terms.
\({ }^{15}\) First person singular is the only person that therefore has four distinct prefixes: hp- for intransitive subject, \(\mathbf{h}\) for transitive subject, him for direct object, and he for oblique/indirect object. (The latter two prefixes are written with a space after them in the writing system; the prefix he should not be confused with the independent pronoun he with which it is obviously related historically.) The allomorphy is slightly irregular with the intransitive irregular ('stress retracting') verbs such as \(\sqrt{\text { oom }}\) lie and \(\sqrt{ }\) ee say in that the allomorph \(\mathbf{h}\) - is used for first person singular, as in hamom (1S-Px-lie) I lay, heme (1S.PX-say) I said, and hemyo (1S-PX-say-PL) we said.

The same verbs are presented in (56) in contexts that require an epenthetic vowel \(\mathbf{i}\) because of the presence of sonorants ( \(\mathbf{h}\) and \(\mathbf{m}\) in this case) before another consonant: following pause and following a consonant; see §27.1.1.
\begin{tabular}{rllll} 
ihpyoofp & I arrived & \(\mathbf{p a c}\) & ihyooho & I saw some \\
inyoofp & you arrived & \(\mathbf{p a c}\) & \begin{tabular}{l} 
pac \\
yoofp
\end{tabular} & she arrived
\end{tabular}

The \(\mathbf{p}\) of the first person singular intransitive subject prefix hp- always elides before a following \(\mathbf{p}\). Therefore the distinction between intransitive \(\mathbf{h p}\) - and transitive \(\mathbf{h}\) - is lost before the Dependent Irrealis prefix po- and is not written. Underlying \{hp-po-m-afp\} (1SGS.In-Ir.Dp-Narrive) (if) I do/will not arrive is ihpomafp (when not pronounced after a vowel-final word), for example, and not *ihppomafp.

The normal first person subject inflection may be replaced by a less-common first person emphatic morpheme. It is especially appropriate when the first person emphatic pronoun hatee (§16.1.5) is used. This emphatic morpheme has a different position in the verb than the ordinary subject person inflection prefixes; it occurs after the negative prefix rather than before the mood prefix (see Table 17.7 and the examples in (59) and (60)). It has three allomorphs: ca- (in intransitive clauses) and \(\varnothing_{-\mathrm{abl}}\) and \(\mathbf{a}_{-\mathrm{abl}}\) (in transitive clauses, before non-low vowels and elsewhere, respectively). \({ }^{16}\) This prefix may occur with transitive verbs or intransitive verbs, and the transitive verbs may have explicit direct objects, but the direct object must be third person morphologically. \({ }^{17}\) As a result, example (57) is unacceptable (it has second person direct object), but example (58) is fine since the reflexive clause has a possessed noun as direct object (see chapter 11).
\begin{tabular}{ll} 
* Hatee ma seenj aha. \\
1Em.Pro & 2SGDO Ir.Id-1Em.S.Tr-yell Aux-DcL \\
('Yo voy a gritarte.') (I am going to yell at you.)
\end{tabular}
(58) Hatee hipi hisoj sazt aha.

1Em.Pro Intns 1P-self Ir.Id-1Em.S.Tr-tattoo Aux-Dcl
'Yo voy a tatuarme a mí mismo.'
I am going to tatto myself. RRR recheck length XX 7May2010 a short

\footnotetext{
\({ }^{16}\) The prefixes lengthen to caa- and aa- under conditions that are not understood. The zero prefix is an ablaut trigger. See §14.4.2.
\({ }^{17}\) This fact was only discovered in 2007 when working with René Montaño Herrera.
}
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow{3}{*}{a.} & \multicolumn{2}{|l|}{intransitive stem} & \multicolumn{2}{|l|}{RMH_11-27-07_68} \\
\hline & \(\sqrt{\text { atax }}\) & Hatee & somcaatax aha. & I won't go. \\
\hline & & 1Еm.Pro & Ir.Id-N-1Em.S.In-go Aux-DCL & \\
\hline b. & \(\sqrt{\text { fit }}\) & Hatee & \begin{tabular}{l}
scafít aha. \\
Ir.ID-1Em.S.In-stand.up
\end{tabular} & \(I\) will stand up. \\
\hline c. & \(\checkmark\) pazt \({ }^{18}\) & Hatee & \begin{tabular}{l}
scapazt aha. \\
Ir.Id-1Em.S.In-Pv-tattoo
\end{tabular} & \(I\) will be tattooed. \\
\hline d. & \(\checkmark\) oohitim \({ }^{19}\) & Hatee & \begin{tabular}{l}
somcoohitim aha. \\
Ir.ID-N-1Em.S.In-UO-eat-IMPF
\end{tabular} & I won't eat. \\
\hline e. & \(V\) aahit & Hatee & scaahit
IR.ID-1EM.S.In-fish & I will go fishing. \\
\hline & \multicolumn{2}{|l|}{transitive stem} & \multicolumn{2}{|l|}{RMH_05-17-08_235} \\
\hline a. & Voonl & Hatee 1Еm.Pro & \begin{tabular}{l}
saanl aha. \\
Ir.Id-1Em.S.Tr-stir Aux-Dcl
\end{tabular} & I will stir it. \\
\hline b. & \(\checkmark\) inj & Hatee & \multicolumn{2}{|l|}{Ir.ID-1Em.S.Tr-yell.at} \\
\hline c. & \(\checkmark\) ahit & Hatee & \begin{tabular}{l}
smaahit aha. \\
Ir.Id-N-1Em.S.Tr-eat
\end{tabular} & I won't eat it. \\
\hline d. & \(\sqrt{ } \mathrm{azt}\) & Hatee & \begin{tabular}{l}
sazt aha. \\
Ir.ID-1Em.S.TR-tattoo
\end{tabular} & I won't tattoo him/her. \\
\hline e. & \(\sqrt{ }\) emen & Hatee & \begin{tabular}{l}
seemen aha. I will \\
Ir.ID-1Em.S.Tr-toss.back.and.fo
\end{tabular} & ill toss it back and forth. orth \\
\hline f. & \(\checkmark\) pii & Hatee & \begin{tabular}{l}
sapii \\
(a)ha. \\
Ir.Id-1Em.S.Tr-taste
\end{tabular} & I will taste it. \\
\hline
\end{tabular}

Two expressions that commonly use a verb with the prefix are hax maacta (just Px-1Em.S.Tr-look.at, with the root \(\sqrt{\text { oocta) }}\) I think, I opine, and hax maaimoz (just Px-1Em.S.Trthink, with the root \(\sqrt{ } \mathbf{C i m o z}\) ) I think, I feel. See \(\S 12.2 .1\) for examples of these words in sentences.

This first person emphatic subject prefix is used with plural stems to indicate a first person plural hortative.

\footnotetext{
\({ }^{18}\) This is the passive stem \((\S 17.3 .5)\) of the verb \(\sqrt{ }\) azt tattoo.
\({ }^{19}\) This is an unspecified object stem (§19.1.1) of the verb Vahit eat.
}

\section*{(61) Pocaalx \(\mathbf{x}\), saactam.}

Ir.Dp-1Em.S.In-go-Pl UT Ir.Id-1Em.S.Tr-look.at-PL
‘¡Vamos a verlo/la!’
Let's go look at it! RmH_11-27-07_70

\subsection*{17.3.2.2 Third person on third person}

Third person subject acting on third person direct object - regardless of number or definiteness of the subject or direct object and regardless of the presence of an overt nominal - generally induces the presence of the prefix \(\mathbf{i}\) - in finite verbs. Simple examples are given in the paradigms in (55) and (56). This \(\mathbf{i}\) is clearly distinguishable from the epenthetic vowel \(\mathbf{i}\) mentioned above in that it is not affected by other vowels. On the contrary: it obligatorily induces the loss of the vowel of the indefinite article zo as shown in (55) when the article zo immediately precedes it.

The direct object relevant for the \(3: 3\) inflection i- may be an infinitival clause, as in the following example.
```

¿Icaatax itamzo?
Inf.In-go 3:3-Rl-want
`¿Quiere ir?'
Does s/he want to go? RMH_11-28-07_73

```

The predicate nominal complement of a copular verb is not a direct object; therefore \(\mathbf{i}\) - does not occur on the finite verb in examples such as the following:
Quihehe \(^{\circ}\) caacoj quih thaa, ...
ruler SN-big the.FL RL-EQ
'Era una reina / un rey, ...'
She was a queen / he was a king, ...

However, the prefix i- does occur in the (impersonal) passive form of ditransitive verbs, even if the verb is inflected for a non-third person object. \({ }^{20}\) These cases require special discussion since it is also claimed that these clauses are superficially intransitive; see §9.2.2.
(64) Iyopéhetim.

3:3-Dт-Pv-give.gift-IMPF
'Les fue obsequiado.'
They were given it. RMH_11-28-07_75a
(65) Hizi ịscompéhetim
aha.
1PLDO 3:3-Ir.Id-N-Pv-give.gift-ImpF Aux-Decl
'No nos será obsequiado.'
We will not be given it. RMH_11-28-07_75b

The claim that the \(3: 3\) prefix is part of the subject inflection paradigm is based on the observation that subject inflection is omitted in one particular situation (see §10.4.2), and is present in

\footnotetext{
\({ }^{20}\) If there is direct object agreement on the verb (always plural for reasons made clear in \(\S 9.2 .2\) ), the presence of \(\mathbf{i}\) - is discernable only by the fact that \(\mathbf{c}\)-Epenthesis can take place if other conditions are correct. See §27.1.4.
}
one suprising situation (see \(\S 14.2\) ) — and in both cases the prefix \(\mathbf{i}\) - disappears or appears in the same way that the first and second person subject inflection prefixes do.

\subsection*{17.3.2.3 Direct object inflection}

The verb inflects for the direct object of the clause. The direct object person prefixes are given in Table 17.4. \({ }^{21}\) Third person is unmarked, although a third person direct object and a third person subject determine an overt subject inflectional prefix (see the preceding discussion in §17.3.2.1).

The direct object inflectional prefixes are written as separate words in the practical orthography, except for the prefix hpo-. \({ }^{22}\) (The prefix hpo- may merge with the vowel of the root when it occurs with a null allomorph of the imperative prefix. This situation never arises with the non-imperative allomorphs.)
a. Him imcazni.
'Me mordió.'
1SGDO Px-bite
It bit me. RмH_11-28-07_76a
b. ilhposanj!
'¡Llévame en tu espalda!’
1SGDO-Im-carry.on.back
Carry me on your back! RMH_11-28-07_76b
c. ilhpoozt!
1SGDO-Im-tattoo
‘¡Tatúame!’
Tattoo me! RмH_05-17-08_236
d. iMa taho?
‘¿Te vio?’
2SGDO RL-see
Did s/he/it see you? RMH_11-28-07_76c
e. Hizi yooho.
'Nos vio.'
1PlDO Dt-see
S/he saw us. RMH_11-28-07_76d
f. Mazi yooho.
'Les vio a ustedes.'
2PlDO DT-see
He saw you (pl.). RMH_11-28-07_76e

\footnotetext{
\({ }^{21}\) Prefix vowels typically delete before other vowels (see §27.2.1). This does not apply to the vowels of an object agreement prefix (written as a separate word in the practical orthography) when it precedes the infinitive prefix: ma ihazt to tattoo you, ma ihatís to point at you.
\({ }^{22}\) All of them are clearly prefixes, as shown by the way that they provide context for a phonological rule such as \(\mathbf{c}\)-epenthesis (§27.1.4). They cannot be separated from the verb by pause nor moved around. The final \(\mathbf{i}\) of the plural forms hazi and mazi elides before the \(\mathbf{i}\) of the infinitive prefix in examples such as (73). The convention of writing them as separate words has allowed for orthographic distinction between three homophonic morphemes: ma (different subject marker, \(\S 3.6\) ), written after a dependent verb and usually before a comma or \(\mathbf{x}\) followed by a comma; ma (second person singular direct object), written as a separate word before the verb, ma (second person plural subject), written as a prefix on the verb. Thus, Ma taho ma, ... After she saw you ... (change of subject in next clause), and Mataht ma, ... After you (pl.) saw it/her/him/them, ....(change of subject in next clause).

The convention also permits an orthographic distinction between two important different interpretations of certain phonetic forms that are discussed later in this section.
}
\begin{tabular}{lc}
\hline & Table 17.4: Direct object inflection prefixes \\
1 singular & hpo- (in imperatives), him (elsewhere) \\
2 singular & ma \\
1 plural & hizi* \(^{*}\) \\
2 plural & mazi \\
\hline *There is a dialectal variant: hazi \\
\hline
\end{tabular}

There are two idiosyncrasies with respect to the prefixes (see Table 17.5 for surface forms). The first is that (despite the conventions of the practical spelling system), when a verb has first person singular direct object, there is no explicit marking of second person subject or possessor. \({ }^{23}\) Instead of him m- ( 1 SGDO 2 SGS ) and him ma- ( 1 SGDO 2 PLS ) one only finds phonetically [2im]. And instead of him mi- ( 1 SGDO 2 P ) in deverbal forms, one finds phonetically [?imi]. Degemination of nasals does not happen elsewhere, so a simple phonological rule cannot account for the fact that two m's are not present. Furthermore, the loss of a in the case with 2PLS would not be accounted for by any straightforward phonological rule. \({ }^{24}\) Some of these facts are simultaneously illustrated by the following form in which the ambiguity is presented and also the fact that a phonetically long nasal results from the juxtaposition of the person prefix and the proximal realis.
\begin{tabular}{|c|c|c|}
\hline & [2im'mii \({ }^{\text {25 }}\) & \multirow[t]{2}{*}{RMH_05-17-08_237} \\
\hline b. & * [?im'mmii \(]\) & \\
\hline & * [?im'immiii] & \\
\hline & \begin{tabular}{l}
me dijo.' o '..., m \\
he told me. or
\end{tabular} & \\
\hline
\end{tabular}

The plurality of the second person plural subject is indicated in the form of the verb stem, as normally done, although it is not indicated by the prefix. \({ }^{26}\)

\footnotetext{
\({ }^{23}\) I thank Dieter Wunderlich for his help in improving the analysis here.
\({ }^{24}\) Note that there is an \(\mathbf{i}\) in the string [?imi], however. The deverbal noun is not unmarked for possessor. The explicit marking is third person possessor although it is interpreted as either second or third person in this situation.
\({ }^{25}\) This is written him miih in the practical orthography if the subject is third person singular, and him mmiih if the subject is second person singular.
\({ }^{26}\) The assimilation of \(\mathbf{m}\) to the point of articulation of the following consonant is automatic; see \(\S 28.5 .2\).
}

Table 17.5: Subject and direct object person combinations
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow{8}{*}{\[
\begin{aligned}
& \stackrel{\rightharpoonup}{0} \\
& .0 .0 \\
& 0 \\
& 0.0 \\
& 0.0 \\
& 0
\end{aligned}
\]} & & \multicolumn{6}{|c|}{Subject} \\
\hline & & 1 s & 2 s & 3 s & 1 pl & 2 pl & 3 pl \\
\hline & 1s & & him m- \(\dagger\) & him & & him m- \(\dagger\) & him \\
\hline & 2 s & ma h- & & ma & mazi ha- & & ma \\
\hline & 3 s & h- & m- & i- & ha- & ma- & i- \\
\hline & 1 pl & & hizi m- & hizi & & hizi ma- & hizi \\
\hline & 2 pl & mazi h - & & mazi & mazi ha- & & mazi \\
\hline & 3 pl & h- & m- & i- & ha- & ma- & i- \\
\hline
\end{tabular}
\(\dagger\) While this is written orthographically as him \(\mathbf{m}\)-, it is phonetically indistinguishable from third person subject (singular or plural) acting on first person singular object.
a. [?in'tع jox] RMH_11-28-07_77
b. * [?imma'tecjox]
c. *[?ima'tعcjox]
‘¿Me donaron ellos?’ o ‘¿Me donaron ustedes?’
Did they donate to me? or Did you (pl.) donate to me?
The second irregularity is the second person singular object prefix (ma) is replaced by its plural counterpart mazi whenever the subject of the verb is first person plural. This situation results in ambiguity since no other part of the morphology or syntax necessarily indicates number of the direct object. \({ }^{27}\)
```

a. Mazi hamiixant.
2PLDO 1PLS-Px-fear-PL
'Te tememos. o Les tememos a ustedes.'
We fear you (sg. or pl.). RMH_11-28-07_78a
b. ¿Mazi hiityoj?
(*;Ma hiityoj?)
2PLDO 1PLS-RL-give.gift-PL
`¿Te lo regalamos? o Se lo reglamos a usted/ustedes?`
Did we give it to you (sg. or pl.)? RMH_11-28-07_78b

```

This generalization relates only to the shape of the prefixes that occur. It does not affect number inflection on the verb, as the plural stems in the preceding examples show. It is true, however, irrespective of whether the subject person prefix actually occurs or not. In the fol-

\footnotetext{
\({ }^{27}\) A verb that clearly distinguishes a perfective from imperfective aspect would permit a difference here since that morphology is regularly used to indicate singular vs. plural direct objects; see §17.3.8.
}
lowing example, the subject person prefix does not appear because the verb occurs as a subjectoriented deverbal noun ( \(\S 14.1\) ). Nevertheless, the replacement of ma by mazi is required.
(70) He mazi cnooptolca ha. (* He ma cnooptolca ha.)

1Pro 2PlDO SN-Tr-hit-Pl-Impf Dcl
'Te estamos golpeando.' o ' Les estamos golpeando a ustedes.'
We are hitting you (sg. or pl.). RMH_11-28-07_79
The same is true if the subject person is represented by a possessive prefix (in both proposition/oblique-oriented and object-oriented deverbal nouns, \(\S 14.4\) and \(\S 14.3\) respectively).
(71) Mazi hisanzil imiimcajc. (* Ma hisanzil imiimcajc.)

2PLDO 1P-PON-carry.on.back-PL 3:3-Px-want.PL
'Quieren que te llevemos (en la espalda).' o 'Quieren que les llevemos a ustedes (en la espalda).'
They want us to carry you (sg. or pl.) (on our backs). RMH_11-28-07_81
\begin{tabular}{lll} 
Mazi hiiyoj & iha. & (* Ma hiiyoj iha.)
\end{tabular}
'Te los estamos obsequiando.' o 'Se los estamos obsequiando a usted/ustedes.'
We are giving them to you (sg. or pl.). RMH_05-17-08_238
It is even true if the verb is infinitival and as such no direct subject person inflection.
(73) Mazi ihasanzil hamiimcajc. (* Ma ihazto hamiimcajc.)

2PLDO Inf.TR-carry.on.back-Pl 1PLS-Px-want.PL
'Queremos llevarte (en la espalda). o 'Queremos llevarles (en la espalda).'
We want to carry you (sg. or pl.) (on our backs). RMH_11-28-07_82

\subsection*{17.3.2.4 Indirect/oblique object inflection}

The verb inflects for indirect objects and oblique objects using the same morphology; see §§2.3-2.4 for examples and discussion of the range of arguments that determine this inflection, and see especially \(\S 18.5 .3\) and \(\S 18.6\) for subcategorization frames that include indirect objects.
\begin{tabular}{l}
\begin{tabular}{c} 
Table 17.6: \begin{tabular}{c} 
Indirect/oblique \\
object inflection prefixes
\end{tabular} \\
1st \\
2nd \\
3nd \\
3rd
\end{tabular} me \\
\hline
\end{tabular}

A few verbs inflect for this prefix without there being any corresponding nominal in the clause (§18.2.5, §18.3.1, §18.4.4, §18.5.4).

The third person indirect/oblique object prefix also commonly occurs on deverbal nouns such as cöiiht (3IO-3P-PON-see/Pl) their seeing them (see §14.4) when they are used as heads of complement clauses (see \(\S 12.2 .2\) and \(\S 12.2 .1\) ) even though the clause does not contain an indirect or oblique object. It is only with such deverbal nouns that two prefixes occur under highly restricted conditions: as in contcöiscmaca (3IO-AW-3IO-3P-Ir.ID-N-US-move) one's going
away. Such double occurrences also always involve proposition/oblique-oriented deverbal nouns with the directional prefix nt- (§17.3.6) and a verb that has an oblique/indirect object.

The morphology is shown in Table 17.6. Indirect object morphology does not distinguish between singular and plural although the difference between singular and plural indirect objects may be indicated in other subtle ways. \({ }^{28}\) The morphemes in Table 17.6 are clearly prefixes although the first and second person forms are written as separate words in the practical orthography. \({ }^{29}\) They are never separated by pause from the verb. The third person prefix, however, is the only one that merges phonetically with the root in a severe way (when the null allomorph of the imperative prefix occurs, similar to what happens with the first person singular direct object prefix); examples are given below.

Indirect object inflection is present whether or not the indirect object or oblique object is overt in the clause as a nominal phrase or pronoun, as illustrated by many examples in \(\S 2.4\). Some very simple examples are repeated here.
(74)... toc cöquiij iha xo cöimiimic. there 3IO-SN-sit DCL but 3IO-3:3-Px-take/bring
‘... estaba allí sentado pero se la llevó [la comida].
... he was sitting there, but she took [the food] to him. (Hombre_Baril_62-64)
(75) Juan cop Pedro quih hipi ihipon \({ }^{\circ}\) cop cöiyaqueecotol. the.Vt the.Fl Intns his/her.voice the.Vt 3IO-3:3-Dt-cause.listen
'Juan \({ }_{\mathrm{i}}\) hizo que Pedro \(_{\mathrm{j}}\) escuchara \(\mathrm{Su}_{\mathrm{*}_{\mathrm{i}, \mathrm{j}}}\) voz.'
Juan \(_{i}\) made Pedro \(_{j}\) hear his**, voice. хмH_04-11-07_15

> ¿Zó hamcaaxat -ya cötasii?
which smoke QM 3IO-RL-smell.like
'¿Huele a qué clase de humo?'
What kind of smoke does it smell of? RMH_08-04-07_1840
The third person prefix interacts phonologically with verbs in quite important ways. It has three allomorphs: co-, coo-, and cö-. \({ }^{30}\)

The basic form of the prefix is clearly co-. The allomorph coo- results from the deletion of a

\footnotetext{
\({ }^{28}\) Some verbs utilize distinct strategies for singular and plural Recipients/Addressees; see \(\S 22.3 .3\) and various sections on verb subcategorization in chapter 18 , such as \(\S 18.4 .3\). Verbs may also be inflected for imperfective aspect ( \(\S 17.3 .8\) ) when the indirect object is plural.
\({ }^{29}\) Cole (1991) used the difference in the behavior of the indirect object inflection and the direct object inflection to argue that the former are really clitics rather than affixes. I do not believe this is an appropriate conclusion.
\({ }^{30}\) An identical sequence of consonant and vowel that may arise through the concatenation of other morphemes, such as the subject-oriented nominalizer \(\mathbf{c}-(\S 14.1)\) and unspecified object \(\mathbf{0}-(\S 19.1 .1)\), does not result in cö-.
}
short low vowel and subsequent lengthening (see §27.3.1). This situation arises only when the null allomorph of the imperative prefix is used (§17.4.2), which is required in this circumstance. (The stress that would have fallen on the a is pronounced on the oo.)

\section*{(77) iCoomjc!}

3IO-Im-take
‘¿Llévaselo!’
Take it to him/her! Rмн_11-28-07_84
The allomorph cö-, \(\left[\mathrm{k}^{\mathrm{w}}\right]\), occurs under very specific conditions. Other than the situation just described in which coo- occurs, the allomorph cö- occurs before a vowel.
Cöiyoomjc.
3IO-3:3-DT-take/bring
'Se lo llevó.'
S/he took it to him/her. RMH_11-28-07_85a
¡Án cöaizet!
3P.interior 3IO-Im-enter.PL
‘¡Pasen adentro!’
Come in! RMH_11-28-07_85b
The allomorph cö- also occurs before any consonant that is followed by a vowel. \({ }^{31}\)
(80) Cötaaipot, ...

3IO-RL-pay RMH_11-28-07_87a
'Estaba pagando con él/ella, ...'
S/he was paying with it, ...
(81) Cöyopanzx. 3IO-Dt-run
'Corrió como él/ella.' RMH_11-28-07_87b S/he/it ran like him/her/it
(82) Cöpopanzx \(\mathbf{x}, \ldots\)
(83) ¡Cöhaas!

3IO-Im-cause.drink
‘¡Dáselo a beber!’ RMH_11-28-07_87d
Give it to him/her to drink!
(84) Cöquimjc iha.

3IO-SN-TR take/bring DCL
'Se lo está llevando.'
S/he is taking it to him/her. RMH_11-28-07_87d
The allomorph cö- also occurs before any sequence of consonants so long as the first consonant is an obstruent and is not the velar stop. \({ }^{32}\)
(85) Cöspanzx aha.

3IO-Ir.Id-run Aux-DCL
'Correrá como él/ella.' RMH_11-28-07_88a
S/he will run like him/her/it.
(86) ¿Cötpanzx?

3IO-RL-run RMH_11-28-07_88b
‘¿Corrió como él/ella?’
Did s/he run like him/her/it?

\footnotetext{
\({ }^{31}\) This allomorph does not occur when the prefix co- receives stress by any means, in particular with stressretracting verbs (§27.7), as pointed out below.
\({ }^{32}\) No examples with velar or uvular fricatives are found in this context to know what would happen with them.
}

\section*{¿Cötmacötim?}

3IO-RL-N-cover.oneself
‘¿No se cubrió con él/ella?’
Didn't s/he cover up with it? RMH_05-17-08_440
In all other situations the allomorph co- occurs. The \(\mathbf{0}\) may be stressed because of irregular stress placement with some verbs (shown explicitly in the following examples).


This allomorph also occurs before consonant clusters beginning with a sonorant (which always happens to be a glottal stop or a nasal).
(90) Cohmiimjc.

3IO-1SGS.Tr-Px-take
'Se lo llevé.' rMH_11-28-07_89a
I took it to him/her. RMH_11-28-07_89b \(\rightarrow\)
(91) Consacötim aha.

3IO-2SGS-Ir.ID-cover.oneself Aux-DcL
'Te cubrirás con él/ella.'
You will cover up with it.
(92) Cohpsacötim aha.

3IO-1SGS.In-Ir.Id-cover.oneself Aux-DCL
'Me cubiriré con él/ella.'
I will cover up with it. RMH_11-28-07_89c
The allomorph co- occurs before any cluster that begins with \(\mathbf{c -}\).
(93) Cocpanzx iha.
3IO-SN-run DCL
'Está corriendo como él/ella.'
She is running like him/her. RMH_11-28-07_90a

\author{
(94) iCocompanzx! \({ }^{33}\) \\ 3IO-Im-N-run RMH_11-28-07_90b \\ ‘¡No corras como él/ella!’ \\ Don't run like him!
}

Despite the claim that the indirect object markers are prefixes, there are two pieces of phonological evidence for claiming that they are attached to the verb less tightly than the subject and direct object prefixes. First, the indirect object inflectional prefixes do not provide the environment for \(\mathbf{c}\)-Epenthesis (see §27.1.4); they are outside the domain of that rule, as are the directional prefixes (§17.3.6).

\footnotetext{
\({ }^{33}\) The second \(\mathbf{o}\) is epenthetic; see \(\S 27.1 .3\). The epenthesis of \(\mathbf{o}\) does not provide an environment for the presence of cö- rather than co-.
}
(95) Cösompanzx aha.

3IO-Ir.ID-N-run Aux-DcL
'No correrá como él/ella.'
S/he will not run like him/her. RMH_11-28-07_91a
Second, the first person indirect object prefix he does not condition the deletion of the imperative prefix glottal stop. (See \(\S 17.3 .5\) for details about this deletion in other situations.)
\begin{tabular}{|c|c|}
\hline ¡He hpanzx! & (* H ( \({ }^{\text {panzx }}\) ) \\
\hline 1IO Im-run & \\
\hline '¡Corre como yo!' & \\
\hline Run like me! RwH_11-28-07_916 & \\
\hline
\end{tabular}

\subsection*{17.3.2.5 Object morphology conflict}

No verb has both a direct and an oblique/indirect object prefix on it; it is not possible morphologically. Examples (97)-(98) have simple transitive verbs with a first or second person direct object.
Ma hsnip \(\quad\) aha.
2SGDO 1SGS.TR-Ir.ID-hit AUX-DCL
'Te pegaré.'
I will hit you (as with a closed fist). RMH_11-28-07_92a
```

Ano hin siih aha.
3P.in 1SGDO Ir.Id-put.Fl Aux-DCL
'Me inyectará.'
S/he will inject me. RMH_11-28-07_93a

```

Examples (99)-(100) are parallel to these examples except that they introduce an oblique object, clearly an instrumental in the case of (100). It will be noticed that something that is neither the first/second person direct object nor the third person indirect object prefix occurs. As shown below, this form is a portmanteau for the expected prefixes. The (b) examples in this set shows that an indirect object prefix (agreeing with the oblique object) is ungrammatical.

a. Hehe ticom me hsnip

aha.

stick Md-Hz 3IO+2DO 1SGS.Tr-Ir.Id-hit Aux-Dcl

b. * Hehe ticom cömahsnip aha.
 3IO-2SGDO-
'Te daré un empuje agudo con ese palo.'
I will jab you with that stick. RMH_11-28-07_92b
a. Penisiliina quih ano he siih
aha.
penicillin the.Fl 3P.in 3IO+1DO-Ir.ID-put.Fl Aux-DcL

\section*{b. * Penisiliina quih ano cöhin siih aha. 3IO-1SGDO}
'Me inyectará con penicilina.'
He will inject me with penicillin. RMH_11-28-07_93b
The third person indirect object prefix overtly shows up on a transitive verb only when the direct object is third person. (It also shows up on intransitive verbs, of course.) Numerous examples are given above in \(\S 17.3 .2\).4 Even when the 3IO prefix would be separated from the direct object prefix by the 'away' directional prefix nt- Aw (see Table 17.7 and §17.3.6), the special situation arises. Example (101) shows the situation with a third person direct object (hence the \(3: 3\) prefix \(\mathbf{i}\) - on the verb), and (102) with a second person direct object. In the latter case, there is some variation that has been registered: the prefix co- may be omitted or it may be present.
(101) Xepe com contisoozi aha.
sea the.Hz 3IO-Aw-3:3-Ir.Id-carry Aux-Dcl
'Se lo/la llevará y meterá al mar.'
S/he will take him/her into the sea. RMH_11-28-07_94a
(102)
\begin{tabular}{|c|c|c|c|}
\hline a. & Xepe com sea the.Hz & \[
\begin{aligned}
& \text { intmesoozi } \\
& \text { AW-3IO+2DO-Ir.ID-carry }
\end{aligned}
\] & \begin{tabular}{l}
aha. \\
Aux-Dcl
\end{tabular} \\
\hline b. & Xepe com & \[
\begin{aligned}
& \text { contmesoozi } \\
& 3 \text { IO-AW-3IO+2DO-Ir.ID-ca }
\end{aligned}
\] & (a)ha. \\
\hline c. & * Xepe com & \begin{tabular}{l}
contmasoozi \\
3IO-Aw-2SGDO-Ir.Id-carry
\end{tabular} & (a)ha. \\
\hline
\end{tabular}
'Te llevará y te meterá en el mar.'
S/he will take you into the sea. (a) RMH_11-28-07_94b (b) RMH_11-28-07_94c
The rule in (103) is meant to describe the facts: when indirect and direct object features cooccur on a verb, (i) only indirect object morphology occurs on the verb, (ii) it occurs in the position where the direct object morphology occurs (after the directional prefix in (101)), and (iii) it has the person features of the direct object.
(103) Object Blending
\[
\mathrm{v}[[\beta \text { Indirect }] \mathrm{X}[\alpha \text { Direct }] \mathrm{Y}] \Rightarrow \mathrm{v}[\varnothing \mathrm{X}[\alpha \text { Indirect }] \mathrm{Y}]
\]

The result of rule (103) is glossed in this grammar as a combination of features, such as \(3 I O+1 D O\). Note that the number of the direct object becomes irrelevant when this rule applies. Rule (103) does not account for the variation between (102a) and (102b); specifically, it accounts for the (conservative speech) form (102a) but not the innovative form (102b).

The Object Blending rule (103) interacts with the first idiosyncrasy discussed in §17.3.2.3 in that the idiosyncrasy does not appear here. This is shown by the following example, which expects indirect/oblique object inflection because of the phrase itacl ipi; note that the second person plural subject prefix ma- occurs; it is not eliminated. \({ }^{34}\)
```

(104) ..., itacl ipi he mascmaht aha.
3P-surface Intns 3IO+1DO 2PlS-Ir.Id-N-see-Pl Aux-DCL
'.. ustedes no me verán nunca más.'
..., you (pl.) will never see me again. (Ac 20:25) RMH_11-28-07_95

```

The same facts result when the 3IO is expected because of the presence of an adjunct such as an instrumental, as the following example shows.
(105) Penisiliina quih ano he masiii aha.
penicillin the.Fl 3P.in 3IO+2SGDO 2PlS-Ir.Id-put.Fl-Pl Aux-Dcl
'Uds. me deben inyectar con penicilina.'
You (pl.) should inject me with penicillin. RMH_05-17-08_239
The Object Blending rule (103) also is meant to indicate that the output of the rule is essentially a variation of form on the direct object prefix. The output has the "tightness" to the verb of the direct object prefixes, triggering c-Epenthesis unlike indirect/oblique object prefixes (§27.1.4).
\begin{tabular}{llll} 
(106) & Tal zo me scmazt & aha. \\
& coal a & 3IO+2DO Ir.Id-N-tattoo & Aux-DCL \\
& 'No te tatuará con carbón.' & \\
& S/he will not tattoo you with charcoal. & RMH_11-28-07_96
\end{tabular}

\subsection*{17.3.3 Subject number inflection}

Number morphology in the verb is an expressive category of the verb. It is also highly irregular morphologically and for that reason the 2005/2010 dictionary included information about number morphology for every verb entry. Apart from the morphology itself (a small introduction to which is given below), a large part of the number morphology is almost regular enough to be viewed as simple agreement with the subject. Verbs indicate number - basically singular vs. plural - and this number generally agrees with the subject of the clause, whether the head of the clause is a finite, imperatival or infinitival verb, or is a deverbal noun. The verb may be active or passive ( \(\S 9.2 .2\) ) or a raising verb (§12.1.2, for example). Therefore a verb that has a singular subject must typically use a singular verb stem while a verb that has a plural subject must

\footnotetext{
\({ }^{34}\) When an example like this was elicited in about 1980, the verb form recorded (and published in Marlett 1981b) was slightly different, essentially he nsiii, which led to some complications. That form was rejected by my consultant in 2008.
}
typically use a plural verb stem. The singular stem in (107a), Vatax, contrasts with the plural stem in (107b), Valx.
(107) a. Ihpyomatax. 'No fui.' I didn't go. RMH_11-28-07_97a 1SGS.In-DT-N-go
b. Hayomalx. 'No fuimos.' We didn't go. RMH_11-28-07_97b 1PLS-DT-N-go-Pl

The difference in the stem adds redundant information when the subject person is explicit, but it is not redundant information in other situations, as illustrated in (108) for third person finite forms, in (109) for deverbal nouns, and in (110) for imperatives. \({ }^{35}\)
Yomatax. 'No fue.' S/he/it didn't go. RMH_11-28-07_97c
DT-N-go
b. Yomalx. 'No fueron.' They didn't go. RMH_11-28-07_97d Dt-N-go-PL
a. Catax iha. 'Va.' S/he is going.
SN-go DCL
b. Calx iha. 'Van.' They are going. RMH_11-28-07_97f SN-go-PL DCL
\begin{tabular}{lllll} 
a. & \begin{tabular}{l} 
¿Catax! \\
Im-go
\end{tabular} & ¡Vete! & Go! (sg.) & RMH_11-28-07_97g \\
b. & \begin{tabular}{l} 
iCalx! \\
Im-go-PL
\end{tabular} & ¡Vayanse! & Go! (pl.) & RMH_11-28-07_97h
\end{tabular}

That is true for the vast majority of cases. Occasionally, however, one finds a singular verb stem with a plural subject inflectional prefix. Alongside scaalx (Ir.Id-1Em.S.In-go-PL) Let's go! (with a plural stem) exists scaatax (Ir.Id-1Em.S.In-go) Let's go! (with a singular stem). The latter verb occurred in a story in which a number of people were traveling as a group.

Other cases of a mismatch between subject number and verb form include the examples presented in \(\S 8.5\) where the subject person inflection on the verb reflects the complement of the partitive expression but the stem of the verb reflects the number of the head. Two examples are repeated here.
\(\left.\begin{array}{llllll}\text { a. } & \begin{array}{llll}(\mathbf{H e}) & \text { tazo } & \text { ipi } & \text { zo }\end{array} & \begin{array}{l}\text { hayomatax. } \\ \\ \text { 1PRO }\end{array} & \text { one } & \text { INTNS } & \text { a/one }\end{array}\right)\)

\footnotetext{
\({ }^{35}\) Infinitives also show number but it is redundant in those cases because number is also shown in the controlling verb. See \(\S 12.1\).
}

\section*{b. *He tazo ipi zo yomatax. \\ DT-N-go}
'Ninguno de nosotros ha ido.'
Not one of us went. Op_2-2-07_056
(112) a. (He) zo hayootax.

1Pro a/one 1PlS-Dt-go
b. \(\quad * \mathrm{He}\) zo yootax.

1Pro a/one Dt-go
'Uno de nosotros ha ido.'
One of us went. RMH_08-04-07_150a

\subsection*{17.3.3.1 Morphology of subject number}

Subject number is indicated in various ways: suffixation, deletion, replacement, infixation, suppletion, or a combination of these (the usual case). \({ }^{36}\) These are illustrated below only briefly. A full treatment requires that one look at the marking of imperfective aspect described in \(\S 17.3 .8\) at the same time.

Some verbs do not show any distinction between singular and plural at all, but this is a relatively rare situation.
\begin{tabular}{llllll}
\((113)\) & a. Vaticpan & work & b. & Vatx & have glochids \\
& c. Vheel & red & d. Vacaatol & dangerous
\end{tabular}
(114) He caticpan iha.

1Pro SN-work DcL
'Estoy trabajando. / Estamos trabajando.'
I am working. / We are working. RMH_11-28-07_98a
(115) \(\mathbf{H a x z}^{\circ}\) ticop xacaatol.
dog Md-Vт Em-dangerous
'Ese perro es peligroso / da miedo.'
That dog is dangerous/scary. RNH_11-28-07_98b
(116) Háxaca com xacaatol.

Abs-pet-Pl the.Hz Em-dangerous
'Los perros (en general) son peligrosos / dan miedo.'
Dogs are dangerous/scary. RMH_11-28-07_98c

\footnotetext{
\({ }^{36}\) E. Moser (1961) and Marlett (1981b, chapter 4) both attempt to get a handle on this topic. This section is based on the latter. While this account attempted to describe a large number of morphophonemic alternations through underlying forms, phonological rules and rule orderings, this is not repeated here as it doesn't seem to be very productive.
\({ }^{37}\) This is a loanword; see Appendix A.
}

\section*{(117) Háxaca tacoi xacaatol.}

Abs-pet-Pl Md-Pl Em-dangerous
'Esos perros son peligrosos / dan miedo.'
Those dogs are dangerous. RmH_11-28-07_98d
Several verbs have what are (presumably) best viewed as suppletive stems. \({ }^{38}\) (In some cases it is just not easy to decide whether a stem involves suppletion once one knows about the variety of incidences that can indicate plurality.)

Singular subject Plural subject
Intransitive
\begin{tabular}{|c|c|c|}
\hline a. \(\sqrt{\text { ap }}\) & \(V_{\text {oii, }}{ }^{39} V^{\text {ooyoj }}\) & stand \\
\hline b. \(\sqrt{\text { ah }}\) & \(\checkmark\) aii & say, put.FL \\
\hline c. Vafp & Vazcam & arrive \\
\hline d. Vaaitom & \(\checkmark\) Vooza & speak \\
\hline e. Vee & \(V_{\text {ooza }}{ }^{40}\) & say \\
\hline f. Vazquim & \(\checkmark\) Voizet & enter \\
\hline g. Viih & \(\checkmark\) Voii & be (flexible item) \\
\hline h. \(\backslash_{\text {iij }}\) & \(\sqrt{ }\) ahca, \({ }^{41}\) Vooxalca & sit \\
\hline i. Visil & \(\sqrt{ } \mathbf{i x t}{ }^{42}\) & small \\
\hline j. Vooit & \(\checkmark\) paailx, \({ }^{43} \sqrt{ }\) eme & arrive (in idioms) \\
\hline k. Voom & \(\sqrt{ }\) ooitoj & lie \\
\hline
\end{tabular}
(119)

Transitive
a. \(\sqrt{\text { aazi }}\)
b. لácatx
c. Vacozxot

Voon \({ }^{44}\)
carry
ajc
release
d. VCactim
give
e. \(\sqrt{\text { yaai }}\)
\(\sqrt{ }\) Canloj
Voziit
use, touch
go to

\footnotetext{
\({ }^{38}\) All of the verbs in this section are cited in perfective aspect (with singular or plural subject). See §17.3.8.
\({ }^{39}\) The plural \(\sqrt{ }\) oii is used for relatively mobile objects (people, animals, knives) whereas \(V\) ooyoj is used for relatively immobile objects (houses, posts, mountains).
\({ }^{40}\) It is obvious that the verb \(\sqrt{ }\) ee say shares a plural stem with the verb \(\sqrt{ }\) aaitom speak. This happens with a few other verbs as well. Note that \(\sqrt{ }\) ap stand and \(\vee_{\text {iih }}\) be (flexible item) also share a plural stem.
\({ }^{41}\) The plural \(\sqrt{ }\) ahca is used for relatively mobile objects (people, animals) whereas \(\sqrt{ }\) ooxalca is used for nouns referring to inanimate objects and animate objects that display less flexibility in position.
\({ }^{42}\) This plural is used alongside \(\sqrt{ }\) izil. The distribution of these two plural forms is not clearly defined.
\({ }^{43}\) The plurals \(\sqrt{ }\) paailx and \(\sqrt{ }\) eme appear in different idioms, sometimes with interchangeability and sometimes without.
\({ }^{44}\) This stem is also used with a singular subject to mean carry (items). The stem of that verb with a plural subject is \(\sqrt{ }\) oonec.
}

A variety of suffixes indicate plurality and every verb must be idiosyncratically marked as to what suffix it takes, if any. There does not appear to be any overwhelmingly dominant pattern. Some examples are given below.
\begin{tabular}{llll} 
& Singular subject & Plural subject & \\
a. & \(V_{\text {Cim }}\) & \(V_{\text {Cim-toj }}\) & throw at \\
b. & \(V_{\text {zaxö }}\) & \(V_{\text {zaxö-t }}\) & discuss \\
c. & \(V_{\text {tins }}\) & \(V_{\text {tins-0 }}\) & scrape \\
d. & \(V_{\overline{\mathbf{a} s}}\) & \(V_{\overline{\mathbf{a} s-x a m ~}}\) & err \\
e. & \(V_{\text {mis }}\) & \(V_{\text {mis-taj }}\) & resemble
\end{tabular}

A verb may also have a suffix that always occurs when the subject is singular but which is replaced by another suffix when the subject is plural. \({ }^{45}\)
\begin{tabular}{llll} 
& Singular subject & Plural subject & \\
a. & \(V_{\text {pasj-im }}\) & \(V_{\text {pasj-oj }}\) & fall underwater \\
b. & \(\sqrt{\text { ooc-ta }}\) & Vooc-tam & look at \\
c. & \(\sqrt{\text { aasalc-a }}\) & Vaasalc-0j & spread legs
\end{tabular}

In addition, some verbs take what appears to be a suffix \(\mathbf{- x}\), of unknown significance, in all forms. One subset of these verbs has -tajc when the subject is plural. \({ }^{46}\)
\begin{tabular}{llll} 
& Singular subject & Plural subject & \\
a. & \(\sqrt{\text { apo-x }}\) & Vap-tajc & pull out \\
b. & \(\sqrt{\text { imo-x }}\) & \(\sqrt{\text { im-tajc }}\) & butcher \\
c. & \(\sqrt{\text { ipa-x }}\) & \(V_{\text {ip-tajc }}\) & climb \\
d. & \(\sqrt{\text { imo-x }}\) & Vimo-tajc & butcher
\end{tabular}

Subject number is often marked on verb roots by the deletion of the vowel in the syllable after the stressed syllable. It is completely unpredictable, however, as to in which forms the deletion will occur, if at all. \({ }^{47}\) It can be seen in (122) that the vowels \(\mathbf{o}\), \(\mathbf{i}\), and \(\mathbf{a}\) are lost in the plural forms of examples (a), (b), and (c), respectively. The examples in (123) demonstrate the same point. The vowels in question are underlined in (123).
a. \(\quad \begin{aligned} & \text { Singular subject } \\ & \sqrt{\text { atp }}\end{aligned}\)

\footnotetext{
\({ }^{45}\) Morpheme breaks are not totally obvious from these few examples, but justification for this analysis is attempted below.
\({ }^{46}\) Marlett (1981b) hypothesized that \(\sqrt{ } \mathbf{t a j c}\) is polymorphemic and that the \(\mathbf{- j}\) is an allomorph of \(\mathbf{- x}\). This analysis may be correct but it is not pursued here.
\({ }^{47}\) A deletion rule rather than an epenthesis rule is needed because 1 ) the vowels in question lengthen by a phonetic rule when they are present ( \(c f . \S 28.5 .1\) ) that does not apply to vowels of suffixes or infixes, and 2 ) the quality of the vowel would not be predictable in a solution using epenthesis.
}
\begin{tabular}{|c|c|c|c|}
\hline b. & \(\sqrt{ }\) actz & Vacatz-oj & screen \\
\hline c. & \(\checkmark\) meque & \(\checkmark\) mec-toj & lukewarm \\
\hline d. & \(\checkmark\) pitol & \(\checkmark\) pitl-oj & bloated \\
\hline e. & \(\checkmark\) imooni & \(\checkmark\) imoon-taj & dance victory dance \\
\hline . & \(\sqrt{ }\) aho & \(\sqrt{ }\) ah-t & see \\
\hline g . & \(\checkmark\) axi & \(\sqrt{ } \mathbf{a x}\) & finish \\
\hline h. & \(\checkmark\) oqueht & \(\checkmark\) Vquehel-am & flexible; bounce \\
\hline i. & \(\checkmark\) Vopol & \(\checkmark\) oopl & black \\
\hline
\end{tabular}

If the vowel deleted is \(\mathbf{0}\) and if it is contiguous to a back consonant, the deletion of the \(\mathbf{0}\) leaves labialization on the back consonant.
\begin{tabular}{|c|c|c|c|}
\hline a. & Singular subject \(\checkmark\) quecöl & Plural subject \(\sqrt{ }\) quecol-oj & listen \\
\hline b. & \(\checkmark\) Vaco & \(\sqrt{\text { aacö-t }}\) & build house \\
\hline c. & \(\checkmark\) ihaxöl & \(\checkmark\) iháxol-oj & have eating utensil (clam) \\
\hline d. & \(\sqrt{\text { apxöll-im }}\) & \(\sqrt{\text { apxot-im }}\) & break (intr.) [long item] \\
\hline e. & Viixöp & \(\checkmark\) Vixop-0j & make crunching sound (intr.) \\
\hline
\end{tabular}

It is extremely common for subject number to be reflected by the replacement of one or more segments. Numerous verb stems end in \(\mathbf{j}\) in the singular subject, singular action form. In all other forms the \(\mathbf{j}\) is replaced by the voiceless lateral fricative \(\mathbf{l}\) for most verbs. These verbs contrast with verbs whose roots end in I in all forms. (See forms (124a)-(124c), for examples of verbs with invariant l.) Examples illustrating the \(\mathbf{j}-\mathbf{I}\) alternation are given in (125).


There are also numerous verbs whose roots end in \(\mathbf{c}\) in the singular subject and perfective aspect form, but \(\mathbf{j c}\) in the other forms including those with a plural subject. (The \(\mathbf{c}\) happens to delete before \(\mathbf{0}\), presumably by a phonological rule in some of the plural forms given below.)


In several verbs an \(\mathbf{i}\) or \(\mathbf{i i}\) is replaced by \(\mathbf{c o o}\) when the subject is plural.
\begin{tabular}{|c|c|c|c|}
\hline a. & Singular subject \(\sqrt{\text { zip }}\) & \begin{tabular}{l}
Plural subject \\
zcoop-xam
\end{tabular} & kiss \\
\hline b. & \(\sqrt{\text { fiz }}\) & \(\checkmark\) fcooz-xam & tie knot \\
\hline c. & \(\sqrt{\text { ziim }}\) & \(\checkmark\) zcoom-t & appreciate \\
\hline d. & \(\checkmark\) ficj & \(\checkmark\) fcoocl & wrap oneself with \\
\hline e. & \(\checkmark\) pii & \(\checkmark\) pcoo-yo & taste \\
\hline f. & \(\checkmark\) sii & \(\sqrt{ } \mathbf{s c o 0}-\mathrm{yo}\) & smell \\
\hline
\end{tabular}

In a number of verbs a root-final \(\mathbf{t}\) or \(\mathbf{n}\) becomes \(\mathbf{I}\) when the subject is plural. \({ }^{48}\)
\begin{tabular}{|c|c|c|c|}
\hline & Singular subject & Plural subject & \\
\hline a. & \(\checkmark\) ooit & \(\checkmark\) ooil-a & dance \\
\hline b. & \(\checkmark\) saaitx & \(\checkmark\) saail-aje & gather together with stick \\
\hline c. & \(\checkmark\) ojast & \(\checkmark\) ojásilam & step (with P-element iti) \\
\hline d. & Voquéht & \(\checkmark\) oquéhelam & flexible; bounce \\
\hline e. & \(\checkmark\) Ceetni & \(\checkmark\) Ceetl-olca & tap \\
\hline f. & \(\checkmark\) atni & \(\sqrt{\text { atl-olca }}\) & jab \\
\hline
\end{tabular}

Ablaut is sometimes used to indicate number. One common alternation is between \(\mathbf{i} / \mathbf{i}\) and \(\mathbf{a a}\), usually with \(\mathbf{i}\) in the singular form. \({ }^{49}\)
\begin{tabular}{|c|c|c|c|}
\hline a. & Singular subject
\[
\begin{equation*}
\sqrt{ } \text { ai } \tag{129}
\end{equation*}
\] & Plural subject
Vaaa-m & tell \\
\hline b. & \(\checkmark\) ahcaail & \(\checkmark\) ahcaaal-im & remain \\
\hline c. & \(\sqrt{\text { aiix }}\) & \(\sqrt{\text { aaax-0j }}\) & go away from \\
\hline d. & \(\checkmark\) ocai & \(\checkmark\) оcaaax \({ }^{\text {a }}\) & follow \\
\hline e. & \(\checkmark\) ooil & \(\checkmark\) oaalo & wear tuft of hair \\
\hline f. & \(\sqrt{\text { siiij-im }}\) & \(\checkmark\) seaal-am & move \\
\hline g . & \(\checkmark\) pajim & \(\checkmark\) pajam-0j & overcooked \\
\hline h. & \(\checkmark\) taxim & \(\checkmark\) taxam-0j & scratch \\
\hline 1. & \(\checkmark\) yazim & \(\checkmark\) yazam-0j & finlike \\
\hline j. & Viixim & \(\checkmark\) iixan-t & fear \\
\hline
\end{tabular}

Other replacement processes occur in fewer forms. These include an alternation between \(\mathbf{n}\) and \(\mathbf{z}\), as in (130a), between \(\mathbf{s}\) and \(\mathbf{z}\), as in (130b), between \(\mathbf{n}\) and \(\mathbf{j}\), as in (130c), and between \(\mathbf{i}\)

\footnotetext{
\({ }^{48}\) The final \(\mathbf{i}\) in the forms (128e-f) are taken as derivationally epenthetic for reasons of sonority (since final clusters of obstruent-sonorant are not possible. However, it is always present in the forms shown, unlike the epenthetic \(\mathbf{i}\) that occurs as the beginning of inflected words (see §27.1.1).
\({ }^{49}\) This alternation gives evidence for the interpretation of what is phonetically [i::] as a two vowel cluster (cf. (129f)) since that is how it behaves phonologically. Some forms are obscured by the effects of the diphthong effect (§28.3.4). This ablaut is unrelated to the one discussed in §14.4.2.
}
and \(\mathbf{0 0}\), as in (130d). Of course, it is not always clear in these cases which consonant or vowel (if either) is more basic underlying.
\begin{tabular}{|c|c|c|c|}
\hline & Singular subject & Plural subject & \\
\hline a. & Vaacni & \(\sqrt{\text { aacz-a }}\) & bowed \\
\hline b. & \(\checkmark\) isil & \(\checkmark\) izil & small \\
\hline c. & \(\sqrt{\text { cazni }}\) & \(\checkmark\) cazi-a & bite \\
\hline d. & \(\checkmark\) nip & \(\checkmark\) noop-toj & hit with hand \\
\hline
\end{tabular}

A large number of verbs exhibit plural forms with the sequence too (sometimes to) infixed in them. \({ }^{50}\)
\begin{tabular}{|c|c|c|c|}
\hline a. & Singular subject Vaazlx & \begin{tabular}{l}
Plural subject \\
Vatoozalxoj
\end{tabular} & cough \\
\hline b. & Vaaa & \(\sqrt{\text { atooat }}\) & call \\
\hline c. & Vaat & \(\sqrt{\text { atootoj }}\) & cook under coals \\
\hline d. & \(\sqrt{\text { aainim }}\) & \(\sqrt{\text { atooilcam }}\) & cause be mixed \\
\hline e. & \(\checkmark\) iip & \(\checkmark\) itoopajö & carry on head \\
\hline f. & \(\checkmark\) iin & \(\checkmark\) itooij & go \\
\hline g . & \(\sqrt{\text { atxiin }}\) & \(\sqrt{\text { atxitoiizoj }}\) & make headring \\
\hline h. & \(\checkmark\) ictim & \(\checkmark\) itoocl & cross (transitive) \\
\hline i. & Veefelim & \(\sqrt{\text { atoofelam }}\) & stumble on \\
\hline j. & Vaazquim & \(\sqrt{\text { atoozijoj }}{ }^{51}\) & make enter \\
\hline k. & \(\checkmark\) aaz & \(\sqrt{\text { atooz }}\) & make suckle \\
\hline 1. & \(\sqrt{\text { ahaanpx }}\) & \(\sqrt{\text { atoonipxoj }}\) & return (something) \\
\hline
\end{tabular}

As already implied above, more than one of these indicators of plural may co-occur on a single verb. That is, a combination of a suffix, an infix, and a stem change may all be used simultaneously.

\subsection*{17.3.4 Negation}

Finite verbs, imperatives and deverbal nouns may be inflected for negation; infinitives cannot be so inflected. The negative prefix is \(\mathbf{m}\)-. It appears in the position shown in Table 17.7, immediately after the mood prefixes or after the imperative prefix or after the nominalizing prefix. \({ }^{52}\)

\footnotetext{
\({ }^{50}\) The way in which the Infixation rule applies will affect the interpretation of superficially long vowels. In (131b) it supports an analysis of [a::] as a two vowel cluster. In (131e) it gives evidence for analyzing [i:] as a single long vowel, but in (131f) as a sequence of vowels.
\({ }^{51}\) This is the plural subject, imperfective aspect stem.
\({ }^{52}\) A few verbs, including \(\sqrt{ }\) moqueepe sick (compare with \(\sqrt{ }\) oqueepe comfortable) and the stem \(\sqrt{ }\) miih (compare with \(\sqrt{\text { iih }}\) be (flexible)) in expressions for die and scarce, have arguably reanalyzed the negative prefix into the stem (Marlett 2002). These verbs can be negated and thus appear to be doubly negated. They also occur with the
}

The prefix is typically in an unstressed syllable and susceptible to place assimilation (§28.5.2). As a sonorant, it also triggers epenthesis either of \(\mathbf{i}\) (§27.1.1) or \(\mathbf{0}\) (§27.1.3), as well as the unusual epenthesis of a velar stop ( \(\$ 27.1 .4\) ). See also the phonetic value it has, as a nasalized labial-velar approximant, after a velar stop (§27.1.4). The negative forms of several verbs and deverbal nouns are given in (132) to demonstrate the allomorphy.
\begin{tabular}{llll} 
(132) & a. & yomafp & {\([\mathrm{m}]\)}
\end{tabular} \begin{tabular}{l} 
s/he/it didn't arrive \\
b. \\
yontápolquim
\end{tabular}\([\mathrm{n}] \quad\) it wasn't broken.

\subsection*{17.3.5 Passive and unspecified subject}

Unspecified subject is indicated in two different ways. First, with an intransitive verb stem, the Unspecified Subject prefix is added. Second, with a transitive verb stem, passive voice must be used. The Unspecified Subject prefix and the Passive prefix do not co-occur; one cannot express morphologically something like if one is bitten. \({ }^{53}\)

The Passive prefix has two suppletive allomorphs, \(\mathbf{p}\)-abl, which occurs before vowel-initial roots, and ah- elsewhere (before consonants and before vowels that are not root-intial).

The allomorph \(\mathbf{p}\)-abl also affects the quality of the vowel that immediately follows; it changes a high vowel into a short low vowel. Specifically, ii and i become e, and \(\mathbf{o o}\) and \(\mathbf{o}\) become a. Examples (cited in the Realis \(\mathbf{t}\) - form and translated as appropriate for main clauses):

\footnotetext{
subject-oriented nominalizer allomorph c- (see §14.1.1), which does not occur with the inflectional negative prefix: cmoqueepe who is sick, immoqueepe who is not sick, coqueepe who is comfortable, imoqueepe who is not comfortable.
\({ }^{53}\) This idea is expressed with a passive verb and a noun such as cmiique person - notably without an article.
(ii) Cmiique pahcazni ta \(x\)
person IR.DP-PV-bite DS UT
'Si uno es mordido, ...' / If one is bitten, ...
}
(133)
\begin{tabular}{|c|c|c|c|c|}
\hline a. & Passive verb tpap & Was it (basket) sewn? & \[
\begin{aligned}
& \text { Root } \\
& \text { Vap }
\end{aligned}
\] & RMH_05-17-08_244 \\
\hline b. & tpazt & Was s/he tattooed? & \(\sqrt{\text { azt }}\) & \\
\hline c. & tpemen & Was it shaken sideways? & \(\sqrt{\text { emen }}\) & \\
\hline d. & tpezi & Was s/he defeated? & \(\checkmark\) izi & \\
\hline e. & tpesxö & Was s/he/it hidden? & \(\checkmark\) isxö & \\
\hline f. & tpemosim & Was s/he begged from? & \(\checkmark\) iimosim & \\
\hline g . & tpanl & Was it stirred? & \(\checkmark\) oonl & \\
\hline h. & tpacta & Was s/he/it looked at? & \(V\) oocta & \\
\hline a. & Passive verb tahcazni & Was s/he bitten? & Root \(\checkmark\) cazni & RMH_05-17-08_245 \\
\hline b. & tahxáp & Was it dug up? & \(\checkmark\) xap & \\
\hline c. & tahníp & Was s/he/it hit? & \(\checkmark\) nip & \\
\hline
\end{tabular}

When the prefix ah- precedes a stem that begins with an unstressed a (whether or not this is part of the causative prefix), that vowel of the stem is lost in the passive form, as shown in (135), unless the consonant immediately following that \(\mathbf{a}\) is a glottal stop, as in (136).


When the passive prefix ah-follows a glottal stop in the same word, the glottal stop in the passive prefix is lost. \({ }^{54}\)

\footnotetext{
\({ }^{54}\) Yip (1988) attributes this to the Obligatory Contour Principle. The deletion rule does not apply to a rootinternal glottal stop such as in itahaahnij \{i-t-ah-aahnij\} (3:3-RL-AUG-tremble) s/he makes it tremble.
}
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{2}{*}{a.} & hihacazni & my being bitten & \{hi-h-ah-cazni\} \\
\hline & & & 1P-PON-Pv-bite RRR? \\
\hline \multirow[t]{2}{*}{b.} & mihaníp & your being hit & \{mi-h-ah-nip \\
\hline & & & 2P-PON-Pv-hit RMH_11-28p-07_07 \\
\hline \multirow[t]{2}{*}{c.} & hasanj & who was carried on back & \{ha-ah-sanj\} \\
\hline & & & SN-PV-carry.on.back RMH_-05-17-08_247 \\
\hline \multirow[t]{2}{*}{d.} & hahótitol & who was gotten up & \{ha-ah-ahotitol \(\}^{55}\) \\
\hline & & & SN-Pv-AUG.arise RRR \\
\hline
\end{tabular}

The passive prefix \(\mathbf{p}\) - abl also commonly changes long aa to short \(\mathbf{a}\); in this respect some verbs participate and some do not.
\begin{tabular}{llll} 
& \begin{tabular}{l} 
Some verbs that change length: \\
tpatj
\end{tabular} & Was it pounded flat? & \begin{tabular}{l} 
Root \\
Vaatj
\end{tabular} \\
a. & tpaca & Was it entrusted? & Vaaca \\
b. & tpaf \({ }^{56}\) & Was it pounded hard? & \(\sqrt{ }\) aafc \\
c. & tpat & Was it cooked under coals? & \(\sqrt{ }\) aat
\end{tabular}
\begin{tabular}{lllll} 
& \multicolumn{2}{l}{ Some verbs that do not change length: } & Root & \\
a. & tpaaisx & Was it cleaned? & لaaisx & \\
b. & tpaao & Was it (place) passed? & \(\sqrt{ }\) aao & RMH_11-28p-07_08b
\end{tabular}

There are a very few more irregular passives:
a. conttahaazi Was s/he taken to it?
(unexpected choice of allomorph, plus vowel change) \(\quad\) Voozi take
b. cötahatalhaa Was s/he sold it? co- Vitalhaa sell (unexpected choice of allomorph, plus vowel change)
c. tahatalhaa Was it bought? RMH_05-17-08_248 Vitalhaa buy
(unexpected choice of allomorph, plus vowel change)
d. tpaii Was it made? Vaai make
(lengthening of second vowel as well as shortening of first) RмH_11-28p-07_09
e. cöitahaaix Was \(s\) he taken there? co- Vaix take (unexpected choice of allomorph) RRR

\footnotetext{
\({ }^{55}\) The simple verb root for get up is \(\sqrt{ } \mathbf{o t} \mathbf{j}\); the causative stem for get (someone) up from lying down is \(\sqrt{ }\) ahótitol. The form hahótitol also demonstrates the loss of a vowel, presumably by Vowel Elision (§27.2.1).
\({ }^{56}\) The vowel here is slightly longer phonetically than the prototypical short vowel but also clearly not the underlying long vowel. (This point was confirmed by René Montaño Herrera.)
}

The verb stem \(\sqrt{\text { iic }}\) is essentially the suppletive passive form of the verb \(\sqrt{ }\) acö kill. The stem \(_{\text {a }}\) \(\sqrt{ }\) iic means be killed and occurs in lieu of the derived form \(* \sqrt{ } \mathbf{p}\)-acö (Pv-kill), even to the extent of including in its semantic structure the Unspecified Agent/Subject that is relevant for Different Subject marking (§9.1.1). (Nevertheless, the morphological passive stem \(\sqrt{ } \mathbf{p}\)-aco-tim (Pv-killIMPF) is attested; it is overtly marked for imperfective aspect; see §17.3.8.)

Unspecified Subject is indicated (on intransitive verb stems, as mentioned above) by the prefix ca- \(-{ }^{57}\) The verb may be plural as well as singular; see the examples below.
\begin{tabular}{llll} 
& Root & Unspecified Subject + root \\
a & \(V_{\text {panzx }}\) & \(\sqrt{\text { capanzx }}\) & run \\
b. & \(\sqrt{\text { iij }}\) & \(\sqrt{\text { quiij }}\) & sit \\
c. & \(\sqrt{ }\) oos & \(\sqrt{\text { coos }}\) & sing \\
d. & \(\sqrt{\text { atax }}\) & \(\sqrt{\text { caatax }}\) & go (sing.) \\
e. & \(\sqrt{\text { alx }}\) & \(\underline{\sqrt{\text { caala }} \mathbf{x}}\) & go (pl.)
\end{tabular}

Intns 3P-PON-US-work Cncsv apart Ir.Id-N-US-not.be.Fl AUX-DCL
'Aunque uno trabaje mucho, uno no morirá.'
Even if one works a lot, one won't die. RMH_11-88p-07_10
(143) Íti yoguiih.

3P-on Dt-US-be.Fl
'Uno vivía en ella (Isla Tiburón).'
One used to live on it (Tiburon Island). RMH_11-28p-07_11
(144) Cötcaahit,

3IO-RL-US-fish
'Uno pescaba con él, ...'
One fished with it, ... (DS2010, ca-) RMH_11-288-07_12
(145) Cmiique Roberto himxahquij, cmiique Martín xah quij person/Seri DT-Crd-CM person/Seri CRD the.CM coox 00 cöicaahit hac ...
all DL 3IO-3P-PON-US-fish the.LC
'Tanto Roberto como Martín, con respecto a la pesca ...'
Both Roberto and Martin, with respect to fishing ... RмH_11-28p-07_13

\footnotetext{
\({ }^{57}\) The same prefix is also used with the third person possessor to indicate an unspecified possessor. See §13.2.3.2. The intransitive allomorph is identical with the intransitive allomorph of the first person emphatic prefix (see §17.3.2.1). Whereas the first person emphatic prefix has a transitive allomorph as well, however, the unspecified subject prefix does not occur in transitive clauses since the passive form must be used.
}
(146) Himcac ano tquiij \(x\), coeenzil coi Dt-LC 3P.in RL-US-sit UT SN-UO-play.stringed.intrument-PL the.PL
mahqueecöl.
Px-Pv-listen.to
'Había gente allí que escuchaba (lo que tocaban) los músicos.'
There were people there listening to the musicians. (ALIM 29 improved) RMH_11-28p-07_14
A few augmented forms (§19.10), all of which have stress on the first syllable of the stem, take the allomorph \(\mathbf{p}_{\mathrm{Abl}}\) of the passive, in violation of the generalization given above (according to which the allomorph of the passive is ah-before prefixes).
\begin{tabular}{|c|c|c|c|}
\hline (147) a & Base \(\sqrt{\text { acsx }}\) awake & Augmented \(\sqrt{\text { aacsx }}\) awaken & Passive \(\checkmark\) pacsx awakened \\
\hline b. & \begin{tabular}{l}
\(\checkmark\) actim \\
cut (intrans.)
\end{tabular} & \begin{tabular}{l}
Vaactim \\
cut (trans.)
\end{tabular} & \begin{tabular}{l}
\(\checkmark\) pactim \\
cut (passive)
\end{tabular} \\
\hline c. & \begin{tabular}{l}
\(\checkmark\) aso \\
borrowing
\end{tabular} & \begin{tabular}{l}
\(\sqrt{ }\) aasot \\
lend
\end{tabular} & \begin{tabular}{l}
\(\checkmark\) pasot \\
lent
\end{tabular} \\
\hline d. & \begin{tabular}{l}
\(\checkmark\) apxölim \\
broken
\end{tabular} & \begin{tabular}{l}
Vapxölim \\
break (trans.)
\end{tabular} & \begin{tabular}{l}
\(\checkmark\) papxölim \\
broken (passive)
\end{tabular} \\
\hline
\end{tabular}

\subsection*{17.3.6 Directionals}

Two directional prefixes occur on a few verbs. They are (venitive) mo- (Twd) toward and (andative) nt- (Aw) away. The verbs with which they occur are cited here in their dictionary citation forms: moca come; imcooit arrive; imquiin return; imcoozi send close; mocqueetx bring, return; and intica go; intcoozi send away.

The prefix nt- has the allomorph int- with prothetic \(\mathbf{i}\) (§27.1.1) when it is not preceded by a vowel (either in the same word or another word). The prefix mo- loses its vowel when it precedes a vowel, as in the infinitive of come: miica (Twd-Inf.In-move); see Vowel Elision §27.2.1. It also loses its vowel when it is unstressed and is \(\underline{\text { not }}\) followed by a cluster of two velar stops; this prompts the need for the same prothetic vowel that occurs with nt-. The \(\mathbf{m}\) also assimilates to the point of articulation of a following consonant because the \(\mathbf{m}\) is in an unstressed syllable (see §28.5.2).
\begin{tabular}{llll} 
a. imcooit & who arrives & TwD-SN-arrive \\
b. intooit & s/he/it arrived, ... & TwD-RL-arrive \\
c. imquiin & who returns & TwD-SN-go
\end{tabular}
\begin{tabular}{lllll} 
d. & imhoozi \({ }^{58}\) & Send it! & TwD-IM-carry/send & \\
e. & montoozi & you sent it, ... & TwD-2SGS-RL-carry/send & \\
f. & mitoozi & s/he sent it, .. & TWD-3:3-RL-carry/send & \\
g. & mocqueetx & who brings it & TwD-SN-TR-take/bring & RMH_11-28p-07_15
\end{tabular}

The directional morphemes, like the indirect object inflection prefixes, are less closely attached to the verb; they do not provide the context necessary for c-Epenthesis (§27.1.4). If these prefixes were as tight to the verb as most prefixes, one would expect a \(\mathbf{c}\) to be inserted after it in the following cases, but this does not happen.

\section*{(149) Contmaca.}
(* Contcmaca.)
3IO-Aw-Px-US-move
'Uno fue.
One went. RMH_11-28p-07_16

\subsection*{17.3.7 Verb prefix order}

Simple examples are given here to show the relative order of each of the classes of morphemes discussed in this chapter. The order is summarized in Table 17.7, which might be viewed as a listing of the inflectional verbal prefixes. \({ }^{59}\) On the lack of examples illustrating the co-occurrence of indirect object and direct object inflection, see \(\S 17.3 .2 .5\).

(152) Direct Object - Subject -Mood - Negative - Passive

Hizi i-s-com-p-éhe-tim aha.
1PlDO 3:3-Ir.Id-N-Pv-give-ImpF Aux-Dcl
'No nos será obsequiado.'
We will not be given it. RMH_11-28p-07_19

\footnotetext{
\({ }^{58}\) This form is also pronounced with what sounds like (at least) a metathesis of the nasal and glottal. See §28.5.10.
\({ }^{59}\) Marlett (1981b) has a slightly erroneous version of this table.
}

Table 17.7: Relative order of inflectional prefixes on verb
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow{4}{*}{IO} & \multirow{4}{*}{DIR} & \multirow{4}{*}{DO} & \multirow{2}{*}{Subject} & \multirow{2}{*}{Mood} & \multirow{4}{*}{Negative} & \multicolumn{2}{|l|}{Unspecified Subject} \\
\hline & & & & & & \multirow[t]{3}{*}{1EmS} & Passive \\
\hline & & & \multicolumn{2}{|l|}{Imperative} & & & \\
\hline & & & \multicolumn{2}{|l|}{Infinitive} & & & \\
\hline
\end{tabular}
(153) Direct Object - Subject -Mood - Negative

Ma h-yo-m-aho.
2SGDO 1SGS.Tr-Dt-N-see
'No te vi.'
I didn't see you. RMH_11-28p-07_20
(154) Direct Object - Imperative - Negative
ilhpo-m-oocta!
1SGDO-Im-N-look.at
‘¡No me mires!’
Don't look at me! RMH_11-28p-07_21
(155) Direct Object - Infinitive Ma iha-sanj ihyomaa.
1SGDO Inf.Tr-carry.on.back1SGS.Tr-Dt-N-know
'No puedo llevarte (en mi espalda).'
I am unable to carry you (on my back) RNH_11-28p-07_22
(156) Negative - Unspecified Subject

Hacx s-om-ca-miih aha.
outside Ir.Id-N-US-not.be.Fl Aux-Dcl
'Uno no morirá.'
One won't die. RMH_11-28p-07_23
(157) Negative - First Person Emphatic Subject

Hatee s-om-caa-tax aha.
1Em.Pro Ir.Id-N-1Em.S.In-go Aux-Dcl
'En cuanto a mí, no iré.'
As for me, I won't go. RMH_11-28p-07_24
(158) First Person Emphatic Subject - Passive

\section*{Hatee s-ca-p-azt aha.}

1Em.Pro Ir.Id-1Em.S.In-Pv-tattoo Aux-Dcl
'En cuanto a mí, seré tatuado.'
As for me, I will be tattooed. RMH_11-28p-07_25
(159) Infinitive - Passive
ica-p-azt
Inf.In-Pv-tattoo
'ser tatuado'
to be tattooed

\subsection*{17.3.8 Aspect}

Imperfective aspect is typically overtly marked (most obviously by a suffix - details are given below), whereas perfective aspect is typically unmarked - or at least usually has no dedicated morphology. \({ }^{60}\) Verbs describing dynamic events therefore commonly have imperfective forms as well as perfective forms, as shown in \((160)\) and (161) for the verb meaning pound, which has the (singular subject) perfective stem \(\sqrt{ }\) aafc and the (singular subject) imperfective stem Vaafajquim. In this grammar, imperfective aspect is explicitly glossed whereas perfective aspect is not. If the stem \(\sqrt{ }\) aafe were explicitly tagged, it would be \(\sqrt{ }\) pound.PF (with singular subject), where \(P F=\) perfective.

José quih inol cop ceenm icaatj」 quih cöimaafc.
the.FL 3P-finger/hand the.VT hammer the.FL 3IO-3:3-Px-pound
'José se pegó en el dedo con el martillo.'
José \(_{i}\) hit his \({ }_{i}\) finger with the hammer. (DS2010, caafc) RMH_07-11-07_16b
(161) Cmaam quij hast quij hehe com cöimáafajquim.
woman the stone the stick the.Hz 3IO-3:3-Px-pound-ImpF
'La mujer está golpeando el palo con la piedra.'
The woman is pounding the stick with the stone. RMH_07-11-07_16a
Predicates that may be thought of as typically stative sometimes have imperfective stems as well, but in these particular situations the meaning of the verb is not stative. The verb \(V_{\text {iih }}\) (perfective) that is used to mean be (in a location) for flexible objects and for people (both illustrated in (162)), has the imperfective stem Viihtim with the meaning be going, as in (163).

\footnotetext{
\({ }^{60}\) The morphology described in this section has been labeled "multiple action" in previous work beginning with Marlett (1981b) up until 2008. While the label "imperfective" may not be appropriate for all uses of the morphology, it nevertheless seems to communicate better the most general usage of this morphology and therefore is adopted here.
}
(162) Hant iti hihiih zo ziix hapahit \(z\) iti tmiih, ... place 3P-on 1P-PON-be.FL a thing SN-Pv-eat a 3P-on RL-not.be.FL
'No hay comida en mi casa, ...'
There isn't any food at my house, ... (Burgos_41) RMH_07-11-07_27c
(163) Hast com ano hptiihtim,...
stone/mountain the.Hz 3P.in 1SGS.In-Rl-be.Fl-ImpF
'Mientras (yo) andaba en los cerros, ...'
As I was going in the hills, .... (DS2010, caahca) RRR
Some dynamic event predicates have an inherent sense of imperfectiveness, and it is not uncommon for them to have no stem that lacks an overt indicator of imperfectivity (although that indicator may vary between singular stems and plural stems). These predicates include \(\sqrt{ }\) aalim play, Vasaquim comb one's hair, and \(\sqrt{ }\) aasitim deceive. The loanword \(\sqrt{ }\) argüeotim wander (with a very unusual-for-Seri sound \(/ \mathrm{g}^{\mathrm{w}} /\) ) is also one of these. Such stems are not glossed with the label ImpF in this grammar, however, in order to not confuse them with those where an aspectual contrast is found.

Stative predicates, on the other hand, often do not have an attested imperfective stem. When they do, the imperfective stem sometimes has a meaning that indicates a special characteristic that is related to multiples. For example, the predicate \(\sqrt{\text { aaol means something like grooved, and }}\) the imperfective stem Vaaoloj is used for the sense of pleated. It is seen by this that aspect morphology does not always directly indicate the basic sense of aspect.

Aspect morphology also in effect indicates singular versus plural direct object and singular versus plural indirect object in many cases, as the following examples illustrate. This situation is very common; it is not an optional matter.
a. ¿Itacö?

3:3-RL-kill
‘¿Lo mató?'
Did s/he kill him/her/it? RMH_05-17-08_249a
b. ¿Itácotim?

3:3-RL-kill-ImpF
‘¿Los mató?’ Did s/he kill them? RмH_05-17-08_249b
a. Tom quih he ivocazit.
money the.FL 1IO 3:3-DT-grab.away
'Me quitó del dinero.'
S/he snatched the money away from me. RMH_-7-20-07_49a
b. Tom quih he iyocázitim.
money the.FL 1IO 3:3-DT-grab.away-IMPF
'Nos quitó el dinero.'
S/he snatched the money away from us. RMH_07-20-07_49b

\subsection*{17.3.8.1 The morphology of aspect}

The most common situation in the language is for perfective aspect to be unmarked and imperfective aspect to be marked. Repetitive and iterative aspect are typically not distinguished, although sometimes they are, as shown below.

The morphology of subject number (§17.3.2.1) is intertwined with that of aspect and it is not always easy to separate the two. Compare two verbs (cited in the simple realis \(\mathbf{t}\) - form, §17.3.1.5), the second of which is unusual in that it has six forms rather than the more typical four. The first verb also has two "modified" forms using the rhetorical infix \(-\mathbf{a}\) - (§26.10), which is set off here with angle brackets. These forms might be mistaken as additional aspect forms when in reality they are modifications of other forms. Therefore the following examples have examples (a) and (a'), (c) and (c'). (The infix is phonetically distinct in that, unlike root vowels, it does not lengthen due to stress; see \(\S 28.5 .1\).)
\begin{tabular}{|c|c|c|}
\hline \multirow[t]{2}{*}{a.} & itoocta \(\quad\)\begin{tabular}{l} 
Subject \\
singular
\end{tabular} & Action perfective \\
\hline & 3:3-RL-look.at & \\
\hline \multirow[t]{2}{*}{a.'} & itooc \(<\) a \(>\) ta singular & continuously (without stopping) \\
\hline & 3:3-RL-look.at.<RHET> & \\
\hline \multirow[t]{2}{*}{b.} & itoocatim singular & imperfective (iterative/repetitive) \\
\hline & 3:3-RL-look.at-ImPF & \\
\hline \multirow[t]{2}{*}{c.} & itooctam plural & perfective \\
\hline & 3:3-RL-look.at-PL & \\
\hline \multirow[t]{2}{*}{c.'} & itooc<a>tam plural & continuously (without stopping) \\
\hline & 3:3-RL-look.at.<RHET>-PL & \\
\hline \multirow[t]{2}{*}{d.} & itoocatam plural & imperfective RMH_11-28p-07_26 \\
\hline & 3:3-RL-look.at-PL-ImPF & \\
\hline \multirow[t]{2}{*}{a.} & itaactim singular & perfective \\
\hline & 3:3-RL-cause.be.cut & \\
\hline \multirow[t]{2}{*}{b.} & itaact singular & cut (the item) into little pieces \\
\hline & 3:3-RL-cause.be.cut & \\
\hline \multirow[t]{2}{*}{c.} & itaacloj singular & cut (the item) into bigger pieces \\
\hline & 3:3-RL-cause.be.cut-? & \\
\hline \multirow[t]{2}{*}{d.} & itatoocl plural & perfective \\
\hline & 3:3-RL-cause.be.cut-PL & \\
\hline \multirow[t]{2}{*}{e.} & itatooct plural & cut (the item) into little pieces \\
\hline & 3:3-RL-cause.be.cut-Pl-? & \\
\hline \multirow[t]{2}{*}{f.} & itatoocalam plural & cut (the item) into bigger pieces RMH_11-288-07_27 \\
\hline & 3:3-RL-cause.be.cut-Pl-ImPF & \\
\hline
\end{tabular}

The morphology of imperfective aspect is most commonly the suffix -tim if the subject is
singular. (The allomorph -im occurs in many places; details are given below.) It is also quite common for the imperfective aspect form to preserve a root-medial post-tonic vowel. In the case of the verb \(V_{\text {iij }}\) sit, the imperfective form (singular subject) \(\sqrt{ } \mathbf{i c o l i m}\) may best be taken as simply suppletive.

The expression of Imperfective aspect is more complex when the subject is plural. This may be due to the fact that plural subject is also indicated by a suffix. Some of the common patterns (disregarding other changes to the root such as the preservation or loss of a post-tonic vowel) are shown in (168).
(168)
\begin{tabular}{lll} 
& Plural subject, Perfective & Plural subject, Imperfective \\
a. & - toj & -tolca \\
b. & \(-\mathbf{t o j}\) & -tam \\
c. & - t & -tolca \\
d. & \(-\mathbf{o}\) & -tam \\
e. & \(-\mathbf{t j}\) & -jam \\
f. & \(-\mathbf{l}\) & -lca
\end{tabular}

With respect to the claim that the underlying forms of the imperfective suffixes -tim and those in (168a-c) are \(\mathbf{t}\)-initial, it is obvious that the \(\mathbf{t}\) generally deletes when it follows a consonant preceded by an unstressed vowel. Thus common allomorphs of -tim, -toj, -tolca and \(\boldsymbol{t a m}\), for example, are -im, -0j, -olca and -am. \({ }^{61}\)
(169) a. لCaxaz-im hit (with long thing) (Sg., Impf.)
b. Vcaacop-0j pound (Pl., Impf.)
c. Vaam-olca return home (Pl., Impf.)
d. Vaapxlox-am harvest eelgrass seed (Pl., Impf.)

The \(\mathbf{t}\) also deletes if that root-final consonant is preceded by a trimoraic nucleus (as opposed to a monomoraic or bimoraic nucleus).

\footnotetext{
\({ }^{61}\) This consonant does not delete if the suffixal \(\mathbf{t}\) is word-final or if it follows \(\mathbf{n}\) (which may be due to assimilation): \(\sqrt{ } \mathbf{i i x a n}-\mathbf{t}\) fear (plural subject, perfective aspect), \(\sqrt{ } \mathbf{i i x}\) an-tolca fear (plural subject, imperfective aspect) (compare the singular stems \(\sqrt{ }\) iixim and \(\sqrt{ }\) iixam-am); \(\sqrt{ }\) asin-t smile (plural subject, perfective aspect), \(\sqrt{ }\) asin-tolca (plural subject, imperfective aspect) (compare the singular stems \(\sqrt{ }\) asim and \(\sqrt{ }\) ásim-am); Voizc-t enter (plural subject, perfective aspect), \(\sqrt{ } \mathbf{o i z i j}-\mathbf{o j}\) (plural subject, imperfective aspect) (compare the singular stems \(\sqrt{ }\) azquim and \(\sqrt{ }\) ázijquim).
}
(170) Trimoraic nucleus
a. Vcaail-im have extra (Sg., Impf.)
b. Vcaaol-im grooved (Sg., Impf.)
c. Voaal-im wear tuft of hair (Sg., Impf.)
d. لcaaaj-am have extra (Pl., Impf.)
e. لâaom-oj ask for gift (Pl.)
f. Vqueeez-olca move back and forth sideways (Pl., Impf.)
(171) Monomoraic nucleus
a. لcap-tim fly (Sg., Impf.)
b. Vaháx-tim stain with grease (Sg., Impf.)
c. Vamos-tim grimace (Sg., Impf.)
d. Vip-tam gather (plants) (Pl.)
d. Vamos-taj grimace (Pl.)
e. \(V\) mec-toj warm (Pl.)
f. Vaptás-tolca have bad luck (Pl., Impf.)
(172) Bimoraic nucleus
a. Vahtaap-tim have pus (Sg., Impf.)
b. Voos-tim sing (Sg., Impf.)
c. Vaas-tim deflate (Sg., Impf.)
d. Vaat-tim \({ }^{62}\) cook under coals (Sg., Impf.)
e. Valaah-taj want to have (Pl.)
f. \(\sqrt{\text { miih-toj }}\) scarce (Pl.)
g. Vihiim-toj marry (Pl.)
h. Vameep-tolca marvelous (Pl., Impf.)

The \(\mathbf{t}\) of a suffix also deletes when it follows two or more consonants.
(173)
\begin{tabular}{lll} 
& \(V\) quesejqu-im & gnaw (Sg., Impf.) \\
a. & \(V_{\text {acs-am }}\) & chew to pulp (Pl.) \\
c. & \(V_{\text {monj-0j }}\) & go in zigzag (Pl.) \\
d. & \(V\) asj-0j & paddle (Pl.) \\
e. & \(V_{\mathbf{i i n l}-\mathbf{o j}}\) & ring (Pl.)
\end{tabular}

The deletion of \(\mathbf{t}\) interacts with the deletion of root-final \(\mathbf{c}\). Specifically, the sequence jc may condition the deletion of \(\mathbf{t}\) although the root-final \(\mathbf{c}\) also subsequently deletes before \(\mathbf{0}\). This is shown for a few verbs below; the forms to notice are those underscored since they show the \(\mathbf{t}\) missing following a single consonant.

\footnotetext{
\({ }^{62}\) See \(\S 24.4 .1 .3\) for evidence that the "long" \(t\) in this word is correctly analyzed as a sequence of two consonants.
}
\begin{tabular}{|c|c|c|c|c|}
\hline Sg., Perf. & Sg., Impf. & Pl., Perf. & Pl., Impf. & \\
\hline \(\checkmark\) quesejc & \(\checkmark\) quesejqu-im & \(\checkmark\) queseji-oj & \(\checkmark\) quesejc-am & gnaw \\
\hline \(\checkmark\) iije & \(\checkmark\) iijijqu-im & \(\checkmark\) Viij-0i & \(\checkmark\) Viijij-0j & be wet \\
\hline \(\checkmark\) iijc & \(\checkmark\) iijajqu-im & \(\sqrt{\text { iij-oi }}\) & \(V_{\text {iiiiij-0 }}{ }^{63}\) & explode \\
\hline \(\sqrt{\text { assqu-im }}\) & \(\checkmark\) āsajc-a & \(\sqrt{\text { assj-oj }}\) & \(\sqrt{\text { āsaj-oj }}\) & paddle \\
\hline \(\checkmark\) monje & \(\checkmark\) monaj-0i & \(\checkmark\) monj-0j & (same) & go in zigzag \\
\hline \(\checkmark\) pisaqu-im & \(\sqrt{\text { pisajqu-im }}\) & \(\checkmark\) pisaj-oi & \(\checkmark\) pisalc-am & rub to sharpen \\
\hline
\end{tabular}

Some verbs having \(\mathbf{z x}\) as part of their stem show imperfective aspect (as well as plural subject in some cases) by what appears to be an infixation of \(\mathbf{c a}\) before the \(\mathbf{x}\), displacing the \(\mathbf{z}{ }^{64}\)
\begin{tabular}{lllll} 
Sg., Perf. & Sg., Impf. & Pl., Perf. & Pl., Impf. & \\
\(V_{\text {tapzx }}\) & \(V_{\text {tapazx }}\)-im & \(V_{\text {tapcaj-c }}\) & \(V_{\text {tapcax-lca }}\) & signal to, slip \({ }^{65}\) \\
\(V_{\text {mihzx }}\) & \(V_{\text {mihcax }}\) & \(V_{\text {mihcaj-c }}\) & \(V_{\text {mihcax-Ica }}\) & slip on \\
\(V_{\text {apzx }}\) & \(V_{\text {apcax }}\) & \(V_{\text {apcaj-c }}\) & \(V_{\text {apcax-lca }}\) & chipped
\end{tabular}

The deletion of the vowel in a syllable after the stressed syllable is also used to mark aspect, usually in combination with other indicators.
\begin{tabular}{|c|c|c|c|c|}
\hline \begin{tabular}{l}
Sg., Perf. \\
\(\sqrt{ }\) atp
\end{tabular} & Sg., Impf. \(\sqrt{\text { atop-im }}\) & \begin{tabular}{l}
Pl., Perf. \\
\(\sqrt{\text { atop-oj }}\)
\end{tabular} & \begin{tabular}{l}
Pl., Impf. \\
\(\sqrt{ }\) atop-olca
\end{tabular} & spit out \\
\hline \(\checkmark\) pitol & \(\checkmark\) pitol-im & \(\checkmark\) pitl-oj & \(\checkmark\) pitol-am & bloated \\
\hline Viiquet & Viict-o & Viict-oj & Viict-olca & carry in womb \\
\hline \(\checkmark\) aho & \(\sqrt{\text { aho-tim }}\) & \(\sqrt{ }\) ah-t & \(\sqrt{\text { ah-tolca }}\) & see \\
\hline \(\checkmark\) ficj & \(\checkmark\) fical-im & \(\checkmark\) fcoocl & \(\checkmark\) fcoocal-am & wrap oneself \\
\hline \(\checkmark\) neezj & \(\checkmark\) neezil-im & \(\checkmark\) neezl-coj & \(\checkmark\) neezil-coj \({ }^{66}\) & crush \\
\hline
\end{tabular}

The replacement of one sound for another, such as \(\mathbf{I}\) for \(\mathbf{j}\), or the alternation of null and \(\mathbf{j}\), indicates aspect as it does subject number.
\begin{tabular}{|c|c|c|c|c|}
\hline \begin{tabular}{l}
Sg., Perf. \\
Vaanjö \\
\(\sqrt{ }\) oteja
\end{tabular} & \begin{tabular}{l}
Sg., Impf. \\
Vaanal-im \(\sqrt{ }\) otel-ca
\end{tabular} & \begin{tabular}{l}
Pl., Perf. \\
\(\sqrt{ }\) aanl-coj \\
\(\sqrt{ }\) otel-coj
\end{tabular} & \begin{tabular}{l}
Pl., Impf. \\
Vaanal-am \\
\(\sqrt{ }\) otel-am
\end{tabular} & poison points stagger \\
\hline \(\sqrt{ }\) iise comca \(\sqrt{ }\) iite & \(\checkmark\) isiiqu-im \(\checkmark\) comajca \(\checkmark\) iitic & \begin{tabular}{l}
\(\sqrt{ } \mathbf{i s i} j-0 j\) \\
\(\checkmark\) comi-oj \\
\(\checkmark_{\text {iitioj }}\)
\end{tabular} & \(\checkmark\) iisijc-am \(\checkmark\) comajc-am \(V\) iitijc-am & whistle; hiss noisy drip \\
\hline
\end{tabular}

\footnotetext{
\({ }^{63}\) One might have expected \(\vee_{\text {iijajoj }}\) for this form, but the one recorded in the dictionary is as given here.
\({ }^{64}\) Marlett (1981b) analyzed this infix ca as an allomorph of ta.
\({ }^{65}\) These two verbs (slip occurring with hant land) are distinguished in the dictionary, one having the plural \(V_{\text {tapcajc }}\) and the other having the plural \(V_{\text {tapcaxlca. In }} 2008\) René Montaño Herrera indicated that both plurals are used with both senses, the former stem with perfective aspect and the latter stem with imperfective aspect.
\({ }^{66}\) This form was not recorded in the 2005 dictionary. René Montaño Herrera added it in 2008.
}

On the assumption that the underlying forms of certain suffixes begin with \(\mathbf{t}\), as shown in (205), the \(\mathbf{t}\) is changed to \(\mathbf{c}\) in a certain environment (specifically, between \(\mathbf{I}\) and \(\mathbf{0}\) where the \(\mathbf{l}\) is related to \(\mathbf{j}\) in the singular punctiliar form, bleeding \(\mathbf{t}\)-Deletion).
\begin{tabular}{|c|c|c|c|c|c|}
\hline (179) & \begin{tabular}{l}
Sg., Perf. \\
Vitaaij \\
Vaanjö \\
\(\sqrt{ }\) asj
\end{tabular} & \begin{tabular}{l}
Sg., Impf. \\
\(\checkmark\) itaail-im \\
aanal-im \({ }^{68}\) \\
\(\sqrt{ }\) asal-im
\end{tabular} & \begin{tabular}{l}
Pl., Perf. \\
Vitaail-coj \\
Vaanl-coj \\
\(\sqrt{ }\) asl-coj
\end{tabular} & \begin{tabular}{l}
Pl., Impf. \\
Vitaail-olca \({ }^{67}\) \\
\(\sqrt{\text { aanal-am }}\) \\
(same)
\end{tabular} & \begin{tabular}{l}
sway \\
poison projectile points spray
\end{tabular} \\
\hline
\end{tabular}

Underlying \(\mathbf{l}\) does not condition the change of \(\mathbf{t}\) to \(\mathbf{c}\); the suffx-initial \(\mathbf{t}\) therefore deletes by \(\mathbf{t}\) Deletion. \({ }^{69}\)
\begin{tabular}{|c|c|c|c|c|}
\hline Sg., Perf. & Sg., Impf. & Pl., Perf. & Pl., Impf. & \\
\hline \(\checkmark\) aaol & Vaai-im & \(\checkmark\) aaol-o & Vaaol-am & grooved \\
\hline \(\checkmark\) queecöl & \(\checkmark\) queecol-im & \(\checkmark\) queecol-oi & (same) & listen to \\
\hline \(\checkmark\) pitol & \(\checkmark\) pitol-im & \(\checkmark\) pitl-oi & (same) & bloated \\
\hline
\end{tabular}

A \(\mathbf{t}\) does not change to \(\mathbf{c}\) after \(\mathbf{x}\) and therefore it deletes by \(\mathbf{t}\)-Deletion.
\begin{tabular}{|c|c|c|c|c|}
\hline Sg., Perf. \(\checkmark\) aiix & \begin{tabular}{l}
Sg., Impf. \\
Vaax-im
\end{tabular} & \begin{tabular}{l}
Pl., Perf. \\
\(\sqrt{\text { aaax-0j }}\)
\end{tabular} & \begin{tabular}{l}
Pl., Impf. \\
Vaaax-olca
\end{tabular} & go away from \\
\hline atax & \(\sqrt{\text { atax-im }}\) & \(\checkmark\) alx & \(\checkmark\) alax-olca & \\
\hline \(\checkmark\) capx & \(\checkmark\) capapx-im & \(\checkmark\) capapx-ai & \(\checkmark\) capapx-olca & crack with teeth \\
\hline \(\checkmark\) aanpx & \(V\) aanipx-im & \(\sqrt{\text { aanipx-at }}\) & \(\sqrt{\text { aanipx-olca }}\) & return home \\
\hline
\end{tabular}

A word-final \(\mathbf{t}\) becomes \(\mathbf{c}\) when it follows either \(\mathbf{l}\) (related to underlying \(\mathbf{j}\) ) or \(\mathbf{x}\).
\begin{tabular}{|c|c|c|c|c|}
\hline Sg., Perf. & Sg., Impf. & P1., Perf. & Pl., Impf. & \\
\hline \(\checkmark\) naafij & \(\checkmark\) naafil-im & \(\checkmark\) naafil-c \({ }^{71}\) & \(\checkmark\) naafil-coj & spiralled \\
\hline \(\checkmark\) iixa & \(\sqrt{\text { iixa-tim }}\) & \(\sqrt{\text { iij-c }}\) & (same) & have water \\
\hline \(\sqrt{\text { am-j-c }}\) & \(\sqrt{\text { ama-l-xim }}\) & \(\sqrt{\text { aml-a-j-c }}\) & \(\sqrt{\text { am-l-a-x-lca }}\) & bring \\
\hline \(\sqrt{\text { amaa-x }}\) & \(\checkmark\) amaa-x-tim & \(\sqrt{\text { amaa-j-c }}\) & Vamaa-x-ajam & brew liquor \\
\hline \(\sqrt{\text { aasa-x }}\) & \(\sqrt{\text { aasa-x-im }}\) & \(\sqrt{\text { atoos-ta-j-c }}\) & \(\sqrt{\text { atoos-ta-x-lca }}\) & open up \\
\hline \(\sqrt{\text { tipt-x }}\) & \(\sqrt{\text { tipit-x-im }}\) & \(\sqrt{\text { tipt-a-j-c }}\) & \(\checkmark\) tip-ta-x-lca & touch \\
\hline \(\sqrt{\text { apt-x }}\) & \(\sqrt{\text { apat-x-im }}\) & \(\sqrt{\text { apt-a-j}-\underline{c}}\) & \(\sqrt{\text { apt-ta-x-lca }}\) & gather with hands \\
\hline
\end{tabular}

\footnotetext{
\({ }^{67}\) One consultant prefers the stem \(\sqrt{ }\) itaail-c here.
\({ }^{68}\) This verb also has another imperfective stem \(\sqrt{\text { aanlea }}\) that indicates XXXqqq check slips.
\({ }^{69}\) René Montaño Herrera in 2008 indicated that the plural stem is \(\sqrt{ }\) aaol-coj, pace the claim in the 2005 dictionary and the claim here that the \(\mathbf{t}\) does not change to \(\mathbf{c}\) after \(\mathbf{l}\).
\({ }^{70}\) This verb also has another imperfective stem \(\sqrt{ }\) aaol-0j that indicates the presence of many grooves. Xxx slip
\({ }^{71}\) Some speakers use \(\sqrt{ }\) naaflc for this form.
}

A number of verbs take suffixes beginning with \(\mathbf{l} .{ }^{72}\) A derived sequence \(\mathbf{l}+\mathbf{l}\) surfaces as zil, presumably by dissimilation and epenthesis of \(\mathbf{i}\). The forms in (183) justify the underlying form of the suffix and those in (184) illustrate the changes.
\begin{tabular}{llllll} 
(183) & Sg., Perf. & Sg., Impf. & Pl., Perf. & Pl., Impf. & \\
& \(V_{\text {aaitom }}\) & \(V_{\text {aaatim }}\) & \(V_{\text {ooza }}\) & \(V_{\text {ooza-Ica }}\) & talk \\
& \(V_{\text {apt-x }}\) & \(V_{\text {apat-x-im }}\) & \(V_{\text {apt-a-j-c }}\) & \(V_{\text {apt-a-x-Ica }}\) & gather \\
& \(V_{\text {queeex }}\) & \(V_{\text {queeex-im }}\) & \(V_{\text {queee-ta-x }}\) & \(V_{\text {queee-ta-x-Ica }}\) & cut hair of \\
(184) & \(V_{\text {aapi }}\) & \(V_{\text {aapal-im }}\) & \(V_{\text {aapz-il }}\) & \(V_{\text {aapz-ilca }}\) & choke \\
& \(V_{\text {saci }}\) & \(V_{\text {sacal-im }}\) & \(V_{\text {sacz-il }}\) & \(V_{\text {sacz-ilca }}\) & carry child \\
& \(V_{\text {naaci }}\) & \(V_{\text {naacal-im }}\) & \(V_{\text {naacz-il }}\) & \(V_{\text {naacz-ilca }}\) & bowed \\
& \(V_{\text {nopii }}\) & \(V_{\text {nopil-im }}\) & \(V_{\text {nopz-il }}\) & \(V_{\text {nopz-ilca }}\) & sink
\end{tabular}

\subsection*{17.4 Inflection of non-finite forms}

The non-finite verb forms include deverbal nouns (discussed in chapter 14), infinitives, and imperatives.

\subsection*{17.4.1 Infinitives}

The infinitival form of the verb occurs only under conditions of coreference in clauses embedded under certain verbs (see chapter 12). Therefore the existence of an infinitive depends on the possibility of it appearing in such a sentence. Infinitives are never negative; this fact does not seem to follow from anything else in the language. \({ }^{73}\)

Infinitives do not display subject person inflection, but they do display subject number inflection (§17.3.3) as well as aspect inflection (§17.3.8). Therefore any verb has at least as many infinitives as it has stems, as shown in (185)-(186).
\begin{tabular}{lllll} 
(185) & a. & icapanzx & to run & (Sg., Perf.)
\end{tabular}

\footnotetext{
\({ }^{72}\) Interestingly, almost all of these verbs have \(\mathbf{j}\)-final roots or have the obligatory suffix - \(\mathbf{x}\).
\({ }^{73}\) Intransitive infinitives are identical phonetically to the unspecified subject form of the third person proposition/oblique-oriented deverbal noun (see §14.4). Compare the infinitive iquiim to sleep \{ica-iim\} (Inf.Insleep) with iquiim one's sleeping \{i-Ø-ca-iim\} (3P-PON-US-sleep). The latter can be negative, however, unlike the infinitive: imquiim one's not sleeping \{i-Ø-m-ca-iim\} (3P-PON-N-US-sleep).
}
\begin{tabular}{lllll} 
a. & icaatax & to go & (Sg., Perf.) & RMH_07-27-07_1b \\
b. & icaataxim & to go & (Sg., Impf.) & \\
c. icaalx & to go & (Pl., Perf.) & \\
d. & icaalaxolca & to go & (Pl., Impf.) &
\end{tabular}

The infinitive prefix has two suppletive allomorphs: ica- when the clause is intransitive, and iha-abl when the clause is transitive. The final vowels of both allomorphs delete before another vowel except before a regular short-low vowel root, in which case the vowel is lengthened. \({ }^{74}\)

The infinitives of a variety of intransitive verbs are given below (citing the verbs with the singular perfective stem).
(187) Infinitives of simple intransitive verbs

RMH_07-27-07_2
\begin{tabular}{llll} 
a. & \(\underline{\text { icahác }}\) & to be blind & Inf.In-blind \\
b. & icás & to err & Inf.In-err \\
c. & icaajc & to yawn & Inf.In-yawn \\
d. & iccooha & to cry & Inf.In-cry \\
e. & icapanzx & to run & Inf.In-run \\
f. & iquiim & to sleep & Inf.In-sleep \\
g. & icaatax & to go & Inf.In-go
\end{tabular}
(188) Infinitives of derived intransitive verbs (including passives) RMH_07-27-07_3a
\begin{tabular}{llll} 
a. & icotís & to point & Inf.In-UO-point.at \\
b. & icapazt & to be tattooed & Inf.IN-Pv-tattoo \\
c. & icahcazni & to be bitten & InF.In- Pv-bite \\
d. & icahaapl & to feel cold & Inf.IN- AUG-cold \\
e. & icaacj & to do twice & Inf.In- Times-two
\end{tabular}
(189) Infinitives of causative verbs used intransitively

RMH_07-27-07_3b
a. icahamoc
to stay out late
b. icaahit
to go fishing
Inf.In-Aug-be.night
InF.IN-AUG-eat RMH_05-17-08_250
(190) Infinitives of denominal verbs used intransitively

RMH_07-27-07_3c
a. iquitaamt to be wearing sandals
b. iquiionam to be wearing a hat
Inf.In-have-sandals
Inf.In-have-hat

The infinitives of a variety of transitive verbs are given below.

\footnotetext{
\({ }^{74}\) The length of vowels in infinitives has been problematic (at least for me) for some years; an infinitive such as icaatax to go has been written as icatax in many previous publications. The difference is barely perceptible, but current consultants are much more aware of the difference and helpful in catching mistakes in this area. Unless the long vowel in the infinitive is due to underlying vowel length in the prefixal a, the lengthening is attributed to the compensatory lengthening (or something like it) that occurs when other prefix vowels displace a short low root-initial vowel. See §27.3.1.
}
(191) Infinitives of simple transitive and ditransitive verbs

RMH_07-27-07_4a
\begin{tabular}{llll} 
a. & ihapii & to taste it & Inf.TR-taste \\
b. & ihaacta & to look at it/him/her/them & Inf.TR-look.at \\
c. & iheep & to carry it on head & Inf.TR-carry.on.head \\
d. & ihaaho & to see it/him/her/them & Inf.TR-see \\
e. & ihaahit & to eat it/them & Inf.TR-eat \\
f. & ihazt & to tattoo him/her & Inf.TR-tattoo \\
g. hapx ihaca & to throw it out & Inf.Tr-put.LQ \\
h. & ihapiz & to suck juice from it & InF.TR-suck.juice.from
\end{tabular}
(192) Infinitives of derived transitive verbs RMH_07-27-07_4b
\begin{tabular}{llll} 
a. ihaacsx & to awaken him/her/it & Inf.Tr-AUG-awake \\
b. & ihaqueejc & to make him/her/it wet & Inf.Tr-AUG-wet \\
c. & ihataamatot & to put sandals on him/her & Inf.Tr-AUG-HAVE-sandal-? \\
d. ihaneaaxot & to wash his/her hands & Inf.Tr-AuG-wash.hands-?
\end{tabular}

The infinitive may be inflected for direct and indirect objects; the absence of overt marking for direct object means that the direct object is third person.
a. ma ihee
to give you (sg.) it
2SGDO Inf.TR-give.food
b. ihee to give him/her it INF.Tr-give.food RMH_07-27-07_4c

The infinitive of the transitive verb \(\sqrt{ }\) italhaa buy, which begins with an unstressed i, changes the \(\mathbf{i}\) to \(\mathbf{a}\). (This is the only basic transitive verb that begins with unstressed \(\mathbf{i}\).)
ihatalhaa
to buy it/them
Inf.Tr-buy
RMH_07-27-07_5a
The infinitives of denominal verbs likewise change the \(\mathbf{i}\) of the have prefix (see §19.3.3) to a when they are used transitively. In this regard it is worth comparing the intransitive and transitive infinitives directly.
(195) a. iquitaamt to wear sandal(s) (intr.) Inf.In-HAVE-sandal
b. ihataamt to wear it/them as sandal(s) Inf.Tr-have-sandal
(196)
a. iquiionam to wear a hat (intrans.) Inf.In-HAVE-hat
b. ihaaonam \({ }^{75}\) to wear it as hat (trans.) Inf.TR-HAVE-hat RMH_07-27-07_5b

Verb stems that begin with non-low vowels oo change to aa, and \(\mathbf{i}\) and \(\mathbf{i i}\) change to \(\mathbf{a a},{ }^{76}\) as

\footnotetext{
\({ }^{75}\) This is used in a sentence like
(iii) Hipiix ihaaonam ihmiimzo.

DPS INF.TR-HAVE.hat 1SGS.TR-PX-want
'Quiero llevar éste (como sombrero).' I I want to wear this one (as a hat). RRRecording
\({ }^{76}\) It was claimed in Marlett (1981b) that the vowel also shortened. This is not correct according to current consultants for the infinitives.
}
shown in (191b-c), \({ }^{77}\) with a couple of minor twists in a few cases, as described below. (This kind of ablaut is found elsewhere in the language; see \(\S 14.4 .2\).)
\begin{tabular}{ll} 
a. & \(V_{\text {oocta }}\) \\
b. & \(V_{\text {ooi }}\) \\
c. & \(V_{\text {ooi }}\) \\
d. & \(V_{\text {oonl }}\) \\
e. & \(V_{\text {oon }}\)
\end{tabular}
(198)
a. Vic
b. \(\sqrt{ }\) ictim
c. Vimox
d. Vimt
e. Vinj
f. \(\quad\) ip
g. Vipje
h. Viptim
i. \(\quad\) is
j. \(\quad\) Visxö
k. Vitlim
1. \(\sqrt{ }\) ixoz
m. لixö
n. \(\quad V_{i z i}\)
(199)
ihaacta
ihaai
ihaai
ihaanl
iheen
iheec
iheectim
iheemox to cut it into pieces
iheemt to rub it
iheenj to shout at him/her/it
iheep to straighten it
iheepjc to grab it
iheeptim to harvest them (seeds)
ihees to miss it/them
iheesxö to hide it/them
iheetlim to kindle it
iheexoz to scrape it
iheexö to jump over it
iheezi to defeat him/her/it RMH_07-27-07_7a
inee to hear him/her/it
iheehe to have it
iheemosim to beg from him/her
iheep to carry it on head
iheexem to fear it/them RMH_07-27-07_7b

The infinitive of the verb \(\sqrt{ }\) oon carry (plural items) would be expected to be *ihaan by this pattern, but it is iheen. This is quite obviously the result of a rule of harmony that is seen operating elsewhere in the language, by which a...e changes to e...e (see §27.2.3). The verb \(\sqrt{ }\) oon evidences the triggering e of the harmony in its plural stem, \(\sqrt{ }\) oonec, the infinitive of which is iheenec. \({ }^{78}\)

\subsection*{17.4.2 Imperatives}

The only morphological imperative is second person. \({ }^{79}\) The difference between singular and

\footnotetext{
\({ }^{77}\) No transitive roots begin with short \(\mathbf{0}\), and only five begin with \(\mathbf{0 0}\).
\({ }^{78}\) See also the harmonization of a to \(\mathbf{e}\) in certain noun forms (§13.2.4).
\({ }^{79}\) In order to express something like a first person hortative (Let's ...), one uses the independent irrealis with a first person emphatic prefix; literally the meaning is WE should ... See §17.3.2.1.
}
plural subject is expressed only in the form of the stem (see §17.3.3): compare, for example, catax Go (sg.)! and calx Go (pl.)!

The imperative has several regular, suppletive allomorphs. \({ }^{80}\) First, it is always null when the verb is inflected with the first person singular object prefix hpo-, \({ }^{81}\) whether the verb is negative or affirmative.

When the imperative prefix occurs with a negative verb that is not inflected with the prefix hpo-, the allomorph c- occurs. (An epenthetic occurs after it before the nasal of the negative prefix under predictable circumstances relating to syllabification; see §27.1.3.)
\begin{tabular}{|c|c|c|c|c|}
\hline a. & ¢Cmatax & Don't go! & \{c-m-atax \(\}\) & Im-N-go \\
\hline b. & ¿Cmotís! & Don't point! & \{c-m-o \({ }_{\text {Abl }}\)-tis \(\}\) & Im-N-UO-point \\
\hline c. & ¿Contís! & Don't point at it! & \{c-m-tis \} & Im-N-point.at \\
\hline d. & ¡Cocompanzx! & Don't run like him/her! & \{co-c-m-panzx\} & \(3 \mathrm{IO}-\mathrm{Im}-\mathrm{N}\)-run \\
\hline
\end{tabular}

Otherwise - that is, when the verb is not negative and does not have a first person singular direct object - the null allomorph occurs also when the imperative morpheme is preceded by the third person indirect/oblique object prefix co- (§17.3.2.4) and directly followed by a rootinitial short low vowel (viz., a or e). \({ }^{82}\)
\begin{tabular}{llllll} 
(202) & a. & ¡Coomjc! & Take it to him/her! & \(\{\mathbf{c o - Ø - a m j c \}}\) & 3IO-Im-take \\
& b. & ¡Hohra cootax! & Go like a donkey! & \(\{\mathbf{c o - Ø - a t a x \}}\) & 3IO-Im-go \\
& c. & ¡Coomen! & Winnow it with it! & \(\{\mathbf{c o - Ø - e m e n \}}\) & 3IO-Im-shake
\end{tabular}

Otherwise - that is, when the verb is not negative and is not inflected for first person direct object or third person indirect object - the imperative prefix has the shape c- (qu-before front vowels, of course) when the verb begins with a root-initial short low vowel (viz., a or e).

\footnotetext{
\({ }^{80}\) This allomorphy was first laid out in Marlett (1975).
\({ }^{81}\) As explained in \(\S 17.3 .2 .3\), the prefix hpo- occurs only in imperatives.
\({ }^{82}\) The vowels that are marked with a macron in underlying forms, such as the root \(\sqrt{ } \bar{a} \mathbf{a}\) at Swim, are short phonetically but act as long in all situations.
}
\begin{tabular}{lllll} 
a. & ¿Catax! & Go! & \{c-atax\} & Im-go \\
b. & ¿Casi! & Drink it! & \{c-asi\} & Im-drink \\
c. & ¡Quemen! & Shake it from side to side! & \{c-emen\} & Im-shake \\
d. & ¡He cazcam! & Come (pl.) to me! & \(\{\) he c-azcam \} & 1IO Im-arrive.PL
\end{tabular}

The important detail here is that the short low vowel must be root-initial - or, perhaps more correctly - it must be a root-initial stressed vowel. No derived verb nor any verb that begins with an unstressed vowel takes this prefix for imperative (see below).

Except for the cases already mentioned above, when the vowel following the imperative morpheme is not a high front vowel (viz., \(\mathbf{i}\) or ii), and the clause is intransitive, the imperative prefix is null plus Ablaut (§14.4.2). The ablaut rule only affects high vowels: it makes them short and low, as shown below, except for the lengthening due to the diphthong effect (see §28.3.4).
\begin{tabular}{|c|c|c|c|c|}
\hline a. & ¡Aait! & Dance! & \{ \(\emptyset_{\text {Abl }}\)-00it \(\}\) & Im-dance \\
\hline b. & ¡As! & Sing! & \(\left\{\emptyset_{\text {Abl-00s }}\right\}\) & Im-sing \\
\hline c. & ¡Aha! & Cry! & \(\left\{\emptyset_{\text {Abl }}\right.\)-ooha \(\}\) & Im-cry \\
\hline d. & ¡Eenj! & Shout! & \(\left\{\emptyset_{\text {Abl }}\right.\)-eenj \(\}\) & Im-UO+yell.at \\
\hline e. & ¿Asanj! & Carry on your back! & \(\left\{\emptyset_{\text {Abl-0 }} \mathbf{o l a l}^{\text {abl }}\right.\)-sanj \(\}\) & Im-UO-carry... \\
\hline f. & ¿Aticpan! & Work! & \(\left\{\emptyset_{\text {Abl-aticpan }}\right\}\) & Im-work \\
\hline g. & ¡Aanpx! & Go home! & \(\left\{\emptyset_{\text {Abl }}\right.\)-aanpx \(\}\) & Im-return.home \\
\hline h. & ¡Aahit! & Go fishing! & \(\left\{\emptyset_{\text {Abl-ahit }}\right.\) \} & Im-fish \\
\hline i. & ¡Eteja! & Stagger! & \(\left\{\emptyset_{\text {Abl }}\right.\)-oteja \(\}\) & Im-stagger \\
\hline
\end{tabular}

The imperative form eteja shows the same kind of vowel harmony seen above with the infinitival form ihén (§17.4.1) and discussed in §27.2.3.

One notable exception to the preceding generalization is the singular irregular verb \(\sqrt{ }\) oom lie; the imperative allomorph is the default one (described below): ¡Hant hoom! Lie down! (The plural stem is regular ( \(V_{\mathbf{o i i t i}}\) ) and has a regular imperative using the expected null plus Ablaut: ;Hant aiiti!)

Finally, elsewhere and presumably as the default case, the imperative prefix is \(\mathbf{h}\)-. (This prefix is often preceded by an epenthetic \(\mathbf{i}\) for reasons of syllabification; see \(\S 27.1 .1\).)
\begin{tabular}{|c|c|c|c|c|}
\hline (205) & a. & ¢Hiim! & Sleep! & Im-sleep \\
\hline & b. & iHoocta! & Look at it/him/her! & Im-look.at \\
\hline & c. & iHoonl! & Stir it! & Im-stir \\
\hline & d. & ¿Hoon! & Carry them! & Ім-carry.(plural.items) \\
\hline & e. & ¿Haafc! & Pound it! & Im-pound \\
\hline & f. & ¿Cöhaafc! & Pound it with it! & 3IO-Im-pound \\
\hline & g . & iIhmai! \({ }^{83}\) & Be quiet! & Im-be.quiet \\
\hline & h. & ¡ILhtís! & Point at it! & Im-point.at \\
\hline & i. & ¡ILCaa! & Look for it! & Im-look.for \\
\hline & j. & iH-ah-ooil! & Make it blue/green! & Im-AUG-blue/green \\
\hline & k. & ¡Co-h-queetx! & Return it to him/her! & 3IO-Im-return \\
\hline & 1. & ¡H-ataamat-ot! & Put sandals on him/her! & Im-cause.have.sandal(s)-? \\
\hline & m. & ¡Cö-h-acózix-ot! & Make him/her saw it! & 3IO-Im-cause.saw-? \\
\hline
\end{tabular}

\footnotetext{
\({ }^{83}\) The surface allomorph ih- is due to epenthesis that relates to phonotactics; see §27.1.1.
}

\section*{18. Basic verb subcategorization}

In this chapter a large sampling of different kinds of non-derived verbs is laid out according to the various subcategorization frames with which they operate. (Derived verbs are discussed in chapter 19.) Semantic subcategorization and syntactic subcategorization are distinguished; \({ }^{1}\) this is especially helpful in the discussion of direct and indirect objects.

Syntactic subcategorization generally is restricted to three items: subjects, direct objects and indirect objects (although there are some special cases, as is shown). \({ }^{2}\) These three notions correspond to relatively clear morphological and syntactic criteria. The most directly indicative criteria are the morphological markings described as subject person inflection, direct object inflection, and indirect object inflection (see §17.1.2). Subject and direct objects have additional tests that are associated with them (see \(\S 9.1\) and \(\S 9.2\), respectively).

Semantic subcategorization is presented here using some fairly standard names for semantic roles, but no claims are made for the adequacy of these labels cross-linguistically. It is also possible that some macro-roles could properly unify some of the more specific semantic roles used here.

On the basis of these semantic and syntactic criteria, various types of verbs may occur, and these are divided into a few major groups, some of which have minor subgroups.

Impersonal verbs are considered in \(\S 18.1\); these do not subcategorize for any referential nominal although some of them are also used as stative intransitive verbs (§18.2). The clauses in which impersonal verbs occur are intransitive by the available tests (see Appendix C).

Personal intransitive verbs are presented in three sections: \(\S 18.2\) - stative verbs, many of which correspond to adjectives in other languages; \(\S 18.3\) - verbs expressing involuntary action; and \(\S 18.4\) - verbs expressing voluntary action. The distinction between these types of intransitive predicates does not appear to have any major morphological or syntactic relevance in Seri, \({ }^{3}\) but the verbs are presented separately for the sake of explicitness. \({ }^{4}\) The basic groups of intransitives also have some minor subgroups that reflect some uncommon morphological,

\footnotetext{
\({ }^{1}\) This presentation follows Jackendoff (2002) and Jackendoff and Culicover (2005).
\({ }^{2}\) See Jackendoff (2002:132ff).
\({ }^{3}\) One morphological fact correlates with whether or not the action can be done with permission, and hence with volition. See \(\S 18.4\) and \(\S 17.1 .1 .4\).
\({ }^{4}\) It has been important in linguistics to consider two types of intransitive verbs, which have been given the names 'unaccusative' and 'unergative', corresponding largely to the matter of volition. See Perlmutter (1978) and Rosen (1984) and many other later works.
}
syntactic or semantic properties that merit some discussion.
Transitive verbs are presented in \(\S 18.5\). Ditransitive verbs are presented in \(\S 18.6\).
The difference between non-agentive/non-volitional verbs and agentive/volitional verbs is imperfectly reflected in the choice of expression for indicating a greater degree. The common expression mos áno (§24.3.1.5) is used most typically with the former, and the expression mos áno anxö (a modification of the intensifier anxö, §24.3.1.6) is used typically with the latter. See the examples presented in the relevant sections.

\subsection*{18.1 Impersonal verbs}

Impersonal verbs do not subcategorize for any referential nominal semantically or any overt nominal syntactically, as the schema in (1) attempts to convey. These are all used to describe atmospheric conditions or the time of day. \({ }^{5}\)


These verbs, when used as impersonals, do not occur with an overt nominal subject, although the verb is always inflected for third person subject. \({ }^{6}\) Third person subject inflection is

\footnotetext{
\({ }^{5}\) The verbs \(\sqrt{ }\) meque warm and \(\sqrt{ }\) aapl cold are also used as stative predicates; see \(\S 18.2\) below. The verb \(\sqrt{ }\) apca rain may be used as an unaccusative verb with the nominal xat hail, arguably the subject, to mean (precipitate) hail. The verb \(\sqrt{ }\) Camla is an imperfective aspect stem of the unaccusative verb \(\sqrt{ }\) Camjö shiny; the perfective stem occurs in the deverbal noun, while the imperfective stem is the preferred verbal form. Some of the idioms are also impersonal, including áno \(\sqrt{ }\) ooit be afternoon (§7.3), hánt \(\sqrt{ }\) fii be next morning (§7.1).
The verb \(\sqrt{ }\) cozim is normally used as an impersonal verb, but it is used as a non-agentive verb in jocular speech to ask for one's personal space.
(i) Halx xah mxocózim tax, ihalx toox iicx he hiij! just ATTEN 2SGS-EM-hot.weather because just far near 1IO IM-sit 'Porque estás haciendo calor, siéntate más lejos de mí.'
Because you're hot, sit farther away from me. (Offered) RMH_07-20-07_26
\({ }^{6}\) This is attributed within the framework of Relational Grammar to the presence of a dummy subject that is also predicted to be phonetically null for a language like Seri since Seri is a pro-drop language. This subject participates in the raising construction, as described in §12.1.2.
}
formally unmarked in finite clauses (see §17.1.2.1), but it is overtly marked in deverbal nouns based on these impersonal verbs ( \(\S 14.4\) ), such as ihamoc ( \(\{\mathbf{i}-\varnothing\)-hamoc \(\}\), 3P-PON-be.night) night, icozim (\{i-Ø-cozim\}, 3P-PON-hot.(weather)) hot weather, summer, ihaapl (\{i-h-aapl\}, 3P-PON-cold) cold weather, winter, eámjö (\{i-Ø-Camjö, 3P-PON-lightning\} (sheet) lightning.
... ttamla, tanloj, tapca, ... RL-shiny.ImpF RL-thunder-ImpF RL-rain
‘... relampagueaba, tronaba, llovía, ...'
... there was lightning, it thundered, it rained, ... (ES2007, ziix cmaam ipca 10b)
... tcozim, hoocala zo tompáho, ... RL-hot.(weather) cloud a RL-N-Pv-see
‘... hacía calor, no había ninguna nube, ...'
... it was hot, not a cloud was seen, ... (ES2007, zix cmaam ipca 02b)
(5) Quiiziloj iha xo hayomiijajoj.

SN-drizzle DCL but 1PLS-DT-N-wet-PL
'Lloviznó pero no nos mojamos.'
It drizzled but we didn't get wet. (DS2005, quiizili) RMH_07-20-07_28
These verbs act as if they have third person syntactic subjects in that they may participate in the raising construction described in §9.1.2.
(6) Moxíma quih hiiqui iipca maapxa. yesterday the.Fl 1P-toward 3P-PON-rain Px-Times-three
'Ayer nos llovió tres veces.'
It rained on us three times. RMH_08-04-07_117
Verbs derived from impersonal predicates are intransitive. See \(\S 19.4\) for the experiencer verbs based on them and \(\S 19.5 .1\) for the causatives based on them.

See \(\S 18.3\) for the use of \(\sqrt{ }\) apca rain with the explicit subject xat hail.

\subsection*{18.2 Stative verbs}

Intransitive stative verbs, which are very numerous, describe a referent in some way. They may indicate the state in which the item is or (without any additional morphology or phrasing) the state in which the item has been, will be, or is becoming. They are therefore often ambiguous between a stative and an inchoative reading. They may indicate intrinsic or temporary characteristics. As indicated in the schema in (7), the subject of these clauses is the nominal that is described by the verb. Examples of stative verbs are given in (8).
\begin{tabular}{lll}
\hline \hline Stative Verb & Semantics: & Patient \\
& Syntax: & Subject \\
\hline
\end{tabular}
a. Color and pattern: \(\sqrt{ }\) heel red, \(\sqrt{ }\) Cihjö red, \(\sqrt{ }\) masol yellow, Vooil blue/green, \(\sqrt{ }\) oopol black, ل , ooscl speckled without much color, Voospoj spotted, \(\sqrt{ }\) Camjö shiny, \(\sqrt{ } \mathbf{i c o p o l}\) dark, \({ }^{7} \sqrt{ } \mathbf{i i m a p x j i j}\) iridescent with dark colors, \(\sqrt{ } \mathbf{i m a a x a t}\) gray brown, \(\sqrt{ }\) ineehj shiny, \(\sqrt{ }\) inziitxi unattractive gray/brown (vulgar), لaan murky, etc.
b. Shape and size: \(\sqrt{ }\) aacni curved, \(\sqrt{ }\) apxeezc wedge-shaped, \(\sqrt{ } \mathbf{a m o o t j}\) forked, \(\sqrt{ } \mathbf{p}\) cö thick, Vacösxaj long, tall \(\sqrt{ }\) iteejöc skinny, \(\sqrt{ } \mathbf{j i p}\) flat, \(\sqrt{ }\) neeej curled up, gnarled, \(\sqrt{ }\) noftj bent, jagged, \(\sqrt{ }\) noocon bowed, \(\sqrt{ }\) noohöc concave and deep, \(\sqrt{ }\) noosc rough, \(\sqrt{ }\) nopin convex, \(\sqrt{ }\) oiij tubular, Vooipj oval, \(\sqrt{ }\) peehzx concave and shallow, ل \(\mathbf{V}\) mazaj extra large and globular, Vaptj wide, ل \(\begin{aligned} & \text { oosot narrow, }\end{aligned}\) \(\sqrt{ } \mathbf{o o j o j}\) short, \(\sqrt{ } \mathbf{a a c o j}\) big, \(\sqrt{ }\) aail spacious and open, \(\sqrt{ }\) isil small, \(\sqrt{ }\) opisica unusually small (opening), لeaam spacious, etc.
c. Weight: \(\sqrt{ } \mathbf{a f z x}\) light, \(\sqrt{ }\) motet heavy.
d. Temperature: \(\sqrt{ }\) aapl cold, \(\sqrt{ }\) matj hot, \(\sqrt{ }\) meque warm.
e. Flavor: \(\sqrt{ }\) acat bitter/salty, \(\sqrt{ } \mathbf{c a p x l}\) sour, \(\sqrt{ }\) oaatjö sweet, \(\sqrt{ } \mathbf{c o t p}\) tart, \(\sqrt{ } \mathbf{j} \mathbf{j z i}\) picante/painful.
f. Smell: \(\sqrt{ } \mathbf{c o n}\) stink like onions, \(\sqrt{ } \mathbf{c o t x t a}\) have smell like body odor, \(\sqrt{ } \mathbf{c o z l}\) smell like rancid oil, Vicotj musty, rotten-smelling, \(\sqrt{ }\) heemt stink, etc.
g. Quantity: \({ }^{8} \sqrt{ }\) azoj one, \(\sqrt{ }\) oocj two, \(\sqrt{ }\) apxa three, \(\sqrt{ }\) zooxöc four, \(\sqrt{ }\) ooitom five, \(\sqrt{ }\) hanl ten, \(\sqrt{ } \mathbf{c o o o}\) all, \(\sqrt{ }\) atxo much, many, \(\sqrt{ }\) ipxa few, \(\sqrt{ }\) miih scarce, etc.
h. Physical condition: \(\sqrt{ }\) âaiscan hard, \(\sqrt{ }\) iipe good, well, \(\sqrt{ }\) moqueepe ill, \(\sqrt{ }\) monlc curly, wrinkled, ل \(\mathfrak{V}\) maaco unobvious, \(\sqrt{ }\) ahtxima rich, ل Vahzinz immature [mesquite pod], ل \(\mathbf{a j o ̈ a z p}\) mushy (fruit), Vancl rusty, \(\sqrt{ }\) axaaza drippy and thick, \(\sqrt{ } \mathbf{a x a x}\) raspy, \(\sqrt{ } \mathbf{a x t}\) delicate, tender, \(\sqrt{ }\) ayáx in poor physical condition, ل \(\mathbf{~ a z a p l e}\) paralyzed in the legs, \(\sqrt{ }\) cam full, \(\sqrt{ }\) haasax open and spread out, \(\sqrt{ } \mathbf{h a a n z x}\) twisted and unraveled, \(\sqrt{ }\) hac blind, \(\sqrt{ }\) hesen \({ }^{9}\) rigid and strong, \(\sqrt{ }\) is raw, \(\sqrt{ }\) maaitx soft, tender, \(V_{\text {mam }}\) cooked, ripe, \(V_{\text {matis }}\) burned, \(\sqrt{ }\) maxquij taut, stiff, \(\sqrt{ }\) meesom unused, intact, \(\sqrt{ }\) miipala broken, ruined, \(\sqrt{ }\) miipla bad, ruined, \(V_{\text {moqueepe }}\) sick, \({ }^{10}\) Vocaait be in disarray, Voozlil sticky, Voqueepe

\footnotetext{
\({ }^{7}\) This verb has the root for black in it (unexplicably with a short vowel, however) but there is no regular morphological derivation happening here.
\({ }^{8}\) See §19.11.
\({ }^{9}\) This root is homophonous with the noun for dry ironwood.
\({ }^{10}\) This root contains the root for comfortable and also a reanalyzed negative prefix (see Marlett 2002).
}
comfortable, \(\sqrt{ }\) paaisx clean, \({ }^{11}\) etc.
i. Mental or emotional state: Vatla fearful of the authorities for having committed a crime, \(\sqrt{ }\) haxz irritable, \({ }^{12} \sqrt{ }\) matiscal have a negative attitude, be a braggart, -atol afraid, etc. \({ }^{13}\)
j. Characterized by being or having something else: Vahpizl have an overhang, \(\sqrt{ }\) ahsnaailc have rough bark, لahtaap have pus, Vahtaasim foamy, have foam, \(\sqrt{ }\) aptxö full of holes, \(\sqrt{ }\) atoopex have whooping cough, \(\sqrt{ }\) cosyat thorny, \({ }^{14}\) \(\sqrt{ }\) haait bloody, \({ }^{15} \sqrt{ }\) hast rocky, stiff, \({ }^{16} \sqrt{ }\) hoopatj be rough sea with breaking waves, \({ }^{17}\) Voaanj poisonous, bearing plant poison, \(\sqrt{ }\) matsj be a liar, etc.

\footnotetext{
\({ }^{11}\) This root is etymologically a passive form of a now disused transitive root \(\sqrt{ }\) aaisx clean (Marlett 2002).
\({ }^{12}\) This root is homophonous with the absolutive form of pet, typically used for \(d o g\). The plural verb stem, \(\sqrt{ }\) háxaca, is homophonous with the plural absolutive form of pet.
\({ }^{13}\) Many of the expressions for mental and emotional states are idiomatic; see chapter 7.
\({ }^{14}\) This root is similar to, or contains, the root for thorn, cosi.
\({ }^{15}\) This root is homophonous with the absolutive form of the noun for blood. The plural verb stem and the plural noun stem are not identical.
\({ }^{16}\) This root is homophonous with the noun for stone, rock. The plural verb stem, \(\sqrt{ }\) hásatoj, is identical to the plural noun form.
\({ }^{17}\) This root is homophonous with the noun for wave. The plural verb stem, \(\sqrt{ }\) hoopatalca, is identical to the plural noun form.
}

\section*{Table 18.1: The number system}

The numbering system is a base-ten system. The primary terms are:
\(1 V_{\text {azoj }}\) (although tazo is used as the simple word for one)
\begin{tabular}{llllll}
2 & Voocj & 4 & \(V_{\text {zooxöc }}\) & & \\
3 & Vapxa & 5 & Vooitom & 10 & \(V_{\text {hanl }}\)
\end{tabular}

Each of these predicates is inflected in the same way as any intransitive verb: chanl (SN-ten) ten, pohanl (Ir.Dp-ten) if there are ten, yohanl (DTten) there were ten, \(\dot{\mathbf{T}}\) Thanl? (RL-ten) Are/were there ten?

The expression for six is an addition of one to something: isnaap \(\sqrt{ }\) azoj (3P-breast one). Seven is etymologically five with two: tomcoj co- \(V_{\text {iih }}\) (five-two 3IO be.FL), where tom is the last syllable of \(\sqrt{ }\) ooitom five and coj is a contraction of coocj (SN-two). Eight is evidently (at least etymologically) a "multiple" form (see §17.1.8) of four: Vzooxolcam. Nine is related to the verb for ten: csooi \(\sqrt{ }\) hanl (? ten); the word csooi only appears in this expression and its derivatives.

The multiples of ten are expressed as ihanl Voocj (3P-PON-ten two) twenty, ihanl \(\sqrt{ }\) apxa thirty, ihanl csooi \(\sqrt{ }\) hanl ninety, ihanl ihanl Voocj two hundred, etc. When the XXX word is a multiple of ten, the "plural" stem \(\sqrt{ }\) hánaloj is used: ihanl ihanl chánaloj quih \(V\) oocj (3P-PON-ten 3P-PON-ten SN-ten.PL the.Fl two) two thousand.

Other numbers between the multiples of ten are expressed with additions to the previous multiple of ten (which is expressed as a dependent clause):
\begin{tabular}{|c|c|c|}
\hline 11 & thanl tazo co- \(\sqrt{\text { iih }}\) & (RL-ten one 3IO be.Fl) \\
\hline 12 & thanl toocj co- \({ }_{\text {iih }}\) & (RL-ten RL-two 3IO be.FL) \\
\hline 16 & thanl tomcoj cötiih co- \(V_{\text {iih }}\) & (RL-ten ? 3IO-Rl-be.Fl 3IO be.Fl) \\
\hline 22 & ihánl toocj tazo co- \(V_{\text {iih }}\) & (3P-PON-ten RL-two one 3IO be.Fl) \\
\hline
\end{tabular}
k. Other: \(\sqrt{ }\) ahntaxl close, \(\sqrt{ }\) haamx widely known, \(\sqrt{ }\) hapx made public, uncovered, \(\sqrt{ }\) ahizoj be mirage, \(\sqrt{ }\) catoomec \({ }^{18}\) be Sunday, \(\sqrt{ }\) eme depleted, \(\sqrt{ }\) aptasa unlucky, \(\sqrt{ }\) comca noisy, \(\sqrt{ }\) pacta be in appearance, etc.

\footnotetext{
\({ }^{18}\) This word eventually traces its origin back to Spanish domingo. See Appendix B.
}

Stative verbs may co-occur with the intensifying adverbs aapa (§24.4.1) and mos áno (§24.3.1.5).

The following examples illustrate the fact that the predicates indicating quantity are easily and naturally used as main predicates in the clause.
(9) Haaonatz quih cooci iha. hat-PL the.FL SN-two DCL 'Hay/había dos sombreros.'
There are/were two hats. RMH_05-17-08_255
(10)

yaanipxat.
DT-return.home-PL
'Después de dos o tres meses, regresaron a casa.'
After two or three months, they returned home. RMH_05-17-08_256
(11) \({ }^{\circ}\) Eenm haaczoj \({ }^{\circ}\) quih tcooo ma, itoon, tatax, yoque. rifles the.FL RL-all DS 3:3-RL-carry.items RL-go DT-US-say
'Llevando todos los rifles, se fue, se dice.'
He took all of the rifles, he went, it is said. RMH_05-17-08_257
(12) Hai cop intooit ma, cöihaafzx hac iti air the.VT Twd-Rl-arrive DS 3IO-3P-PON-fast the.LC 3P-on

> hoocala cötaanim ma, hant com tcooo, yicopol.
cloud 3IO-RL-covered DS land the.Hz RL-all DT-dark
'Cuando vino el viento, muy pronto se puso nublado y toda la tierra se oscureció.'
When the wind came, it quickly got cloudy and all the earth became dark. (DS2005 caafzx) RMH_05-20-08_190

Many stative typically have third person subjects. Some examples of those that may have human subjects are given here. In some cases, described in \(\S 19.4\), a stative predicate with an experiencer requires a special derived verb.
(13) Ihpimhác.
1SGS.In-Px-blind
'Soy ciego.' RMH_07-20-07_29a
I am blind. (DS2005, chac)
(14) iIhpthaxz?
1SGS.In-RL-irritable
‘¿Soy irascible?’ RMH_07-20-07_29b
Am I irritable? (DS2005, chaxz)
(15) Ziix zo hyoohit yax, ihpxocám.
thing a 1 SGS.Tr-Dt-eat because 1 SGS.In-Em-full
'Comí algo y estoy lleno.'
I ate something and I'm full. RMH_07-20-07_29c
(16) Ihpxaptasa.

1SGS.In-Em-have.bad.luck
'Tengo mala suerte.'
I have bad luck. RNH_11-28p-07_29
(17) Taax hapocooo \(\mathbf{x}\), cöhasmiipla \({ }^{19}\) ha.

DDP 1PlS-Ir.Dp-all UT 3IO-1PLS-Ir.Id-bad Aux-Dcl
'Eso sería malo para todos nosotros.'
That would be bad for all of us. RMH_05-17-08_258
(18) \({ }^{\circ}\) Hamatj ihptooxi \({ }^{\circ}\), siml ix quih anxö ihtasi, I.was.thirsty barrel.cactus 3P-liquid the.Fl Intns 1SGS.Tr-RL-drink

\section*{ihpyazaplc.}

1SGS.In-Dt-paralyzed.in.legs
'Cuando tenía mucha sed, tomé mucho jugo de una biznaga, y me paralicé de las piernas.'
When I was very thirsty, I drank lots of barrel cactus liquid and became paralyzed in the legs. (DS2005, cazaplc, ix) RRR
The common verb \(\sqrt{ }\) pacta \(^{20}\) be in appearance requires a special kind of complement that indicates the point of comparison, and this adjunct is almost always the pronoun taax DDP that, the pronoun hizaax DPP this, the adverb ox thus, or the interrogative adverb zó how.
\begin{tabular}{cllll} 
Taax / Hizaax & oo & cöhapacta & ha. \\
DDP & DPP & DL & 3IO-SN-be.in.appearance & DCL
\end{tabular}
'Es como eso / esto.'
That / This is what it is like. RMH_05-17-08_259
(20) Ox hapacta ha.
thus SN-be.in.appearance DcL
'Así es.'
That's what it is like. RMH_05-17-08_260
(21) ¿Zó hapacta -ya?
how? SN-be.in.appearance QM
‘¿Cómo es?’
What is it like? RMH_05-17-08_261

\footnotetext{
\({ }^{19}\) Some people could or would use the plural stem \(V_{\text {miiploj }}\) here, but the preferred from appears to be with the singular verb.
\({ }^{20}\) See Marlett (2002) for more discussion of this stem, which is a reanalysis of the passive stem of Voocta look at.
}
(22) Pooixaj ta, ox impacta ha.

Ir.Dp-strong DS thus SN-N-be.in.appearance DCL
'No era porque él era fuerte.'
It wasn't because he was strong. [It was supernatural power.] (Muerte Cöquimaxp 30)
See also the use of this verb in the expressions for then (ox tpacta ma,... thus RLbe.in.appearance DS), why? (zó tpacta ma, ... how RL-be.in.appearance DS), that's why (taax (ah) \(\mathbf{0 0}\) cötpacta ma, ... DDP FOC DL 3IO-RL-be.in.appearance DS), and however (ox \(\mathbf{0 0}\) mpacta xo thus Dl Px-be.in.appearance but).

\subsection*{18.2.1 Equative verb \(\sqrt{ }\) haa}

The verb \(\sqrt{ }\) haa equates a subject and a predicate nominal. The clauses in which it occurs are intransitive by all tests. (For more details on the usage of this verb, see \(\S 10.3\).)
\begin{tabular}{llll}
\hline \hline Equative Verb & Semantics: & Patient & Predicate nominal \\
Vhaa Equative & Syntax: & Subject & \(\|\mathrm{DP}\|\) \\
\hline ___Patient/Subject _——| & Predicate Nominal \(\mid\)
\end{tabular}
..., \({ }^{\circ}\) ziix hast iizx ano coom \({ }^{\circ}\) com mos cmiique quih thaa \(x\), northern.chuckwalla the.Hz also person the.Fl RL-EQ UT
'... la iguana también era una persona, ...'
... the chuckwalla was also a person, ...(DS2007, acaam ccaa 13b)
\begin{tabular}{llllllll}
\(\cdots\) & ziix & tiquij & \({ }^{\circ}\) ziix quiisax \({ }^{\circ}{ }^{\text {áa }}\) & \(\mathbf{z}\) & \(\underline{l}\) \\
thinghaa & MD-CM & person & INTNS & a & SN-N-EQ & DCL
\end{tabular}
'... esa cosa no era una verdadera persona.'
... that thing was not a real person. (Gigante_Comelon_49) RMH_11-28p-07_30
\begin{tabular}{lllllll} 
Ihyaaco cop ihapooin & cop & eenim & quih & chaa & ha. \\
1P-house the.VT & 3P-PON-PV-cause.closed & the.VT & metal & the.FL & SN-EQ & DCL
\end{tabular}
(27) \({ }^{\circ}\) Ziix hacacj \({ }^{\circ}\) hipquij hast quih chaa ha. carving Px-Cm stone the.Fl SN-EQ DCL
'Esta figura es de piedra.'
This carving is made of stone. RMH_08-14-07_82a RMH_08-14-07_88

\subsection*{18.2.2 Motion verb}

One verb root (at least) that indicates involuntary motion of an entity subcategorizes for a range of locations: a location adverb (§24.3.2), a postpositional phrase (chapter 22), or an oblique object with indirect/oblique object cross-reference morphology (§2.4). (See also §18.4.1. for its
use with an agentive subject.)
\begin{tabular}{llll}
\hline \hline Motion Verb & Semantics: & Agent/Patient & Location \\
& Syntax: & Subject & Oblique Object ~ \\
& &
\end{tabular}
(29) a. \(\sqrt{\mathbf{a}}\) (requires a directional prefix as well), to mean come or go)
b. Vahjiit fall
(30) Iteen hac haait quih ano moma.

3P-mouth the.Lc Abs.blood the.Fl 3P.in/from Twd-Px-move
'Salió sangre de su boca.'
Blood came from his/her/its mouth. RMH_07-11-07_27b
(31) Canoaa zo haa moca ha.
boat a there Twd-SN-move DcL
'Allí viene una panga.'
There comes a boat. (DS2005, haa) RMH_08-04-07_221b
The verb \(\sqrt{ }\) ahjiit fall is similar in that it also requires some kind of location expressed in the clause.
(32) Toc cöihiihtolca iti \(x\), zo hant sahjiit haa hi. there 3IO-3P-PON-be.Fl-Pl-ImpF 3P-on UT a/one land Ir.Id-fall Aux Dcl 'Estando allí, uno de ellos va a caerse.'
They are there, one is going to fall. RMH_07-11-07_41c

\subsection*{18.2.3 Locational and existential verbs}

A few verbs are very commonly used to indicate the location of an item (and by extension, in some contexts, existence). Some of these verbs may also be used as verbs of motion and they may have agentive subjects; see \(\S 18.4 .2\). They are glossed in the examples using the shorter glosses sit, stand, etc., but they are are interpreted differently by their contexts. They are also used in the more complex situational construction (§3.12.1). These verbs always occur with some word or phrase that specifies a location: a location adverb (§24.3.2), a postpositional phrase (chapter 22), or an oblique object with indirect/oblique object cross-reference morphology (§2.4).
\begin{tabular}{llll}
\hline \hline Locational Verb & Semantics: & Patient & Location \\
& Syntax: & Subject & Adverb \(\sim\) PP \(\sim\) Oblique Object \\
\hline \hline
\end{tabular}
(34) a. Vahca be located
b. Viij be seated
c. Vap be standing
d. Voom be lying
e. \(\sqrt{\text { iih }} \quad b e\) (flexible item)

These verbs essentially divide the world up into different types of physical objects, depending on their shape and orientation. Items that are compact in form are presented with the verb \(V_{\mathrm{iij}}\) be seated; those that are extended and not vertical are presented with \(V_{\mathrm{iij}}\) be lying, etc. See also the noun classes that have developed with respect to the definite articles that are etymologically related to these same verbs (§13.3).

Examples with an adverb before the locational verb:
(35) Ihmáa zo haa tiij ma, ...
other a there RL-sit DS
‘Otro estaba allí, ...'
Another one was there, ... (Mt 25:15) RMH_08-04-07_200b
(36) Tiim haa toom xah hpmiimoz.

RL-sleep there RL-lie - 1SGS.In-Px-think
'Pensé que estaba allí durmiendo / dormido/a.'
I thought that s/he was there sleeping. (DS2005, camoz) XMH_08-15-07_51a
Examples with a PP before the locational verb:
\begin{tabular}{lllllll} 
Ox tpacta ma, & cmaax & taax & iti & tiii, & ... \\
thus RL-be.in.appearance & DS & now & DDP & 3P-on & RL-sit & \\
'Entonces, sentada allí, ...' & & & & \\
Then, sitting there, .... (Es2007, cmaam ipca quiho \(8 w)\) & & &
\end{tabular}
(38) Tzih com haso quih ano toom, isoj itahiix, ...
pufferfish the.Hz net the.FL 3P.in RL-lie 3P-self 3:3-RL-cause.be.inflated 'El pez infla que estaba en la red se infló ...'
The pufferfish was caught in a net, it inflated itself ... (DS2005, cahiix) OP_2-07-07_20
Examples with a cross-referenced oblique object before the locational predicate:
(39) Coos] quij toc cötiij \(x\), cooit cop mos toc cömiip.

SN-sing the.FL there 3IO-RL-sit UT SN-dance the.VT also there 3IO-Px-stand
'Había un(a) cantante allí, también había un bailador.'
There was a singer there, there also was a dancer. (siete_filos 41)
¿Quíih -ya miicp cötap?
who? QM 2P-place.next.to 3IO-RL-stand
¿Quién está a tu lado?'
Who is standing next to you? RмH_11-27-07_09

When these verbs are used with the word toc there (a noun that requires oblique-object cross-referencing on the verb), they are interpreted as existential predicates; they are in fact the common way to present new characters in a story.

\subsection*{18.2.4 Stative verb with additional nominal}

The verb \(\sqrt{ }\) poct full commonly occurs both with and without a nominal phrase (Patient \({ }_{2}\) below) that is not cross-referenced on the verb at all. This nominal indicates the contents of the subject. \({ }^{21}\)
\begin{tabular}{llll}
\hline \hline & Semantics: & Patient \(_{1}\) & \(\left(\right.\) Patient \(\left._{2}\right)\) \\
\(\checkmark\) poct full & Syntax: & Subject & \((\|\mathrm{DP}\|)\) \\
\hline \hline
\end{tabular}

In (42) the verb occurs without the additional nominal (Patient \()_{2}\), and in (43-44) it occurs with it.
(42) \({ }^{\circ}\) Hehe an icaaij \({ }^{\circ}\) quij cpoct iha. water.drum the.Cm SN-full DcL
'El tambo está lleno.'
The water drum is full. RMH_07-20-07_30a
(43) \({ }^{\circ}\) Hehe an icaaij \({ }^{\circ}\) quij hax quih cpoct iha. water.drum the.Cm water the.FL SN-full DCL
'El tambo está lleno de agua.'
The water drum is full of water. RMH_07-20-07_30b
(44) ... panaal quih tpoct ma, ... honey the.FL RL-full DS
‘ \(\ldots\). estaba llena de miel, ...'
... it was full of honey, ... \({ }^{22}\) (DS2005, cahiizat) RMH_07-20-07_30c

\subsection*{18.2.5 Dative stative verbs}

At least a couple of stative verbs subcategorize for an oblique object that is cross-referenced as

\footnotetext{
\({ }^{21}\) As evidence of the intransitivity of this verb, note that in (43b) the \(3: 3\) prefix \(\mathbf{i}\) - does not occur on the finite verb as it would if the clause had a direct object. The verb is not marked with co- 3 IO , a fact that distinguishes this from cases of simple adjuncts.
\({ }^{22}\) This could also be understood as referring to honeybees rather than honey.
}
an oblique/indirect object (§17.1.2.4), indicated by the prefix co- in example (47). The clauses in which these verbs occur are intransitive by all available tests.
\begin{tabular}{llll}
\hline \hline Dative Stative Verb & Semantics: & Patient \(_{1}\) & Patient \(_{2}\) \\
& Syntax: & Subject & Oblique Object
\end{tabular}
a. Vpam be connected
b. Vaanim be covering

'El niño recién nacido todavía tiene el cordón umbilical conectado.'
A newborn baby's umbilical cord is still connected to it. (DS2005, cocpám) RMH_08-04-07_119
Soaano quih he smaanim aha.
bed.sheet the.Fl 1IO Ir.Id-N-cover Aux-DCL
'La sábana no me cubrirá.'
The bed sheet will not cover me. RMH_11-28p-07_31

\subsection*{18.2.6 Morphologically dative statives}

A few stative verbs do not subcategorize for an oblique or indirect object but they nevertheless inflect for third person oblique/indirect object in all uses, as illustrated in (50)-(51). \({ }^{23}\) (Their derived causatives also inflect for third person indirect object. See §19.5.2.)
(49) \(V_{\text {naafij }}\) slightly arched, \(\sqrt{ }\) patyax striped, \(\sqrt{ }\) ootij \(d r y\), \(\sqrt{ } \mathbf{i i n}\) short and pudgy, \(\sqrt{ }\) ihmeel bright pink, \(\sqrt{ } \mathbf{i m a h j o ̈}\) light pink, \(\sqrt{ } \mathbf{i m a s o l}\) orange, \(\sqrt{ } \mathbf{i m a x p}\) very light pink, \(\sqrt{ }\) oomlax stuck together, stiff (in limbs), Vipootizx inside out.
¿Cötootij?
(* ¿Tootij?) RL-dry
3IO-RL-dry
‘¿Está seco?’
Is it dry? RMH_07-20-07_31
(51) \({ }^{\circ}\) Ziix is ccapx \({ }^{\circ}\) imám pac hataht ma, hax cövimasol 00. pitaya.agria 3 -fruit some 1 PlS-Rl-see-Pl DS IntNS 3IO-DT-orange Dl
'Encontramos algunas frutas de pitaya agria, y eran anaranjadas.' Rмн_08-04-07_120
We found some pitaya agria fruit, they were orange-colored. (DS2005, cöquimásol, improved)
The verb \(\sqrt{ }\) tootij may, however, also occur with an oblique object that indicates the liquid of

\footnotetext{
\({ }^{23}\) In the 2005 dictionary they are all listed with this morphology in their entry forms.
}
which the subject is lacking, in the pattern described in §18.2.5.
(52) Hax iihom com hax quih cötootij ma \(x\), ...
water 3P-PON-lie the.Hz water the.Fl 3IO-Rl-dry DS UT
'Cuando un lugar donde hay agua está seco, ...'
When a place that holds water dries up ... (DS2005, quitilic) RMH_08-04-07_121

\subsection*{18.3 Involuntary action verbs}

Some verbs typically describe a motion or other action that a nominal is involuntarily undergoing. Examples of these are listed in below. Some of these are also used to express a voluntary action (see §18.4). \({ }^{24}\)
\begin{tabular}{lll}
\hline \hline Involuntary Action VERB & Semantics: & Patient \\
& Syntax: & Subject \\
\hline \hline
\end{tabular}
a. Change toward a final condition: \(\sqrt{\mathbf{a a c t o j}}\) dry up (fruit) on plant, \(\sqrt{ } \mathbf{a p x} \mathbf{l}\) lim break [long item], \(\sqrt{ }\) Camopxa get lost, \(\sqrt{ }\) heme form into a group larger than expected, \(\sqrt{ }\) mapcö burst open, float up, \(\sqrt{ }\) masij open up [fruit, wound], \(\sqrt{ } \mathbf{V z t}\) come loose, لooxi die, \({ }^{25}\) etc.
b. Action and/or motion: \(\sqrt{ } \mathbf{a a h n i j}\) tremble, \(\sqrt{ } \mathbf{a h m a ́ c}\) throw off sparks, \(\sqrt{ } \mathbf{a h x o o m j o j}\) shimmer, \(\sqrt{\mathbf{a}}\) err, Voaafp bounce, Voálali flap, Vooseta jiggle, twitch, \(\sqrt{ }\) ooxot fall (as group), \(\sqrt{ }\) paainj tumble over, \(\sqrt{ } \mathbf{p a m i z}\) rock, \(\sqrt{ }\) ahtoopj fall from plant, \(\sqrt{ } \mathbf{a}\) anapoj stagger, \(\sqrt{ } \mathbf{a h j i i t}\) fall, \({ }^{26} \sqrt{ }\) apniicl flip end to end, \(\sqrt{ }\) oopjij vibrate gently, Voxot fall [mass or group of things], Voqueht bounce, etc.
c. Sound: Vafiix make mysterious sound, ل oaap whinny, ل \(\mathbf{V o h a}\) cry, \(\sqrt{ }\) oosit rattle, \(\sqrt{ }\) oots sizzle, \(\sqrt{\text { iifz }}\) make snapping noise, etc.
d. Bodily function or action: \(\sqrt{ } \mathbf{a a h z x}\) sneeze, \(\sqrt{ } \mathbf{a a j c}\) yawn, \(\sqrt{\text { aapj }}\) choke on solid,
 frown, \(\sqrt{ }\) apazpx soil one's pants because of fear or surprise, ل \(\mathbf{V a a x a l i m}\) blink rapidly, etc.

Some examples with human subjects are given here.

\footnotetext{
\({ }^{24}\) If the action is done to another item, a causative verb is required; see \(\S 19.5\).
\({ }^{25}\) This verb is generally used only for animals; it is used with a human subject only pejoratively.
\({ }^{26}\) This verb is etymologically a passive form of \(\sqrt{ }\) jiit throw (Marlett 2002). It is generally used with the noun/adverb hant land, down.
}
(55) Ihpyaaic.

1SGS.In-DT-yawn
'Bostecé.'
I yawned. RMH_07-20-07_32a
(56) Zixquisiil \({ }^{\circ}\) tintica hanso yaanapolca, ...
child Md-Aw just DT-stagger-ImpF
‘Este niño se está tambaleando, ...'
That child is staggering, ... (DS2005, caanapolca) RMH_07-20-07_32b
(57) Moxíma quih xaa hpyaii.
yesterday the.FL soon 1 SGS.In-DT-wake.up.partially
'Ayer desperté temprano.'
Yesterday I woke up early. (DS2005, caii) RMH_-07-20-07_32c
The impersonal verb \(\sqrt{ }\) apca rain (see \(\S 18.1\) ) is used with the noun xat hail as its subject to mean to hail. \({ }^{27}\)
(58) Xat voopca.
hail Dt-rain
‘Cayeron granizos.'
It hailed. RMH_08-04-07_122a

\subsection*{18.3.1 Dative involuntary action verbs}

Some involuntary action verbs subcategorize for an oblique object, cross-referenced as an oblique/indirect object, which is some very relevant nominal. These are not treated as simple intransitive verbs with an oblique object like those presented in \(\S 2.4\) since these verbs require the oblique nominal.
\begin{tabular}{llll}
\hline \hline Dative Involuntary Action Verb & Semantics: & Patient \(_{1}\) & Patient \(_{2}\) \\
& Syntax: & Subject & Oblique Object \\
\hline
\end{tabular}
(60) a. Vcoiimaj \({ }^{28}\) wind oneself around
b. Vaahjöim choke on
(61) Hehe hapéc quih \({ }^{\circ}\) hehe hant haníp \({ }^{\circ}\) cop plant SN-Pv-plant the.FL post the.VT

\footnotetext{
\({ }^{27}\) The subjecthood of the noun xat is made evident when the causative of the impersonal verb \(\sqrt{ }\) apca rain ( \(\S 19.5 .1\) ) is compared with the causative of the expression for hail ( \(\S 19.5 .4\) ). The former is morphologically intransitive and the latter is morphologically transitive.
\({ }^{28}\) This verb, the root of which is the same as a general term for non-venomous snake, is also a voluntary action verb when the subject is something like a snake.
}

\section*{cöscoiimai caha.}

3IO-Ir.ID-wind.around Aux.SN-DCL
'La planta se va a enredar en el poste.'
The plant is going to wind itself around the post. (DS2005, coccoimaj) RMH_07-20-07_33
(62) Zixquisiil \({ }^{\circ}\) ctam quih panaal zo cötaahjöim, ...
child male the.Fl honey a 3IO-RL-choke
'El niño se atragantó comiendo miel de abeja, ...'
The boy choked on honey, ...(DS2005, coccaahioim)

\subsection*{18.3.2 Morphologically dative involuntary action verbs}

A few involuntary action verbs, including \(\sqrt{ }\) pémetx overturn [generally something without arms or legs], capsize and لoaafp come loose, \({ }^{29}\) do not subcategorize for an indirect object but typically inflect for one in all uses nevertheless. \({ }^{30}\)
(63) Canoaa com cöyopémetx. (* yopémetx)
boat the.Hz 3IO-DT-overturn DT-overturn
'La panga se volteó.'
The boat capsized. RMH_08-04-07_122b
... moficj \({ }^{\circ}\) quih \({ }^{\text {iiqqui cöipazj }}{ }^{\circ}\) quih cöcoaafp iha. your.shirt the.FL button the.FL 3IO-SN-come.loose DCL
'... tu blusa (camisa) está desabotonada (se ha desabotonado).'
... you blouse (shirt) is unbuttoned (has come unbuttoned). (Ds2005, cöcoaaf) RMH_05-17-08_262
See also the plural forms of the verb meaning arrive, as in the expression for descend (voluntarily or involuntarily) mentioned in \(\S 18.4 .5\); these are likewise morphologically dative, unlike the singular forms.

\subsection*{18.3.3 Passive intransitive}

One verb has a simple form but is more complicated in other ways. The verb \(\sqrt{ }\) iic has no other stem (apparently not even a distinct plural), and is only used with a single surface argument, the patient as subject. However, this verb is always understood as implying that someone has caused the action; it means be killed and not simply die although the verb is not morphologically passive. Furthermore, the Different Subject (§9.1.1) marking pattern in the case of this verb functions as if there is an Actor present.

\footnotetext{
\({ }^{29}\) The singular stem of this verb is homophonous with the verb meaning jump upwards, but the plurals of the two verbs are distinct.
\({ }^{30}\) This verb may also be used for a voluntary action by something without arms or legs, such as a manta ray.
}
\begin{tabular}{lllll}
\hline \hline Passive Intransitive Verb & & Semantics: & Patient & Actor \\
لiic be killed & & Syntax: & Subject & - \\
\hline \hline Hap quih tiic, & heme \(^{\circ}\) & hac & cötpamjc & ma \\
mule.deer & the.FL & \\
\hline
\end{tabular}
ipxasi coi imiiitoj.
3P-flesh the.PL 3:3-Px-eat-Pl
'Cuando un venado bura se mata, es traído al campamento, y comen la carne.'
When a mule deer is killed, it is brought to camp and they eat the meat. (Ds2005, quiic) RRR
\begin{tabular}{lllllll} 
Heecot & poquiih & \(\mathbf{x}\), & \({ }^{\circ}\) ziix ccam & zo & popaho & \(\mathbf{x}\), \\
desert.area & IR.DP-US-be.FL & UT & animal & a & IR.DP-Pv-see & UT
\end{tabular}
siic
aha.
Ir.Id-be.killed Aux-DcL
'Un animal se mata si alguno lo ve cuando uno está en el monte.'
An animal is killed if someone sees it while one is in the desert. (DS2005, quiic) RRR

\subsection*{18.4 Voluntary action verbs}

Some intransitive verbs typically occur with an agentive subject. \({ }^{31}\)
\begin{tabular}{lll}
\hline \hline Voluntary Action Verb & Semantics: & Agent \\
& Syntax: & Subject \\
\hline \hline
\end{tabular}
a. Motion: \(\sqrt{ } \mathbf{a a n p x}\) return home, \(\sqrt{ }\) aapxtim change place of residence, \(\sqrt{ }\) aatotim crawl, \(\sqrt{\text { àcat }}\) swim, \(\sqrt{ }\) aheehtim wander around, \(\sqrt{\text { apoti }}\) duck to avoid a blow, \(\sqrt{ }\) argüéyotim wander around, \({ }^{32} \sqrt{ } \operatorname{atax}\) go, \(\sqrt{ } \mathbf{c o j p}\) jump (like toad), \(\sqrt{ }\) cap fly, \(\sqrt{ }\) fit stand up from seated position, \(\sqrt{ }\) haasx stand in line side by side, \(\sqrt{ }\) meetosa stretch, \(\sqrt{ }\) miha go slowly, \(\sqrt{ }\) neejim dodge to one side, \(\sqrt{ }\) ocasjc walk with high steps, \(\sqrt{ } \mathbf{j} \mathbf{j o z}\) flee, \(\sqrt{ }\) oocöz trot, \(\sqrt{ }\) otj stand up from lying down, Vozaca move a boat by poling, \(\sqrt{ }\) atóm make noisy strikes in water, \(\sqrt{ } \mathbf{p a n z x}\) run, \(\sqrt{ } \mathbf{a f p}\) arrive, etc.
b. \(\quad\) Speech and vocalizations: \(\sqrt{ }\) âaitom speak, \(\sqrt{ } \mathrm{Col}\) argue, \(\sqrt{ } \mathrm{Cah}\) make musical

c. Other action: \(\sqrt{ } \mathbf{a} \mathbf{s q u i m}\) paddle, \(\sqrt{ }\) ocalim pack (to travel), Vaalim play, etc.

\footnotetext{
\({ }^{31}\) Some of them are also used for involuntary action. For example, \(\sqrt{ }\) aanpx return home is also used to mean shrink, and \(V^{\mathbf{o j o z}}\) flee is also used to mean squirt out (intransitive).
\({ }^{32}\) This word, presumably based on the root 'vagar' from Spanish, is unusual because of the sound [g w \(]\) in it. See Appendix B.
}

Some examples of the verbs in context are given here. Some of them may occur with an optional oblique object (see §2.4), of course, such as the verb for arrive in (70).
(70) Xicaquiziil \({ }^{\circ}\) coi pacataj \(x\), canoaa com cösiizcam aha. children the.Pl Ir.Dp-swim-PlUT boat the.Hz 3IO-Ir.Id-arrive.Pl Aux-DcL
'Los niños llegarán a la panga nadando.'
The children will get to the boat by swimming. (DS2005, cacat, improved) RMH_05-17-08_263
\begin{tabular}{lllllll}
\({ }^{\circ}\) Ziix coquéht \({ }^{\circ}\) & zo hit hant & sooit & ta ma, \\
ball & a & 1P-on land & Ir.ID-arrive & AUx.RL DS
\end{tabular}

\section*{hptapoti ma, ...}

1SGS.In-RL-duck.a.blow DS
'Una pelota me iba a pegar y la eludí al agacharme, ...'
A ball was going to hit me and I ducked, ... (DS2005, capotil) RMH_07-20-07_34b
(72) Haxz tintica tacat, hax yatomtim oo.
dog Md-Aw RL-swim Intns DT-make.sound.in.water-ImpF DL
'El perro nadaba y golpeaba el agua (haciendo sonido).' RMH_07-20-07_34c
The dog was swimming and was hitting the water (making sound.) (Ds2005, catom)
Motion events do not conflate the manner in the verb, so activity verbs do not describe bound events.
a. Haxz tintica xepe ano cácatim iha.
dog Dt-Aw sea 3P.in SN-swim-Impf DcL
'El perro está nadando en el mar.'
The dog is swimming in the sea. QQQRRR
b. * Haxz tintica canoaa com iti/ano/... yácat(im). dog DT-Aw boat the.Hz 3P-on/3P.in/from DT-swim(-ImPF) ('El perro nadó a/de ... la panga.') (The dog swam tolfrom ... the boat.) QQQ
a. Cmaam tintica \({ }^{\circ}\) hehe án \({ }^{\circ}\) com ano cpánozxim iha. woman Dt-Aw countryside the.Hz 3P.in/from SN-run-ImPF DcL 'La mujer está corriendo por el monte.' The woman is running in the countryside. QQQRRR
b. * Cmaam tintica haaco cop ano yopanzx. woman Dt-Aw Abs.house the.Vt 3P.in/from Dt-run qaaxxx ('La mujer salió de la casa corriendo.') (The woman ran out of the house.)

\subsection*{18.4.1 Motion verbs}

Some verbs that indicate motion subcategorize for a locative oblique object, a location adverb, or a locative PP (except for \(\sqrt{ }\) ooit). The irregular verb root \(\sqrt{ }\) a also requires either the venitive
prefix mo- (TwD) or the andative prefix nt- (Aw). (The two verbs that are formed from this root are extremely common.)
\begin{tabular}{llll}
\hline \hline Motion Verbs & Semantics: & Agent/Patient & Location \\
& Syntax: & Subject & Oblique Object ~ \\
& & & Adverb ~PP \\
\hline \hline
\end{tabular}
(76) a. Va move (come, go)
b. Vooit arrive (not with only PP)
c. \(\quad \sqrt{\text { iin }} g o\)
d. Vazquim enter (plural stem: Voizet)
\({ }^{\circ}\) Hehe án \({ }^{\circ} \quad z\) ano mota, toc cömiiha iti, countryside a 3P.in TwD-RL-move there 3IO-Twd-3P-PON-move 3P-on
\begin{tabular}{lll} 
haa \(\quad\) motat & itcaiilam & ma, \\
there & TwD-RL-move-PL & \(3: 3-R_{L}-\) shoot-PL-IMPF \\
DS
\end{tabular}
tooxquim, tooxquim, toc cömoma.
Rl-UO-put.Hz Rl-UO-put.Hz there 3IO-Twd-Px-move
'Venía del desierto, mientras venía allí, venían (otros) allí, estaban tirándole, le tiraba (rocas, etc.), tiraba, (y) venía.'
He was coming from the desert, (and) while he was coming there, they were coming, they were shooting him, he was shooting, he was shooting, he was coming there. (Hipocampo_9)
(78) Hahoot hac ah contita, cömiizquim.

Abs-entrance the.Lc Foc 3IO-Aw-Rl-move 3IO-Px-enter
'Entró por la puerta.'
S/he entered by the door. (DS2005, ah) RMH_07-11-07_16f
(79) Ihpsoos ta ma, naapxa zo hant mooit. 1SGS.In-Ir.ID-sing Aux.Rl DS turkey.vulture a land/down Px-arrive
'Cuando yo estaba por cantar, un zopilote bajó.'
When I was about to sing, a turkey vulture landed. RMH_05-20-08_23
(80) Hai quih caaixaj quih me tooit, ...
wind the.FL SN-strong the.FL 2IO RL-arrive
'Cuando el viento fuerte te llega, ...'
When the strong wind arrives to you, ... Hast_Cacöl_9
(81) ¡Hant z iiqui hiin!
land a 3P-toward Imp-go
‘\(¡\) Vete a otro lugar!
Go somewhere else! (DS2005, quiin) RRR
(82) He cacöla hant hac án cöicoizct 1Pro SN-tall/long.PL place the.LC 3P.interior 3IO-InF.In-enter.PL

\section*{hascmaaj \\ aha.}

1PLS-Ir.ID-N-know-Pl Aux-Dcl
'Los de nosotros que somos altos no podremos entrarlo.'
We who are tall won't be able to enter it. RMH_08-24-07_91
In an imperative, the verb meaning come can be used without the overt expression of a location.
\begin{tabular}{|c|c|c|}
\hline ¿Mohat! & ¡Hizac iti & cazcam! \\
\hline Twd-Im-move-Pl & Px-LC 3P-on & Im-arrive.PL \\
\hline \({ }^{\text {¿Vengan! }}\) ¡Vengan & aquí!' & \\
\hline Come (pl.)! Come & pl.) here! Rмн_о7 & 11-07_35b \\
\hline
\end{tabular}

The root \(V\) ooit may occur with a directional prefix (perhaps only when the subject is the wind) and in that case not have a separate location expressed.
```

Hai cap taapl, intooit, ...
wind the.VT Rl-cold Twd-RL-arrive
'El viento está frío, llega, ...'
The wind is cold, it arrives, ... Hast_Cacöl_28

```

The root \(\sqrt{ }\) iin may also occur with a directional prefix; see \(\S 17.1 .6\). When it occurs with an oblique object, it often has the sense of return.

\subsection*{18.4.2 Locational verbs as motion verbs}

Some of the same verbs described in \(\S 18.2\).2 that indicate the location of the argument are also used to indicate motion of a volitional being. Like their stative counterparts, they require the expression of a location in the clause. But in addition to the ones possible when used as statives (except for the oblique object, it seems), they may also occur with an locative noun (§5.4) when used as verbs of motion.
\begin{tabular}{llll}
\hline \hline \begin{tabular}{ll} 
Locational Verb \\
as Verb of Motion
\end{tabular} & Semantics: & Agent & Location \\
& Syntax: & Subject & Adverb \(\sim\) PP \(\sim\) Location Noun \\
\hline
\end{tabular}
\begin{tabular}{lll} 
a. & \(V_{\mathrm{iij}}\) & sit \\
b. & \(V_{\text {ap }}\) & stand \\
c. & \(V_{\mathbf{o o m}}\) & lie \\
d. & \(V_{\text {iih }}\) & walk (in imperfective aspect), reside
\end{tabular}

Examples with a PP before the motion verb:
(87) iHant czaahox com iti hiij!
place/land SN-sunny the.Hz 3P-on Im-sit
‘iSiéntate aquí a la luz del sol!’
Sit down in the sunny place! (DS2005, czaahox) RRR
(88) iHahoot \(\quad \mathbf{z}\) iti camom!

Abs-entrance a 3P-on Imp-N-lie
‘ \(¡\) No te acuestes en la puerta!'
Don't lie down in the doorway!
(89) Xiica coi imac hac ano cap, ...
thing.Pl the.PL 3P-midst the.LC 3P.in Im-stand
'Ponte de pie en medio de esas personas, ...'
Stand up in the midst of them, ... (Lk 6:8) RMH_08-21-07_99e
Example with a location noun before the motion verb:
(90)
```

iHant hiii!
land Im-sit
';Siéntate!'
Sit down! RRR

```

\subsection*{18.4.3 Limited dative voluntary action}

One verb, \(\sqrt{ }\) eeti fetch, subcategorizes for an obligatory beneficiary. \({ }^{33}\) But this verb presents a morphosyntactic twist that is found in several verbs (discussed in other sections of this chapter, including the following). If the beneficiary is singular, it is an indirect object. If the beneficiary is plural, it occurs in a postpositional phrase headed by ano (literally in). \({ }^{34}\)
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|l|}{Limited Dative Voluntary Action Verb} \\
\hline & Semantics: & Agent & Beneficiary \\
\hline \(\sqrt{ }\) eeti fetch & Syntax: & Subject & Indirect Object \(_{\text {sg }} /\) || \(\mathrm{PP}_{\text {ano }} \|\) \\
\hline
\end{tabular}

The example in (92a) shows a plural beneficiary of the fetching; the clause is morphologically intransitive; note that the intransitive hp- allomorph of first person singular subject inflection as opposed to the transitive \(\mathbf{h}\) - allomorph (see \(\S 17.1 .2 .1\) and Appendix C). The plural

\footnotetext{
\({ }^{33}\) Beneficiary is a semantic role that is virtually absent from the language except in the cases of the derived assistive verbs (§19.6) where the beneficiary is the direct object. Benefactive constructions of the sort I will sing for you or John will build a house for you do not exist.
\({ }^{34}\) It is proposed that ano is the default marking for plural human arguments that are not given syntactic subcategorization status (see \(\S 22.3 .3\) ).
}
beneficiary cannot occur as an indirect object, as shown in (92b).
(92) a. Comcaac tacoi ano hpyeeti. person.Pl Md-Pl 3P.in 1SGS.In-Dt-fetch
b. * Comcaac tacoi cohpyéeti.
'Recogí para esas personas.'
I fetched for those people. RMH_07-20-07_38a
Ihpooij, me hpseeti haa hi.
1SGS.In-Ir.Dp-UO.fetch.water 2IO 1SGS.In-Ir.Id-fetch Aux Dcl
'Acarrearé agua para ti.' (*‘Acarrearé para ustedes.')
I will go fetch water for you (sg.) ( \({ }^{*}\) pl.). (DS2005, queeti) RMH_07-20-07_38b
Cohpyeeti.
3IO-1SGS.In-DT-fetch
'Recogí para él/ella.' (* 'Recogí para ellos.')
I fetched for him/her. (*I fetched for them.) RMH_07-20-07_38c
The inclusion of the item fetched renders the sentence ungrammatical whether the verb is conjugated as an intransitive verb or as a transitive one, and regardless of the word order of the noun phrases in question, as the following examples illustrate. \({ }^{35}\)
\begin{tabular}{lllllll} 
a. & \(*\) Ziix & zo & comcaac & tacoi & ano & \begin{tabular}{l} 
hpyeeti. \\
\\
thing
\end{tabular} a \\
person.PL & Md-PL & & 1SGS.In-DT-fetch
\end{tabular}
('Recogí algo para esas personas.') (I fetched for those people.)
And the same is true even if the verb is inflected for an indirect object; this verb simply does not subcategorize for a patient (the item fetched).
\begin{tabular}{llllll} 
a. & \(*\) Comcaac tacoi ziix & zo & cohyeeti. \\
b. & \(*\) Comcaac tacoi ziix & zo & cohpyeeti. \\
c. & \(*\) Ziix & zo comcaac & tacoi & cohyeeti. \\
d. & \(*\) Ziix & zo & comcaac & tacoi & cohpyeeti.
\end{tabular}
('Recogí algo para esas personas.') (I fetched for those people.)

\footnotetext{
\({ }^{35}\) The postposition would always need to stay in preverbal position; see chapter 22.
}

As shown above and also in (97), a singular indirect object is grammatical, but even with a singular indirect object, no patient/direct object is allowed.
(97) Me hpyeeti.

2IO 1SGS.In-Dt-fetch
'Recogí para ti.' (*'Recogí para ustedes.')
I fetched for you (sg.). (*I fetched for you (pl.).) RMH_08-14-07_71c
(98) a. * Ziix zo me hpyeeti. thing a 2IO 1SGS.In-DT-fetch
b. * Ziix zo me hyeeti. thing a 2IO 1SGS.Tr-Dt-fetch
('Recogí algo para ti.')
(I fetched something for you (sg.).)

\subsection*{18.4.4 Dative voluntary action verbs}

A few voluntary action verbs never occur without an oblique object; notice the prefix co-/cö(§17.1.2.4) in the examples that follow. The semantic role of the oblique object is a location in one case and a patient in several. \({ }^{36}\)

With the verb \(\sqrt{ }\) zeemjö, the oblique/indirect object is the location in which the diving is done. A clause in which it occurs is intransitive by all available tests.
\begin{tabular}{llll}
\hline \hline Dative Voluntary Action Verb & Semantics: & Agent & Location \\
\begin{tabular}{lll} 
(Location) & & \\
لzeemjö dive & Syntax: & Subject
\end{tabular} & Oblique Object \\
\hline \hline
\end{tabular}
\begin{tabular}{lllll}
\(\ldots\) & \begin{tabular}{l} 
xepe \\
sea
\end{tabular} & \begin{tabular}{l} 
cyaail \\
SN-deep
\end{tabular} & \begin{tabular}{l} 
com \\
the.Hz
\end{tabular} & \begin{tabular}{l} 
cötzeemjö,
\end{tabular} \\
& \(\ldots\) & \(\ldots\) \\
3IO-RL-dive
\end{tabular}
'... se clavó en el mar profundo, ...'
... he dove into the deep sea, ... (DS2005, coczéemjij) \({ }^{37}\) RMH_-07-20-07_36
For some verbs the oblique object is a semantically a patient. These clauses are morphologically intransitive by all tests (see Appendix C).

\footnotetext{
\({ }^{36}\) The point is made in Marlett 2008 that this is not quirky case (where a real direct object simply looks like an indirect object). The quirky case analysis would not explain the intransitivity of the clause that is indicated by various other facts (see Appendix C).
\({ }^{37}\) This verb appeared in the 2005 dictionary as coczeemj, but will be changed (corrected) to coczéemjö in the second edition. There may be idiolectal variation on this point.
}
\begin{tabular}{llll}
\hline \hline Dative Voluntary Action Verb & Semantics: & Agent & Patient \\
& Syntax: & Subject & Oblique Object \\
\hline \hline
\end{tabular}
(102) a. Vanaafin \({ }^{38}\) surround
b. Veesyat pay as bride price
c. Vocosot \({ }^{39}\) lend
d. Vaaitim chase after
e. Veexetim refuse to give up
f. Veepit bet with
(103) Cmaam cop cöyanaafin.
woman the.Vт 3IO-Dт-surround
'Rodearon a la mujer.'
They surrounded the woman. RMH_05-17-08_264
(104) \({ }^{\circ}\) Eenm haacni \({ }^{\circ}\) zo cohpyeesyat
rifle a 3IO-1SGS.In-DT-pay.as.bride.price
'Doté un rifle ...'
I paid a rifle as bride price ... (DS2005, cöquessyat) RMH_07-20-07_37b
(105) Hitrooqui quij cohpyomocosot.

1P-vehicle the.Cm 3IO-1SGS.In-Dt-N-lend
'No he prestado mi carro.'
I haven't lent my car. RмH_07-20-07_37c
(106) ¿Itrooqui quij cötocosot?

3P-vehicle the.Cm 3IO-Rl-lend
‘¿Prestó su carro?’
Did s/he lend his/her car? RMH_07-20.07_37d
(107) Ctam zo toc contita ma, cohpyaaitim, ...
man a there 3IO-Aw-RL-move DS 3IO-1SGS.In-DT-chase
'Un hombre iba hacia allá, y lo perseguí, ...'
A man was going there, and I chased after him, ... (DS2005, cöcaatim) RMH_05-17-08_265

\footnotetext{
\({ }^{38}\) This verb typically is understood as having a plural subject. The stem Vanafin indicates that multiple items are surrounding one person or thing; the (plural) stem \(\sqrt{ }\) anaafilcoj indicates multiple items are surrounding more than one person or thing.
\({ }^{39}\) This verb is included here for the sake of presentation, but it is obviously related etymologically to the verb Vaasot lend (see below in this section) with which it is synonymous as long as no recipient determines inflection on the verb. The material at the beginning of the stem looks like one of the allomorphs for Unspecifed Object (§19.1.1).
}
```

(108) ... cöteexetim ma, ...
3IO-RL-refuse.give.up DS
‘... negó soltarlo ...’
... [the traveler] refused to let go of it [his overcoat] ... (Viento_Norte_7)

```
(109) Himoz quij cohpseepit aha - ox mee, \({ }^{\circ}\) ziix coosyat \({ }^{\circ}\) quih.
    1P-heart the.Cm 3IO-1SGS.In-Ir.Id-? Aux-Dcl thus Px-say giant the.Fl
    'Apostaré mi corazón —dijo el gigante.'
    "I will bet my heart," said the giant. (Ds2005, queepit) RMH_07-11-07_51b

Two verbs have the schema shown in (110), which is similar to that in (101) except that it allows for an optional recipient. \({ }^{40}\) The recipient must be a direct object if it is singular but the complement of ano (literally, in) if it is plural.
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|l|}{Dative Voluntary action Verb with Optional Recipient} \\
\hline Semantics: & Agent & Patient & (Recipient) \\
\hline Syntax: & Subject & Oblique Object & (Direct Object \({ }_{\text {sg }} /\left\|\mathrm{PP}_{\text {ano }}\right\|\) ) \\
\hline \[
\begin{aligned}
& \text { Vitalhaa }^{41} \\
& \text { Vaasot }
\end{aligned}
\] & sell lend & & \\
\hline
\end{tabular}

First, consider examples in which the recipient does not occur. Such clauses are intransitive by all available tests (see Appendix C). In (112) the intransitive allomorph hp- of first person singular subject inflection occurs (§17.1.2.1), in (114) the 3:3 prefix \(\mathbf{i}\) - does not occur (§17.1.2.1), and in (116) the intransitive allomorph of the infinitive prefix (17.2.1) occurs.
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{4}{*}{(1} & \multicolumn{5}{|l|}{\multirow[t]{4}{*}{\begin{tabular}{l}
Hasaj hoop quih cohpsitalhaa \\
basket 1P-ON-sew the.FL 3IO-1SGS.In-IR.Id-buy/sel 'Voy a vender la canasta que hice.' \\
I am going to sell the basket that I made. (OS2005, quitanaia)
\end{tabular}}} \\
\hline & & & & & \\
\hline & & & & & \\
\hline & & & & & \\
\hline \multirow[t]{4}{*}{(113)} & \multicolumn{5}{|l|}{\multirow[t]{4}{*}{\begin{tabular}{l}
Zixcám hipcom cohptemitalhaa ho. fish Px-Hz 3IO-1SGS.In-RL-N-buy/sell Decl 'No vendí este pescado.' \\
I didn't sell this fish. RMH_08-14-07_71
\end{tabular}}} \\
\hline & & & & & \\
\hline & & & & & \\
\hline & & & & & \\
\hline
\end{tabular}

\footnotetext{
\({ }^{40}\) The topic of subcategorization of ditransitives is discussed in detail in Marlett (to appear). The presentation here differs in an important way in that it distinguishes more sharply between optional indirect objects and obligatory ones.
\({ }^{41}\) This verb means buy when it is in a different syntactic configuration; see \(\S 18.5\).
}
(114) Cötmitalhaa ho.

3IO-RL-N-buy/sell DCL
'No lo/la vendió.'
S/he didn't sell it. RMH_07-20-07_39b RMH_08-14-07_71g
(115) Zixcám hipcom cohptemitalhaa ho.
fish Px-Hz 3IO-1SGS.In-Rl-N-buy/sell DcL
'No vendí este pescado.'
I didn't sell this fish. RMH_07-20.07_39c
(116) Hasaj cap cöiquitalhaa hmiimzo.
basket the.Vt 3IO-Inf.In-buy/sell 1SGS.Tr-Px-want
'Quiero vender la canasta.'
I want to sell the basket. RMH_07-20-07_39d RMH_08-14-07_71i
(117) Cmaax eenim ihyaa \(^{\circ}\) zo cohpscmaasot haa hi. now knife mine a 3IO-1SGS.In-Ir.Id-lend Aux DCL
'Ahora no prestaré ningún cuchillo mío.'
Now I won't lend any knife of mine. RMH_07-20-07_40e RMH_08-14-07_71e
These verbs also, however, allow for the inclusion of an optional recipient in the clause, A singular recipient is direct object in the following examples (for which there are no paraphrases); it determines direct object inflection and the clause is transitive by all tests. In (118), therefore, the indirect object inflection co- cross-references the phrase hasaj cap, as in (112), and the clause is transitive because of the presence of a recipient as direct object. The transitivity of the clause is indicated by the allomorph \(\mathbf{h}\) - for first person singular subject.
(118) Hasaj cop cohyitalhaa. (119) Cöiyitalhaa. basket the.Vt 3IO-1SGS.Tr-Dt-buy/sell 3IO-3:3-Dt-sell
'Le vendí la canasta.' RMH_07-20.07_40b
I sold the basket to him/her.
'Se lo/la vendió.' RмH_05-17-08_266 S/he sold it to him/her.

In other examples below where there is a first or second person direct object, there is some morphological conflation that obscures the syntactic facts a bit - the situation called object blending in §17.1.2.5. \({ }^{42}\)
(120) Tiix meihatalhaa imaa ha.

DDS 3IO+2SGDO Inf.Tr-buy/sell SN-Tr-N-know DCL
'No te lo/la puede vender.'
S/he can't sell it to you (sg.). RMH_07-20-07_40c

\footnotetext{
\({ }^{42}\) Unless one sees these examples in their place within the complete arrangement of facts, one can easily misanalyze them by misunderstanding what seems to be simple indirect/oblique inflection.
}
(121) ¡Icocózyax \({ }^{\circ}\) zo he haasot!
scissors a 3IO+1SGDO Im-lend
‘¡Préstame las tijeras.'
Lend me some scissors! (DS2005, cöcaasot) RMH_07-20-07_40d
(122) \({ }^{\circ}\) Eenm haacni \({ }^{\circ}\) zo me tompasot, ... \({ }^{43}\)
rifle a 3IO+2SGDO Rl-N-Pv-lend
'No fuiste prestado un rifle.'
You (sg.) weren't lent a rifle. RMH_07-20-07_40a RMH_08-14-07_71n
(123) iHe haasot!

3IO+1DO Im-lend
'¡Préstamelo/la!'
Lend me it! Rмн_08-14-07_71k
(124) Tiix meihatalhaa imaa ha.

DDS 3IO+2SGDO Inf.Tr-buy/sell SN-Tr-N-know DCL
'No te lo puede vender.'
S/he can't sell it to you (sg.). RMH_08-14-07_71m
A plural recipient with these verbs is the complement of the postposition ano (literally in ) and is not the direct object. The result is that a clause with these verbs has an overt patient (which is the oblique/indirect object) and an explicit plural recipient (which is the complement of ano); the verb in such a clause is morphologically intransitive, as all available tests indicate.
(125) Mino cöiquitalhaa hmiimzo.

2P-in 3IO-Inf.In-buy/sell 1SGS.Tr-Px-want
'Quiero venderselo/la a ustedes.'
I want to sell it to you (pl.). RMH_07-20-07_41a RMH_08-14-07_71j
(126) Hitrooqui quih áno cohpyitalhaa.

1P-vehicle the.FL 3P.in 3IO-1SGS.In-Dt-buy/sell
'Les vendí mi carro.'
I sold them my car. RMH_07-20-07_41b
(127) Hino cövitalhaa.

1P-in 3IO-Dt-buy/sell
'Nos lo/la vendió.'
S/he sold it to us . RMH_07-20-07_41c
(128) Eenim zo hino cöyaasotim. \({ }^{44}\)
knife a 1P-in 3IO-Dt-lend 'Nos prestó un cuchillo.'
S/he lent a knife to us. RMH_07-20-07_42b

\footnotetext{
\({ }^{43}\) An impersonal passive is required here although this is not transparent; see §9.2.2.
\({ }^{44}\) There are three ways to say this according to my consultants. First, the form given in the text. Second, Eenim zo hino he yaasotim, with the person of the Addressee actually appearing twice in the sentence. Third, Eenim z ano he yaasotim, where the person of the Addressee appears as Indirect Object and the postposition ano just sits there. This third option, preferred by some people, may represent a complication. The Addressee is Indirect
}
(129) \({ }^{\circ}\) Eenm haaczoj \({ }^{\circ}\) quih coocj ih hino comcaasot(im). rifles the.Fl SN-two Foc 1P-in 3IO-Px-US-lend
'Alguien nos prestó dos rifles.'
One (unspecified) lent two rifles to \(u s\). RMH_07-20-07_42a RMH_08-14-07_71f

\subsection*{18.4.5 Morphologically dative voluntary action}

A few verbs of voluntary action, including \(\sqrt{ }\) monjc go in zigzag fashion and \(\sqrt{ }\) aaihalx protect one's eyes against the sun and the plural stem \(\sqrt{ }\) eme arrive (as in the expression for descend and escape, but not the singular stem Vooit), \({ }^{45}\) always carry third person oblique/indirect object inflection although no oblique/indirect object occurs with them.

Ctaamjij zo htaho, ihyoím
sidewinder a 1SGS.Tr-Rl-see 1SGS.Tr-Dt-throw.at
\begin{tabular}{lll} 
xo & cötmonic & ma, \(\ldots\) \\
but & 3IO-RL-go.zigzag & DS
\end{tabular}
'Vi una víbora cornuda, tiré a ella, pero andaba en zigzag ...' \({ }^{\text {RMH__08-04-07_123 }}\)
I saw a sidewinder and threw something at it, but since it was going zigzag ...
(131) ... cmiique cmaam zo toc cötap, cötaaihalx, hizi yoocta. person woman a there 3IO-RL-stand 3IO-Rl-protect.eyes 1PLDO Dt-look.at '.. una mujer seri que estaba allí nos miraba, protegiéndose los ojos.' Rмн_05-17-08_267 ... a Seri woman there was looking at us while protecting her eyes. (DS2005, cöcaaiala)
(132) Pnaacoj án com an cötoizct, \({ }^{\circ} \underline{h a p x}\) hant cöyoome \({ }^{\circ}\). mangrove 3P.area the.Hz 3P.in 3IO-Rl-enter.PL outside land 3IO-Dt-arrive.PL 'Entraron el manglar y escaparon.'
They entered the mangrove area and escaped. RRR

\subsection*{18.4.6 Intransitive lexical reflexives}

Several voluntary action intransitive verbs are distinguishable, perhaps, from other voluntary action intransitive verbs because the action is always implicitly done toward the agent subject they are inherently reflexive. \({ }^{46}\) Furthermore, these verbs never take a reflexive pronoun. The schema for these verbs might be given as in (133).

Object; the Theme is not Direct Object (since the clause is intransitive). If the Theme is a Chômeur, what is the reason for ano? If the Theme is the complement of a postposition, this is the one situation where that option arises.
\({ }^{45}\) Most if not all of the various expressions based on this verb may be used for involuntary action as well as involuntary action.
\({ }^{46}\) If the action is done toward someone else, a derived verb must be used; see \(\S 19.5 .6\).


Some examples of these lexical reflexives are given below; these demonstrate the intransitivity of these clauses. Note that in (135) and (136) the intransitive first person singular inflection allomorph hp- occurs, and that in (138) the 3:3 prefix \(\mathbf{i}\) - (§17.1.2.1) does not occur on the relevant verb. \({ }^{48}\)
(135) Hicaamiz quih htapox, cohpmacötim.

1P-shirt the,SF 1SGS.Tr-Rl-remove 3IO-1SGS.In-Px-cover.oneself 'Me quité la camisa y me cubrí con ella.'
I took off my shirt and covered myself up with it. (DS2005, cacoitim) OP_2-07-07_51
(136) Haptco hpmoneaax.
already 1SGS.In-Px-wash.hands
'Ya me lavé las manos.'
I already washed my hands.
(DS2005, conéaax) OP_2-07-07_52
(137) Ihpyopanim.

1SGS.In-DT-wash.hair 'Me lavé el pelo.'
I washed my hair. (DS2005, cpanim) RMH_07-20-07_43a
(138) Ilít quij ittánala \(x\), tasaquim \(x\), hant quih iti miij. 3P-head/hair the.Cm 3:3-RL-do UT RL-comb.one's.hair UT land the.Fl 3P-on Px-sit 'Ahí estaba peinándose y arreglándose el cabello.'
She was there combing and fixing her hair. (DS2005, casaquim) OP_2-07-07_53
Two of the lexical reflexives (if they should be called that) are slightly different from the others in that they require an oblique/indirect object that is the object on which the action is done. \({ }^{49}\)

\footnotetext{
 comb one's hair has a short vowel (like brush (something) has) but conjugates as if it were a long vowel (unlike brush (something)), however; see §27.6.
\({ }^{48}\) If one wishes to perform these actions to another person, then a causative form must be used. See §19.5.6.
\({ }^{49}\) The verb \(\sqrt{ }\) coiimaj also appears in \(\S 18.3 .1\) as a verb of involuntary action since a plant as well as a snake can do this action.
}
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|l|}{Dative Lexical Reflexive Verb} \\
\hline & Semantics: & Agent+Patient \({ }_{1}\) & Patient \({ }_{2}\) \\
\hline & Syntax: & Subject & Oblique Object \\
\hline \begin{tabular}{l}
\(\sqrt{ }\) coiimaj \\
\(\sqrt{ }\) atiiitx \({ }^{50}\)
\end{tabular} & d oneself a port oneself & \begin{tabular}{l}
Patient \(_{2}\) \\
tient \(_{2}\)
\end{tabular} & \\
\hline
\end{tabular}

Cocazni \({ }^{\circ}\) tintica hehe cop cöyocoiimaj.
rattlesnake Md-Aw tree/plant the.Vт 3IO-DT-wind.around
'La víbora de cascabel se enredó en el árbol.'
The rattlesnake wrapped itself around the tree. RmH_08-04-07_124
\begin{tabular}{lll}
\(\ldots\), & iti & cohptatiiitx
\end{tabular}\(\quad\) ma, \(\quad . .\).
‘..., me recargué en ella ...'
..., I leaned on it ... (DS2005, cöcatiitx) RMH_-07-20-07_43b

\subsection*{18.4.7 Intransitive verbs introducing direct quotes or thoughts}

The intransitive verb \(\sqrt{ }\) ee say (plural stem: \(\sqrt{ }\) ooza), used with the adverb ox thus, presents direct quotes; the discourse itself does not determine any inflection on the verb. The intransitive verb \(\sqrt{\text { amoz think, used with the adverb ox thus, presents direct expressions of thought. These clauses }}\) are morphologically intransitive. (For more details, see the discussion of quotations in §12.7.)

Direct Quote/Thought Verb
\begin{tabular}{lll} 
Semantics: & Agent & (Direct Discourse) \\
Syntax: & Subject & \(\|\) Direct Quote/Thought \| \\
\hline
\end{tabular}
\begin{tabular}{lll} 
a. & Vee & say \\
b. & \(\sqrt{ }\) amoz & think
\end{tabular}

Ox mee: "....". thus Px-say
'Así dijo: "...."'
S/he said: "...." RMH_05-17-08_268
(146) Ox mooza: "...".
thus Px-say.PL
'Así dijeron: "...."
They said: "...." RMH_05-17-08_269

\footnotetext{
\({ }^{50}\) As example (142) below shows, the postposition iti (3P-on) also occurs with this verb and the item on which one leans is presumably the complement of that postposition as well as the indirect object. Such double marking of nominals is not common in the language, but it is attested elsewhere (see \(\S X X\) ).
}
(147) Ox miimoz: "...".
thus Px-think
'Así pensó: "....,"
He thought: "....." RMH_05-17-08_270
The questions that corresponds to these statements use the adverb zo how? for the question word: ¿Zó tee? (how RL-say) What did s/he say?

A transitive verb that subcategorizes for an addressee and a direct quote is presented in §18.5.9.

\subsection*{18.4.8 Intransitive verbs presenting indirect quotations and thoughts}

The intransitive verb \(\sqrt{ } \mathbf{e}_{\text {Irreg }}\) say follows indirect quotes and the intransitive verb \(\sqrt{ }\) amoz think follows indirect thoughts; the indirect quote or thought itself does not determine any inflection on the verb. These clauses are morphologically intransitive. (For more details on the form of the indirect quotes or thoughts, see the discussions in \(\S 12.4\) and \(\S 12.5\).)
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|l|}{Indirect Quote/Thought Verb} \\
\hline & Semantics: & Agent & (Indirect Discourse) \\
\hline & Syntax: & Subject & || Indirect Quote / Thought || \\
\hline \begin{tabular}{l}
\(\sqrt{ } \mathbf{e}_{\text {Irreg }}\) \\
\(\sqrt{\text { amoz }}\)
\end{tabular} & & & \\
\hline
\end{tabular}

\subsection*{18.4.9 Phasal verbs}

Three verbs function as phasal verbs with raising of the complement's subject even though two of them are etymologically and morphologically transitive verbs. The simplified schema shown in (151) is meant to indicate that the phasal verb has a surface subject that has no semantic relationship to the phasal verb (hence the lack of role for that nominal on the semantics line). That subject must be coreferential with the subject of the event clause. These verbs are discussed in detail in \(\S 12.3\) where it is argued that these are raising predicates and not control predicates.


\subsection*{18.4.10 The verb \(\sqrt{ } \mathrm{aCa}\) know as be able}

The verb \(\sqrt{ }\) aCa know can be used to mean be able. The complement in that case is an infinitival clause. It is shown in \(\S 12.1 .2\) that the construction is one of raising and not control.
\begin{tabular}{llll}
\hline \hline & Semantics: & Event & \\
{\([\mathbf{a C a}]\) be able } & Syntax: & {\(\left[\left[\text { Ø-Subject }{ }_{\mathrm{i}} \ldots\right]_{\text {lnfinitival }}\right.\)} & Subject \(\left._{\mathrm{i}}\right]\) \\
\hline \hline
\end{tabular}

\subsection*{18.5 Simple transitive verbs}

The lexicon includes many simple transitive verbs with agent or experiencer subjects. Some examples are agent subjects are: \(\sqrt{ }\) aafc pound, \(\sqrt{ }\) acö kill, \(\sqrt{ }\) ahit eat, \(\sqrt{ }\) ap sew basket, \(\sqrt{ }\) apis smoke, \(\sqrt{ }\) azix cut with sawing motion, \(\sqrt{ }\) azt tattoo, \(\sqrt{ } \mathbf{i s x} \mathbf{0}\) hide, \(\sqrt{ } \mathbf{C a x z}\) pound [with long object], and \(\checkmark\) nip hit (especially with the hand). Some of these predicates typically indicate activities and others indicate accomplishments. \({ }^{51}\)

Some examples with experiencer subjects are: \(\sqrt{ } \mathbf{a C a}\) know, \(\sqrt{ }\) aho see, \(\sqrt{ } \mathbf{i i}\) hear, \(\sqrt{ }\) oocta look at, \(\sqrt{p} \mathbf{p i i}\) taste, and \(\sqrt{ }\) Cii feel. Most of these are stative verbs, although \(\sqrt{ }\) oocta look at appears to be an activity.


These verbs do not generally allow an instrument as subject, so far as is known.
```

* Eenim cop ziix ipxasi iyoozix.
knife the thing 3P-flesh 3:3-Dt-saw
('El cuchillo cortó la carne.') (The knife cut the meat.) QQQ check this carefully

```

Some transitive verbs are verbs of giving, saying, or exchanging but do not allow under any circumstances a recipient or addressee. The verbs \(\sqrt{ }\) eque give (as a gift) and \(\sqrt{ }\) italhaa buy \({ }^{52}\) are in this class of simple transitives. Some examples are given below.

\footnotetext{
\({ }^{51}\) The different classes of situations is due to Vendler (1967). Also see Dowty (1979).
\({ }^{52}\) This verb is identical to sell (see \(\S 18.4 .4\) ) in the form of its root. The two meanings are distinguished by the syntactic frames in which they occur.
}
(157) ¿Itrooqui quih iteque?

3P-vehicle the.FL 3:3-RL-give.as.gift
¿¿Obsequió su carro?’
Did s/he give his/her car (as a gift)? RMH_07-20-07_44a
(158) ¿Zixcám catxo pac sitalhaa queeya?
fish SN-much some 3:3-Ir.Id-buy/sell Aux.SN-QM
‘¿Comprará mucho pescado?’
Will s/he buy a lot of fish? RMH_05-17-08_271 RMH_05-17-08_272
(159) Hasaj cap ihatalhaa hmiimzo.
basket the.Vt Inf.Tr-buy/sell 1SGS.Tr-Px-want
'Quiero comprar la canasta.'
I want to buy the basket. RMH_07-20-07_44e
The ungrammatical sentences in (160) are all attempts to try to include mention of the person from whom the basket would be bought. None is successful because the verb meaning buy simply does not subcategorize for one semantically. The same is true for the verb \(V\) eque give as gift in that it cannot mention the recipient.
\(\left.\begin{array}{rlll}\text { a. * Hasaj } & \text { cap } & \text { me ihatalhaa } & \text { hmiimzo. } \\
\text { basket } & \text { the.VT } & \text { 2IO Inf.Tr-buy/sell } & \text { 1SGS.Tr-Px-want }\end{array}\right\}\)\begin{tabular}{lll} 
b. * Hasaj & cap & \begin{tabular}{l} 
miti ihatalhaa \\
2P-on Inf.Tr-buy/sell
\end{tabular} \\
c. \({ }^{*}\) Hmiimzo.
\end{tabular}
('Quiero comprar la canasta de ti.') (I want to buy the basket from you.)
The verb \(\sqrt{ }\) aCa know may occur with a simple nominal object complement in the sense of know a fact ('saber') but not in the sense of know a person ('conocer') unless some elaboration is given. The examples immediately below illustrate the first sense. \({ }^{53}\)
```

¿[ Itaasi zo ] ntaa? 3P-name a 2SGS-Rl-know

```
‘¿Sabes su nombre?’
Do you know his/her/its name? RмH_11-28p-07_32
(162) iMe [ \({ }^{\circ}\) hant ihiip \({ }^{\circ}\) zo ] ntaa?

2Pro its.meaning a 2SGS-Rl-know
¿¿Lo entiendes?'
Do you understand it? (DS2005, quiva) RMH_11-28p-07_33

\footnotetext{
\({ }^{53}\) It also has the meaning be able; this is discussed in §18.4.10.
}
[ Hipimax iiqui ihíih ipi \(z\) ] impaa ha xo ... even 3P-toward 3P-PON-be.FL even a SN-N-Pv-know DCL but
'Ni se sabe dónde estaba pero ...'
It isn't even known where he was but ... (Lk 15:32) RMH_11-28p-07_34
¿[ Quihehe \({ }^{\circ}\) quij ziix chaa zo] ntaa? ruler the.Cm thing SN-EQ a 2SGS-Rl-know
‘¿Sabes quién qué tipo de persona es el gobernador?’
Do you know what kind of person the governor is? хмн--08-08-07_286
¿[ Quihehe \({ }^{\circ}\) quij ziix chaa quih ] ntaa?
ruler the.Cm thing SN-EQ the.Fl 2SGS-RL-know
‘¿Sabes quién es el gobernador?’
Do you know who the governor is? RMH_05-17-08_273
(166) He miizj ihmiya, [me cömihaa hac ].

1Pro well 1SgS.Tr-Px-know 2Pro 3IO-2P-PON-EQ the.LC
'Yo sé bien quien eres.'
I know very well who you are. хмH-08-08-07_288
The following example represents the unsuccessful attempts to use this verb in a simple sentence with the sense of be acquainted with.
```

¿Ma taa? ${ }^{54}$
2SGDO RL-know
(¿Te conoce?) (Does s/he know you?)

```

The typical way to express the idea of be acquainted with is with a biclausal structure using an adverbial clause with the verb \(\sqrt{ }\) aho see followed by the verb \(\sqrt{ }\) aCa know, which has the person known as its direct object, as evident by examples (168ff).
¿Ma taho mataa?
2SGDO Rl-see 2SGDO Rl-know
‘¿Te conoce?’
Does s/he know you? RMH_11-28p-07_35
¿Juan quih intaho ntáaa?
the.FL 2SGS-RL-see 2SGS-RL-know
¿¿Conoces a Juan?’
Do you know Juan? хмн-08-08-07_285

\footnotetext{
\({ }^{54}\) This phrase can be used to mean Does it (e.g. a pet) recognize you? If it is a person (such as a recovering patient in the hospital) who is recognizing another, the phrasing is \(\dot{i}\) Ziix chaa quih mataa? (thing SN-EQ the.FL 2SGDO Rl-know).
}
(170) ¿Quihehe \({ }^{\circ}\) quij intaho ntaa? ruler the.Cm 2SGS-RL-see 2SGS-Rl-know
'¿Conoces el gobernador?'
Are you acquainted with the governor? хмн-08-08-07_287
Not all transitive verbs have agent/experiencer subjects. Some transitive verbs take subjects that are patients. \({ }^{55}\) Nevertheless, the syntax of these types of clauses is not different from the standard transitives.

Transitive Verb with Patient Subject
\begin{tabular}{lll} 
Semantics: & Patient \(_{1}\) & Patient \(_{2}\) \\
Syntax: & Subject & Direct Object \\
\hline
\end{tabular}
a. \(V\) mis resemble
b. Vâainim mix with
\(\begin{array}{lll}\ldots, & \text { hap } & \text { itaamalca } \\ \text { mule.deer } & \text { 3P-antler(s) } & \begin{array}{l}\text { itmís, } \\ \text { 3:3-RL-resemble }\end{array}\end{array}\)
'..., se parecía a los cuernos del venado bura, ...'
..., they resembled mule deer antlers, ... (Conejo_Cuernos_2b)
(174) Hax cop \({ }^{\circ}\) hasaaiti coozlil \({ }^{\circ}\) cop iyooinim. water the.Vт lubricating.oil the.Vт 3:3-Dт-mix.with
'El agua se mezcló con el aceite.'
The water mixed with the oil. (DS2005, quinim) RMH_08-04-07_127a

\subsection*{18.5.1 Simple transitives with location}

A few transitive verbs (at least) subcategorize to have a location expressed in the clause, usually as a PP but sometimes as a location adverb, location noun, or a cross-referenced oblique object. These are all verbs that translate as put.
\begin{tabular}{clll}
\hline \hline Transitive Verb with Location & & \\
Semantics: & Agent & Patient & Location \\
Syntax: & Subject & Direct Object & PP \(\sim\) Adverb ~ \\
& & & Noun \\
\hline \hline
\end{tabular}

\footnotetext{
\({ }^{55}\) The verb \(V\) mis in addition may take a complement clause with an inflected deverbal noun (§14.2).
}
(ii) [ Halx xah icoohit imquimzo ] ixomís tax. just AtTEN INF.IN-UO-eat 2SGS-SN-TR-want 3:3-EM-resemble -
'Supongo que todavía tienes hambre.'/ I bet you are still hungry. (DS2005, siimet) RRR
(176) a. Vaquim put (items)
b. Vaca put (liquid or basket)
c. \(\sqrt{\mathbf{a h}}\) put (flexible item)
d. Vaxquim put (horizontal item)
e. Vzam put (vertical item)
f. Vcaaix put (compact item)
(177) Cmiique cmaam quij ziix hapi oaactim quih an imiiquim; person/Seri woman the.CM thing InTNS 3P-ON-use the.Fl 3P.in 3:3-Px-put.items
ziix quih ihmaa quih mos cöimasiijim.
thing the.Fl other the.Fl also 3IO-3:3-Px-do
'La mujer seri le metió sus cosas e hizo otras cosas con él.'
The Seri woman put her things in it and also did other things with it (a certain kind of basket). (ES2007, lito) RMH_11-19-07_102
(178) Hita quih cafee ooztoj quij hapx itaca, 1P-mother the.FL coffee 3P-ON-cook.in.water the.Cm outside 3:3-RL-put.LQ
\begin{tabular}{lll} 
iyoozaj, & isahaapl & ta. \\
3:3-DT-do.back.and.forth & 3:3-IR.ID-make.cold & AUX.RL
\end{tabular}
'Mi madre vertió el café de un contenedor a otro para enfriarlo.'
My mother poured the coffee back and forth to cool it down. (DS2005, quiza)) RMH_07-11-07_40f
(179) Comcaii quij oop quih zaah cop iti iyooca.
old.woman the.Cm 3P-ON-sew.basket the.Fl sun the.VT 3P-on 3:3-Dt-put.LQ
'La anciana puso su canasta en el sol.'
The old woman put her basket into the sunlight. RMH_08-13-07_34a
(180) Cötafp, itexl, hant itáh,

3IO-RL-arrive 3:3-RL-take land 3:3-RL-put.FL
hehe zo toc cotom ma, itaai, heete cöitáh, ...
stick a there 3IO-Rl-lie DS 3:3-RL-make tip 3IO-3:3-RL-put.FL
'Le llegó [a la carne que estaba en una percha], la agarró, la bajó, la puso en la punta de un palo que estaba allí, ...'
He arrived to it [the meat that was on a drying rack], he grabbed it, he took it down, he put it on the end of a stick that was there ... (Gigante_Comelon 485-490)
(181) Hasatoj coi ptimocaj hac an iyocaaitax.
stone-PL the.PL RcP-3P-place.under the.Lc 3P.in 3:3-DT-put.Cm-PL
'Pusieron las piedras, cada uno debajo del otro.'
They put the stones under each other. RMH_08-04-07_180b
The verbs \(\sqrt{ }\) yaai go to (the plural stem is \(\sqrt{ }\) oziit) and \(\sqrt{ }\) âaix go away from, abandon
subcategorize for a locational direct object (which may be a place or an individual). Note that the verb in the following example is inflected for 3:3. It also passes all other tests for a transitive verb.
(182) \(\quad\).. mos zaah tiquij ityaai, yoque
also sun Md-Cm 3:3-RL-go.to DT-US-say
‘... estaba viajando al sol, ...'
... he was traveling to the sun, ... (Apostador 98) RRR
The verb \(\sqrt{ }\) aao pass by (the plural stem is \(\sqrt{ }\) aait) also subcategorizes for a locational direct object.

\subsection*{18.5.2 Simple transitives with recipient/addressee as direct object}

At least three simple transitive verbs have fairly simple usage with direct objects that are recipients or addressees. It is obvious that, while this pattern exists in the language, this is not the dominant pattern for expressing recipients/addressees.
\begin{tabular}{clll}
\hline \hline Transitive Verb with ReciPient/Addressee as Direct Object \\
Semantics: & Agent & Recipient/Addressee & (Other) \\
Syntax: & Subject & Direct Object & (Indrect Object) \\
\hline \hline
\end{tabular}
(184)
a. Vaaipot pay Recipient
b. \(V_{\text {miiit }}\) ask Addressee
c. Vatolec ask Addressee for help
(185) ..., cocsar quij miizj hin xaaipot.

Mexican the.Cm well 1SGDO Em-pay
‘..., el mexicano no indígena me pagó bien.'
..., the non-Indian Mexican paid me well. (DS2005, caapo, improved) RMH_08-04-07_126
(186) Tiix iihax ihtaai ma, hin yaaipot.

DDS 3P-with.SG 1SGS.Tr-Rl-make DS 1SGDO Dt-pay
'Le ayudé y él/ella me pagó.'
I helped him/her and s/he paid me. RмH_07-20-07_459
(187) i \(\underline{\text { Mazi temaaipotim? }}\) 2PLDO RL-N-pay-ImpF
‘¿No les pagó a Uds.?’
Didn't s/he pay you (pl.)? RMH_07-20-07_46a
(188) \(\quad\) iHizi tmiiitim?

1PLDO RL- ask-Impf
‘¿Nos preguntó?’
Did s/he ask us? RMH_08-04-07_127b
(189) \(\quad\) iHin tmiiit?

1 SGDO RL-ask
‘¿Me preguntó?’
Did s/he ask me? RMH_08-14-07_73a
(190) Ctam quij taaitom, cmaam cop itmiiit, man the.Cm RL-speak woman the.VT 3:3-RL-ask
'El hombre habló, preguntó a la mujer, ...'
The man spoke, he asked the woman, ... Rмн_08-14-07__73b
(191) ... hin yatolec, ...

1SGDO DT-ask.for.help
‘... me pidió ayuda, ...'
...s/he asked me for help, ... (DS2005, catolece) RMH_08-04-07_100a
If the payment (in the case of \(\sqrt{ }\) aaipot pay) or the topic or item (in the case of \(\sqrt{ }\) miiit ask) is mentioned, it occurs as an oblique object that is cross-referenced with indirect object morphology. The combination of two objects results in object blending (see §17.1.2.5).

Peez capxajö me hsaaipotim haa hi.
peso(s) three/ImpF 3IO+2DO-1SGS.Tr-Ir.Id-pay-ImpF Aux DcL
'Les pagaré tres pesos a cada uno de Uds.'
I am going to pay three pesos to each one of you. RMH_07-20-07_46b
(193) ¿Ziix zo he tmiiit?
thing a 3IO+1DO-RL-ask
‘¿Me preguntó acerca de algo?’ o ‘¿Me pidió algo?’
Did s/he ask me (about) something? or Did s/he ask me for something?
RMH_07-20-07_46c RMH_08-14-07_73c
(194) Ziix zo he vahmiiit. \({ }^{56}\)
thing a 3IO+1DO-DT-ask
'Fui preguntado acerca de algo.' o 'Se me pidió algo.'
I was asked about something. or I was asked for something. RMH_08-14-07_73d
The verb \(\sqrt{\text { zaxö }}\) discuss, talk is somewhat unusual in that the direct object of a simple transitive sentence may be either the topic or it may be the addressee.
\begin{tabular}{llll}
\hline \hline & Semantics: & Agent & Topic or Addressee \\
\(\sqrt{\text { Jaxö } \text { discuss }}\) & Syntax: & Subject & Direct Object \\
\hline \hline
\end{tabular}

\footnotetext{
\({ }^{56}\) This is an impersonal passive; see \(\S 9.2 .2\).
}
(196) Icaaitom \({ }^{\circ}\) ihmaa mos zo hyozáxö.
word another also a 1SGS.Tr-Dt-discuss
'Hablé de otro tema.'
I discussed another topic. RMH_07-20.07_45a
(197) He cmaax mos icaaitom \({ }^{\circ}\) hmáa zo he szaxö caha.

1Pro now also word other a 1Pro Ir.Id-discuss Aux.SN-DcL
'Ahora hablaré de otro tema.'
I will now discuss another topic. RMH_08-14-07_71s
(198) Ma hnzaxö.

2SGDO 1SGS.Tr-Px-discuss
Mazi hnzaxö. RmH_08-14:07_71p
2PLDO 1SGS.Tr-Px-discuss
'Estoy hablándote.'
'Estoy hablándoles a ustedes.'
I'm talking to you. RMH_08-04-07_128
I am talking to you (pl.).
(200) Ma ihazáxö ihxoomzo.

2SGDO Inf.Tr-discuss 1 SGS .Tr-Em-want
‘¿Quiero hablar contigo!'
I want to talk with you (sg.)! RMH_08-14-07_710
(201) Iyozáxö.

3:3-Dt-discuss
'Le habló.' Rмн_08-14-07_71q
S/he talked with him/her.
(202) Ihpyahzáxö.

1SGS.In-Dt-Pv-discuss
'Alguien me habló.'
I was talked to. RMH_08-14-07_71r
This verb also allows for the topic and addressee to co-occur. When they do, one of them apparently the topic, but it is perhaps impossible to decide which - is cross-referenced as an oblique/indirect object.
\begin{tabular}{lllll}
\hline \hline & Semantics: & Agent & Addressee & Topic \\
\(V_{\text {zaxö }}\) discuss & Syntax: & Subject & Direct Object & Oblique Object \\
\hline \hline
\end{tabular}
(204) Icaaitom \({ }^{\circ}\) ihmaa mos zo cohyozáxö.
word another also a 3IO-1SGS.TR-Dt-discuss
'Le hablé de otro tema.'
I discussed another topic with him/her. RмH_07-20-07_45b
(205) Ziix zo cöiyozáxö.
thing a 3IO-3:3-DT-discuss
'Conversó acerca de algo con él/ella/ellos.'
S/he discussed something with him/her/them. RMH_07-20-07_46d RMH_08-14-07_71u
(206) Taax me hnzaxö.

DDP 2IO 1SGS.Tr-Px-discuss
'Te estoy conversando acerca de eso.' / 'Les estoy ... a ustedes ...'
I am discussing that with you (sg./pl.). RMH_07-20-07_46e RMH_08-14-07_71v
(207) Ziix zo me hnzáxö.
thing a 2IO 1SGS.Tr-Px.-discuss
'Te/os estoy conversando acerca de algo.'
I am discussing something with you (sg./pl.). RMH_08-14-07_71t
(208) Taax cöicahzáxö ihmiimzo.

DDP 3IO-Inf.In-Pv-discuss 1SGS.Tr-Px-want
'Quiero ser hablado acerca de eso.'
I want that to be talked to about that. RMH_08-14-07_71w

\subsection*{18.5.3 Transitive verbs with optional oblique/indirect object}

A few verbs may be used as simple transitives or they may be used with an oblique/indirect object that is the person from whom or to whom the action is done. \({ }^{57}\)

Transitive Verb with Optional Recipient/Addressee
\begin{tabular}{|c|c|c|c|c|c|}
\hline & & \begin{tabular}{l}
Semantics: \\
Syntax:
\end{tabular} & \begin{tabular}{l}
Agent \\
Subject
\end{tabular} & Theme/Patient Direct Object & \begin{tabular}{l}
(Recipient/Addressee) \\
(Indirect Object)
\end{tabular} \\
\hline a. & \(\sqrt{\text { cazit }}\) & & grab & & \\
\hline b. & \(\sqrt{\text { coozz }}\) & steal & & & \\
\hline c. & \(\sqrt{\text { queetx }}\) & take & & & \\
\hline d. & mo- \(V^{\text {qu }}\) & & & & \\
\hline
\end{tabular}

The following examples illustrate these verbs without an oblique/indirect object.
Ziix \(\quad \mathbf{z}\)
iyocazit
lhing iyocooz
a
3:3-DT-snatch miyoqueetx.
'Arrebató / robó / devolvió algo.'
S/he grabbed / stole / returned something.

\footnotetext{
\({ }^{57}\) The use of \(\sqrt{ }\) queetx without an oblique/indirect object is special and not common, however. The verb \(\sqrt{ }\) mihjzx slip is similar to these verbs syntactically. It may occur with the noun hant land and be a simple transitive. But most commonly it occurs without hant and with an indirect/oblique object that is the specific object on which one slips.
(iii) Hast quij iti hptozám, cohtmihzx, hant ihptahjiit ma, ... stone the.Cm 3P-on 1SGS.In-RL-UO-put.Vt 3IO-1SGS -RL-slip down 1SGS.In-RL-fall DS 'Pisé en una piedra, me resbalé en ella, me caí ...'
I stepped on a rock, slipped on it, fell down, ... (DS2005, cminzx) RMH_08-04-07_125
}

When the person from whom the grabbing or stealing is expressed, it appears as the indirect/oblique object. \({ }^{58}\)
(212) a. Tom quih he iyocazit.
money the.Fl 1sIO 3:3-DT-snatch
'Me quitó del dinero.'
S/he snatched the money away from me. RMH_07-20-07_49a
b. Tom quih he iyocázitim.
money the.FL 1sIO 3:3-DT-snatch-ImpF
'Nos quitó el dinero.'
S/he snatched the money away from us. RмH_07-20-07_49b
Tiix ziix itac quih haxz cop cöimcazit.
DDS thing 3P-bone the.Fl dog the.Vt 3IO-3:3-Px-snatch
'ÉL/ELLA le quitó el hueso al perro.'
S/HE snatched the bone away from the dog. RMH_07-20-07_49c
(214) Eenim hipcap ah he imcooz xo mos ihmexl.
knife Px-Vt Foc 1IO 3:3-Rl-rob but also 1SGS.Tr-Px-take
'Me robó este cuchillo pero lo recuperé.'
He robbed this knife from me but I took it back. (DS2005, ccooz) RMH_07-20-07_50a
(215) iMeenim quih me tahcooz?

2P-knife the.FL 2IO Rl-Pv-rob
'¿Te fue robado el cuchillo?'
Was the knife robbed from you? (DS2005, ccooz) RMH_07-20-07_50b
(216) Ihyáazi \({ }^{\circ}\), \({ }^{\circ}\) hanzajípj quiipa \({ }^{\circ}\) hipcop mamaz cohqueetx!
my.child.ME frying.pan Px-VT 2P-father's.mother 3IO-Ім-return
'Hijo/hija, devuelve este sartén a tu abuela.' RмH_07-20-07_50c Son/daughter, take this frying pan back to your grandmother. (DS2005, cqueetx)

The verb \(\sqrt{ }\) amje bring is like the verbs discussed above in that it may occur with an optional recipient (the person to whom the item is brought) but it has the singular/plural twist added to it. A singular recipient is expressed as an oblique object, but a plural recipient is expressed in a postpositional phrase headed by ano (see §22.3.3).
\begin{tabular}{lllll}
\hline \hline Vamjc & Semantics: & Agent & Patient & (Recipient) \\
bring & Syntax: & Subject & Direct Object & (Indirect Object \({ }_{\text {sg }} /\left\|\mathrm{PP}_{\text {ano }}\right\|\) ) \\
\hline \hline
\end{tabular}

\footnotetext{
\({ }^{58}\) The prefix \(\mathbf{i}\) - is written following the indirect object inflection in active clauses, although in normal speech it is usually not clearly heard.
}
¿Áz intamic?
what? 2SGS-Rl-bring
‘¿Qué traes?’ RMH_08-04-07_129
What did you bring? (DS2005, quimic)
(219)
¿Ziix zo he camic! thing a 1IO Ім-bring
‘¡Tráeme algo!’ RMH_07-20007_51a Bring something to me!
¡Tootjöc pac he camjc! cholla.fruit some 1IO Im-bring
‘¡Tráeme fruta de choya!'
Bring some cholla cactus fruit to me! RMH_08-14-07_71a
(221)
¡Ziix zo hino camjc!
thing a 1P-in Im-bring
‘¡Tráenos algo!’
Bring something to us! RMH_07-20-07_51b
(222)
¡Tom quih hino camjc! money the.FL 1P-in Im-bring
‘\(¡\) Tráenos el dinero!’
Bring the money to us! RMH_08-14-07_71b

\subsection*{18.5.4 Morphologically dative simple transitive}

Some simple transitive verbs, including \(\sqrt{ }\) pooin close and \(\sqrt{ }\) acooyam honor, praise are different from typical transitive verbs in that they are always inflected as if they had a third person indirect or oblique object although none is ever present. \({ }^{59}\) Notice the prefix co- (allomorph cö-) in the following examples.
¿Hahoot hac cöitpooin? Abs-entrance the.Lc 3IO-3:3-Rl-close
‘¿Cerró la puerta?’
Did she close the door? RMH_07-20-07_45c
Quihehe \({ }^{\circ}\) quih cöimacooyam.
ruler the.FL 3IO-3:3-Px-honor
'Honró al jefe.'
S/he honored the chief. RRR
The verb Vaasitim deceive is similar in that it is also inflected for a third person indirect/oblique object whether or not one actually mentions an item that is used in the deception. \({ }^{60}\)

\footnotetext{
\({ }^{59}\) Some speakers, apparently a minority, do sometimes use the verb \(\sqrt{ }\) pooin without the third person indirect object inflection.
\({ }^{60}\) This verb may omit mention of the person deceived, which makes the clause intransitive; even in that situation the indirect object inflection occurs on the verb.
}
```

(225) Juan quih cohtaasitim ma,...
the.FL 3IO-1SGS.Tr-Rl-deceive DS
`Engañé a Juan, ...'
I deceived Juan, ... (DS2005, cöcasitim) RMH_11-88p-07_37

```

\subsection*{18.5.5 Simple transitive with optional addressee/recipient but no indirect object}

The verb Vâaom beg for subcategorizes for only one obligatory syntactic argument - the patient/direct object. Nevertheless it permits an additional semantic argument, the addressee. The addressee must appear in a pospositional phrase headed by the default postposition for human goals: iti (for singular ones) and ano (for plural ones); see §22.3.3. Illustrative sentences are given in (227-228).
\begin{tabular}{lllll}
\hline \hline V âaom & Semantics: & Agent & Patient & (Addressee) \\
beg for Patient & Syntax: & Subject & Direct Object & \((\|\) PP \|) \\
\hline
\end{tabular}
(227) Siimet quih (miti) itaaom, ...
bread the.FL 2P-on/from 3:3-Rl-beg
'Pedía pan (de ti), ...'
S/he was begging for bread from you (sg.), ... RMH_07-20-07_45d RMH_08-14-07_71x
\({ }^{\circ}\) Ziix cxatle \({ }^{\circ}\) quih (hin) itaaom,
tortilla the.FL 1P-in/from 3:3-RL-beg
'Pedía tortillas (de nosotros).'
S/he was begging for tortillas from us, ... RMH_07-20-07_45e RMH_08-14-07_71y
The verb \(\sqrt{\mathbf{a m x}}\) say is similar but only subcategorizes for an optional plural addressee. (If a singular addressee is to be included, the derived verb \(\sqrt{\text { aamx }}\) is used; see \(\S 19.12\).)
\begin{tabular}{lllll}
\hline \hline\(\sqrt{\text { amx }}\) & Semantics: & Agent & Utterance & (Addressee \({ }_{\mathrm{pl}}\) ) \\
say Utterance & Syntax: & Subject & Direct Object & \((\|\) PP \(\|)\) \\
\hline \hline
\end{tabular}
a. ¿Itamx?

3:3-Rl-say
‘¿Lo dijo?’ RMH_07-20-07_44b
Did s/he say it? RMH_08-14-07_71bb
b. Ihyoomx.

1SGS.Tr-Dt-say
‘Lo dije.' RмH_07-20-07_44c
I said it. RMH_08-14-07_71cc
;Mos camx oo!
again Im-say DL
'Dilo otra vez.'
Say it again! RMH_08-14-07_71aa
(232)
a. Mino hyoomx.
b. iQuino \(^{61}\) camx!
2P-in 1SGS.Tr-Dt-say
'Se lo dije a ustedes.' RMH_08-14-07_71ee
I said it to you (pl.). RMH_07-20-07_51d

3P.Pl-in Im-say
‘ \(\quad\) Díselo a ellos! RMH_08-14-07_71dd
Tell it to them! RMH_07-20-07_51e
c. Ano / Quino hyoomx.
3P.in / 3P.Pl-in 1SGS.Tr-Dt-say
'Se lo dije a ellos/ellas.'
I said it to them. RMH_08-13-07_30d

\subsection*{18.5.6 Morphologically transitive involuntary action verbs}

The verbs \(\sqrt{ } \mathbf{i m t}\) open up (involuntarily), be open and \(V \mathbf{i x o j}\) dry up [columnar cactus fruit] are morphologically transitive (and not reflexive). Note that in (234-236) the verbs carry the \(3: 3\) prefix \(\mathbf{i}-(\S 17.1 .2 .1)\). But the only argument allowed in the clauses is the patient. \({ }^{62}\) The schema in (233) is an attempt to display the situation with these verbs.

Morphologically Transitive Involuntary Action Verb
\begin{tabular}{lll} 
Semantics: & Patient & - \\
Syntax: & Subject & Direct Object \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline Minl & itimla & ... \\
\hline \multicolumn{3}{|l|}{2P-finger/hand-PL 3:3-RL-open-PL} \\
\hline \multicolumn{3}{|l|}{'Cuando se te abrió la mano, ...'} \\
\hline \multicolumn{3}{|l|}{When your hand opened (involuntarily), .... (DS2005, quimt) LHC} \\
\hline \multicolumn{3}{|l|}{... hahootj com tcooo itimla,} \\
\hline \multicolumn{3}{|r|}{Abs-entrance-Pl the.Hz RL-all 3:3-RL-open-Pl} \\
\hline \multicolumn{3}{|l|}{'... se abrieron todas las puertas...'} \\
\hline
\end{tabular}
Ool imám quih \(\quad\) itixoj \(\quad\) x, \(\quad\) xöatjö.
organpipe.cactus
3P-fruit the.FL
3:3-RL-dry.up UT
Cuando la fruta de la pitaya se seca, está muy dulce.'
When the organ pipe cactus fruit dries, it is very sweet. (DS2005, quixoj) RMH_05-17-08_274

\subsection*{18.5.7 The verb \(\sqrt{ }\) amzo want}

The verb Vamzo want subcategorizes for a complement clause that is headed by either a

\footnotetext{
\({ }^{61}\) Ano is also possible here.
\({ }^{62}\) The causative form of the verb \(\sqrt{ }\) imt is used when an agent performs the action: \(\sqrt{ }\) eemt open (trans.). This causative verb is morphologically ditransitive (inflecting for indirect object) even though it is a simple transitive syntactically.
}
deverbal noun or an infinitive, depending on the matter of coreference with the agent/subject of want. See \(\S 12.1\) for examples and discussion.

\subsection*{18.5.8 Special use of \(\sqrt{ } \mathrm{aCa}\) know}

The verb \(\sqrt{ }\) aCa know may occur with a special kind of complement configuration in which the direct object is pronominal and the predicate complement includes the predicate nominal and the deverbal noun chaa (SN-EQ).
\begin{tabular}{|c|c|}
\hline (237) & \begin{tabular}{l}
Ziix chaa zo hin yomaa. \\
thing SN-EQ a 1SGDO DT-N-know \\
'No sabe/sabía quien soy.' \\
S/he doesn't/didn't know who I am/was. (S/he doesn't/didn't recognize me.) (DS2005, quiya) XMH-08-08-07_289
\end{tabular} \\
\hline (238) & \begin{tabular}{l}
\(\begin{array}{llllll}\text { He } & \text { ziix } & \text { chaa } & \text { quih } & \underline{\text { ma quiya }} & \text { ha. } \\ \text { 1PRO } & \text { thing } & \text { SN-EQ } & \text { the.FL } & 2 \text { 2SDO SN-TR-know } & \text { DCL }\end{array}\) 'Sé quien eres.' \\
I know who you are. RMH_11-28p-07_38
\end{tabular} \\
\hline (239) & \begin{tabular}{l}
Jesús quih \({ }^{\circ}\) ziix quiisax \({ }^{\circ}\) chaa quih hmiya; \\
the.Fl person SN-EQ the.Fl 1SGS.Tr-Px-know \\
Pablo quij mos emiique chaa quih hmiya. \\
the.Cm also person SN-EQ the.Fl 1SGS.Tr-Px-know
\end{tabular} \\
\hline & \begin{tabular}{l}
'Conozco a Jesús; también conozco a Pablo.' \\
I know who Jesus is and I also know who Paul is. (Ac 19:15) RMH_11-28p-07_39
\end{tabular} \\
\hline
\end{tabular}

An appropriate representation of such clauses should indicate not only that first person singular in (237) is the grammatically the direct object of know but also the referent of the predicate nominal ziix. \({ }^{63}\) The schema in (240) is an attempt to show this using bracketing.
\begin{tabular}{lllll}
\hline \hline\(\sqrt{ } \mathbf{a C a}\) & Semantics: & Experiencer & [Patient & Predicate nominal ] \\
know & Syntax: & Subject & Direct Object & \(\|\) NP chaa D \| \\
\hline \hline
\end{tabular}

\subsection*{18.5.9 Transitive verb introducing direct quotes}
 The direct object is the addressee; the discourse itself does not determine any inflection on the verb.

\footnotetext{
\({ }^{63}\) To use other terminology, this appears to be an example of "raising to object".
}
\begin{tabular}{lllll}
\hline \hline لai & Semantics: & Agent & (Discourse) & Addressee \\
tell & Syntax: & Subject & \((\|\) Quote \(\|)\) & Direct Object \\
\hline \hline
\end{tabular}


Ox hizi mii. (244)

Ox iyóaam.
thus 3:3-Dt-tell.PL
thus 1PLDO Px-tell
‘Así le(s) dijeron.' RMH_08-14-07_80c
'Así nos dijo.'
Thus they told him/her/them.
Reference to the content of the discourse may also be made using the interrogative adverb zó how? whereas it cannot be done with the interrogative pronoun áz what?.
(245)
a. ¿Zó ma htai?
how? 2SGDO 1SGS.Tr-tell
¿¿Qué te dije?
What did I tell you? RMH_07-20-07_48c
b. * iÁz mahtai? what?
('¿Qué te dije?’)
(What did I tell you?)

\subsection*{18.6 Ditransitives}

The preceding sections have presented fairly simple arrays of facts that have only occasionally, and optionally, included two objects (one direct and one indirect). This section, however, looks at verbs that are obligatorily subcategorized for two objects. It turns out that there are two major patterns.

The first pattern is reminiscent of some of those presented in the section under simple transitives but in this case, as mentioned, both objects are obligatory. In each case the item or person most affected is the direct object: the person or item splashed in the case of \(\sqrt{ }\) inim, the item transported in the case of \(\sqrt{ }\) aaix, and the person to whom insulting or defamatory words (extremely strong insults) are spoken in the case of \(\sqrt{\text { aatajquim. In two cases this direct object }}\) must be singular.
\begin{tabular}{lllll}
\hline \hline Vinim & Semantics: & Agent & Patient & Instrument \\
splash & Syntax: & Subject & \({\text { Direct } \text { Object }_{\text {sg }}}\) & Oblique Object \\
\hline \hline
\end{tabular}

\footnotetext{
\({ }^{64}\) The phrase ctam czaxö is lexicalized to mean the leader of the group of warriors.
}
\begin{tabular}{lllll}
\hline \hline Vaaix & Semantics: & Agent & Patient & \begin{tabular}{l} 
Goal \\
(person or place)
\end{tabular} \\
carry & Syntax: & Subject & Direct Object & Oblique Object \\
\hline \hline
\end{tabular}
\begin{tabular}{lllll}
\hline \hline Vaatajquim & Semantics: & Agent & Patient & Topic \\
tell & Syntax: & Subject & \({\text { Direct } \text { Object }_{\text {sg }}}\) & \\
\hline \hline
\end{tabular}

These verbs are illustrated by the examples below.
¿Hax \(\underline{\text { me hsinim }}^{65} \quad\) xo!
water 2IO 1SGS.Tr-Ir-splash Em
‘TTe voy a echar agua!'
I am going to splash water on you (sg.)! (DS2005, cöquinim) RMH_08-04-07_130a
(250) Hax hapasi hizcap iicp me hsaaix aha. water SN-Pv-drink Px-Vt towards 2IO 1SGS.Tr-Ir.Id-carry Aux-DCL
'Te llevaré esta agua para que la bebas.'
I will take this water to you to drink. (DS2005, iicp) RMH_05-20-08_103
(251) Hant quih iti isaticpan ha tahac cöimaaix. land the.Fl 3P.on 3P-Ir-work Aux that.Loc 3IO-3:3-Px-carry 'Los llevó al lugar donde trabajarían.'
He took them to the place where they would work. RRR
(252) Cmozime quij ziix quih cöipátajquim hac, SN-drunk the.Cm thing the.Fl 3IO-3P-PON-Pv-insult the.LC
\(\begin{array}{lll}\text { taax } & \text { cacaatol } & \text { iha. } \\ \text { DDP } & \text { SN-dangerous } & \text { DCL }\end{array}\)
'Es peligroso decir cosas ofensivas a un borracho.'
It is dangerous to say offensive things to a drunk man. (DS2005, cöcaataquim) RMH_08-04-07_130b
When the patient is plural, a derived verb form is required; the patient in those clauses is expressed as a postpositional phrase. These examples are discussed in §19.1.5.

Another pattern for ditransitives is found with only two verbs. Unlike the verbs just mentioned, however, these verbs are very commonly used. \({ }^{66}\) The recipient is the direct object; it

\footnotetext{
\({ }^{65}\) This verb evidences object blending (§17.1.2.5).
\({ }^{66}\) They are the only examples of what might be thought to be clearly a pattern that is dominant in other languages, described by Dryer (1986) as primary object languages. This might be an old pattern in the language that has been superseded elsewhere by an innovative pattern (Haspelmath 2007).
}
determines direct object inflection. The patient (the object given) appears syntactically but is unmarked in any way. \({ }^{67}\)
\begin{tabular}{|c|c|c|c|c|}
\hline & \begin{tabular}{l}
Semantics: \\
Syntax:
\end{tabular} & \begin{tabular}{l}
Agent \\
Subject
\end{tabular} & \begin{tabular}{l}
Patient \\
| DP \|
\end{tabular} & \begin{tabular}{l}
Recipient \\
Direct Object
\end{tabular} \\
\hline \begin{tabular}{l}
a. \(\quad \sqrt{ } \mathrm{CC}\) \\
b. \(\quad \sqrt{ } \mathbf{e}_{\text {Irreg }}\)
\end{tabular} & ent (food) to ent (gift) to & Recipient ecipient & \[
\text { food } \mathrm{m}
\] & be nonspecific \\
\hline
\end{tabular}

The examples below illustrate the use of these verbs.
¿Zixcám quih ma tee?
fish the.Fl 2SGDO Rl-give.food
‘¿Te ha dado pescado?’
Did s/he give you fish? RMH_07-20-07_52b
(256) Zixcám quih him miye.
fish the.FL 1SGDO Px-give.food
'Me dio pescado.'
S/he gave me fish. RMH_07-20.07_52c
(257) ¿Tom quih ma hiite? money the.Fl 2SGDO 1SGS.Tr-Rl-give.gift
‘¿Te he dado el dinero?’
Did I give you the money? RmH_07-20-07_52a
(258) Canoaa zo him iiyoj.
boat a 1SGDO DT-give.gift-PL
'Me regalaron una panga.'
They gave me a boat. (DS2005, ique) RMH_05-17-08_275
In the following examples the clauses are passive; the recipient is the subject. It is important to notice that each of these clauses is clearly intransitive, as evidenced by the intransitive allomorph hp- of the first person singular subject inflection prefix and of the infinitival prefix, ica- (see Appendix C). \({ }^{68}\)

\footnotetext{
\({ }^{67}\) The grammatical relation of this nominal would be 2-Chômeur (direct object chômeur) in the framework of Relational Grammar. In another language, of course, a chômeur may in fact be marked morphologically. The assistive construction (§19.6) arguably has a chômeur when the base verb is transitive.
\({ }^{68}\) These facts were discussed in Marlett (1981b:288ff), Marlett (1984:221ff), and Marlett (1990:523ff). It was noted that analogous clauses in English were labeled transitive passives in Hockett (1958:205). The Seri facts clearly show that these passive clauses do not have a (surface) direct object.
}
(259) Tom quih hpyopehe.
money the.Fl 1SGS.In-Dt-Pv-give.gift
'Fui regalado el dinero.'
I was given the money. RMH_07-20-07_52d
(260) ¿Zixcám quih hptpee?
fish the.Fl 1SGS.In-Rl-Pv-give.food
‘¿Fui dado pescado?’
Was I given fish? RMH_07-20-07_52e
(261) Zixcám com icapehe hmiimzo.
fish the.Hz Inf.In-Pv-give.gift 1SGS.Tr-Px-want
'Quiero ser regalado el pescado.'
I want to be given the fish. \({ }^{69}\) RMH_-07-20-07_-52f
(262) Zixcám quih icapee hmiimzo
fish the.Fl Inf.In-Pv-give.food 1SGS.Tr-Px-want
'Quiero ser dado pescado.'
I want to be given fish. RMH_07-20-07_53
While demonstrably intransitive clauses, the passive clauses demonstrate one more interesting fact: the prefix i- \(3: 3\) ( \(\$ 17.1 .2 .1\) ) occurs when the subject and direct object are third person. This is the only situation in finite verbs where this prefix appears in an intransitive clause. \({ }^{70}\) The secondary object canoaa zo in (263) (and similar examples) does not affect the transitivity of the clause (see the multiple tests described in Appendix C), but it is pertinent to the presentation of the prefix \(\mathbf{i}\)-.
```

Canoaa z iyopehe.
boat a 3:3-Dt-Pv-give.gift
'Fue regalado la panga.'
S/he was gifted a boat. RMH_05-17-08_276

```

\subsection*{18.7 Other types of subcategorization}

A few words are considered to be auxiliary verbs, although they are not prototypical cases of such: they do not inflect for person or number, and display very limited "tense" distinctions. These are discussed in chapter 20.

\footnotetext{
\({ }^{69}\) According to René Montaño Herrera, the noun phrase zixcám com would refer to a whole fish, but the noun phrase zixcám quih would refer to a filleted fish.
\({ }^{70}\) This usage of \(\mathbf{i}\) - is described in Marlett (1981b) and Marlett (1984b:234ff) within the framework of Relational Grammar as having to do with the presence of a direct object chômeur, which correlates in part to what is referred to as a secondary object in this book. In the passive clause XXXXXX.
}

\subsection*{18.8 Selectional restrictions}

Some predicates have selectional restrictions worthy of note, and a few of these are mentioned here. Discussion here is primarily limited to basic verbs.

Verbs meaning roughly give (something as a gift) include the following: \(\sqrt{\mathbf{e}_{\text {Irreg }}}\) give (a gift, not food) (see \(\S 18.6\) for subcategorization facts), Veque give as a gift (a simple transitive verb; see \(\S 18.5\) ); and \(\sqrt{ } \mathbf{e C e}\) give ( a gift that is food) (and the food must be non-specific; see \(\S 18.6\) ). These verbs are not used for simple acts of giving such as in contexts of handing over an object.

Verbs meaning roughly put (something in a location) include the following: \(\sqrt{ }\) ah for flexible things; \(\sqrt{ }\) aquim for small loose things; \(\sqrt{ }\) caaix for compact items; \(\sqrt{ }\) axquim for long items; \(\sqrt{ }\) aca for liquids and knives; and \(\sqrt{ } \mathbf{z a m}\) for tall items (see \(\S 13.3 .3\) ).

Verbs meaning grind include the following: \(\sqrt{ } \mathbf{C i z j}\) grind; \(\sqrt{ }\) sic grind (seeds, grain); \(\sqrt{ } \mathbf{a}_{\text {Irreg }}\) grind (seeds, grain); لacöim grind dry organ pipe cactus (to obtain a powder used for making tar). See also the derived verb Vapám grind dry mesquite pods. See also the different words for mash, which include \(\sqrt{ }\) neezj mash and \(\sqrt{ }\) apámjöc pound mesquite pods with water to make a mash.

Verbs that mean cut vary primarily on the kind of action that is involved (e.g. sawing), but one verb selects objects that have a certain form: \(\sqrt{ }\) aam cut (something tall or long).

Two intransitive verbs for choke differ in the kind of object (which is presented as an oblique/indirect object) that is causing the problem: Vaapj choke (on solid), Vaahjöim choke (on liquid).

Verbs for hit and pound typically vary by the kind of action that it is, by the prototypical instrument used, or by the kind of result expected. These include: \(\sqrt{ }\) aafc hit hard, \(\sqrt{ }\) Caxz hit (with long item), \(\sqrt{ } \mathbf{n i p}\) hit (especially with hand), \(\sqrt{ } \mathbf{a a t j}\) pound flat.

Verbs for carry include: \(\sqrt{ }\) aazi and \(\sqrt{ }\) aheectim, \(\sqrt{ } \mathbf{i i p}\) (on one's head), \(\sqrt{ } \mathbf{i z t i m}\) (on one's hip), \(\sqrt{ } \mathbf{i c s e e n p x}\) and \(\sqrt{ }\) asoompx (long thing under arm), \(\sqrt{ } \mathbf{c o o i}\) (in many trips), \(\sqrt{ } \mathbf{s a n j}\) (on one's back),
 handle), and \(\sqrt{ }\) izcapxla (under arm).

Intransitive verbs for intransitive break include \(\sqrt{ }\) apxölim break (long item), \(\sqrt{ }\) tapolquim break (XXXqqq), \(\sqrt{ } \mathbf{t i x l}\) break (into small pieces).

Expressions for die have important selectional restrictions on the subject. The expressions hacx \(V_{\text {miih }}\) (§7.4) and imiipla \(V_{\text {haa }}\) (§7.1) are only used with people, the latter being very respectful. The predicate \(V_{\text {ooxi }}\) is typically used for animals. For a plant, the predicate meaning
\(d r y\) is used (see \(\S 18.2 .6\) ).
The predicate \(\sqrt{ }\) iteejöc thin is used for items on a vertical dimension (including people), while \(\sqrt{ }\) xatcaj thin is used for items on a horizontal dimension (such as tortillas). qqq check
more qqq

\section*{19. Derived verb subcategorization}

Verb stems that are related to morphologically simpler stems are considered in this chapter. \({ }^{1}\) §19.1 discusses intransitive verbs that are built on transitive roots; the derived verbs omit the direct object. § 19.2 mentions a few verbs that are formed on nominal bases. \(\S 19.3\) discusses verbs built on nominal bases where the derived verb indicates having or putting on an item referred to by the noun. §19.3.4 looks at the rare kinship verbs. \(\S 19.4\) presents verbs that include an experiencer-subject in their argument structure. §19.5 examines causative verbs, §19.6 assistive verbs, and \(\S 19.7\) the less common so-called benefactive verbs. Some miscellaneous derived verbs are presented in \(\S 19.8\). The allomorphy of the prefixes for causatives and assistives is presented in \(\S 19.10\), and the morphology for the times/raising verbs in \(\S 19.11\). Finally, some unusual examples of dative and antidative morphology are presented in §19.12.

\subsection*{19.1 Unspecified object verbs}

The great majority of transitive predicates may appear, in some way, in two intransitive constructions. The first is a passive clause (see \(\S 9.2 .2\) ), in which case the verb is inflected with passive morphology ( \(\S 17.1 .5\) ). The second construction is one in which the expected patient/direct object does not appear, and in this case the verb is generally inflected with unspecified object morphology (described in §19.1.1).

When an unspecified object stem is used, the patient/direct object cannot be expressed syntactically (although it is implied, of course); the verb is inflected as an intransitive verb. Compare the simple transitive clause in (1a) with the simple - but entirely typical unspecified object clause in (1b).
(1)
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{4}{*}{a.} & Zixcám hipcom ihstiin & & \multirow[t]{3}{*}{stem \(=\sqrt{ }\) tion} \\
\hline & fish Px-Hz 1SGS.Tr-Ir.Id-cut.in.strips & \multirow[t]{3}{*}{Aux-Dcl} & \\
\hline & 'Cortaré este pescado en tiras.' & & \\
\hline & I will cut this fish into strips. RmH_05-17-08_277 & & \\
\hline b. & Poyaam ta, hpsotiin & aha. & \multirow[t]{4}{*}{stem \(=\sqrt{ }\) otíin} \\
\hline & Ir.Dp-later DS 1SGS.In-Ir.Id-UO-cut.in.strips & Aux-Dcl & \\
\hline & 'Más tarde cortaré en tiras.' & & \\
\hline & Later I will cut into strips. RMH_05-17-08_278 & & \\
\hline
\end{tabular}

The absolute unacceptability of the presence of a patient/direct object with these unspecified

\footnotetext{
\({ }^{1}\) Unless otherwise noted, all of the verbs presented here are included as main entries in the 2005 dictionary. Passive verbs, which do not have main entry status in the dictionary, are treated in the chapter on inflection, §17.1.5.
}
object verbs is illustrated by the sentences in (2)-(3), which contrast the transitive basic verb in the (a) examples with the intransitive unspecified object verb in the (b) examples.
a. ¿Áz -ya itáhitim?
what? QM 3:3-RL-eat-ImpF
¿¿Qué está comiendo?'
What is s/he/it eating? RMH_08-24.07_78
b. * ¿Áz -ya toohitim?
what? QM RL-UO-eat-ImPF
('¿Qué está comiendo?')
(What is s/he/it eating?)
(3) a. Haas quih cöcootij quih insiifmoj aha. mesquite the.Fl 3IO-SN-dry the.Fl 2SGS-Ir.ID-gather.firewood AUX-DCL 'Debes recoger leña de mezquite seco.'
You should collect dry mesquite firewood. RMH_08-04-07_54
b. * Haas quih cöcootij quih insoofmoj aha. mesquite the.Fl 3IO-SN-dry the.Fl 2SGS-Ir.Id-UO-gather.firewood Aux-DCl ('Debes recoger leña de mezquite seco.')
(You should collect dry mesquite firewood.)
There is no way to include the patient nominal in these unspecified object clauses.
By all known tests (Appendix C), the unspecified object clauses are morphologically intransitive. These facts are briefly reviewed here. First, the intransitive allomorph hp- of the first person singular subject prefix (§17.1.2.1) occurs, as in (4a). Second, the intransitive allomorph ica- of the infinitive prefix ( \(\S 17.2 .1\) ) occurs, as in (4b).
a. Ihpmoohitim.
1SGS.In-Px-UO-eat-ImPF
'Estoy comiendo.'
I am eating. RMH_08-04-07_55a
b. Icoohit ihmiimzo.
Inf.In-UO-eat 1SGS.Tr-Px-want
'Quiero comer.'
I want to eat. RMH_08-04-07_55b

Third, the intransitive allomorph \(\varnothing_{\text {-abl }}\) of the second person imperative prefix (§17.2.2) occurs, as in (5a). Fourth, the intransitive allomorph \(\mathbf{y}\) - \(_{\mathrm{Abl}}\) of the proposition/oblique nominalizer (§14.4) occurs, as in (5b).
\begin{tabular}{|c|c|c|c|}
\hline a. & iAfmoj! b. & Inyafmoj & ihmiimzo. \\
\hline & Im-UO-gather.firewood & 2P-PON-UO-gather.firewood & 1SGS.Tr-Px-want \\
\hline & ‘「Recoge leña!' \({ }^{\text {rmH_08-04-07_56a }}\) & 'Quiero que recojas leña.' & \\
\hline & Gather firewood! & I want you to gather firewood. & d. \(\mathrm{RMH}-08-04007\) 7 56 b \\
\hline
\end{tabular}

Fifth, the rule coalescing o's in finally intransitive clauses (§27.2.2) applies, as in (6a). Sixth, the intransitive allomorph ca- of the first person singular emphatic prefix (§17.1.2.1) occurs, as in (6b).


Seventh, these clauses may have an unspecified final subject (§17.1.5), as in (7).
\begin{tabular}{llll} 
Pomcoohit & x, & somcaaixaj & aha. \\
Ir.Dp-N-US-UO-eat UT & Ir.Id-N-US-strong & AUX-DCL \\
'Si uno no come, ...' & \\
If one does not eat, one will not be strong. & \\
RMH_08-04-07_58
\end{tabular}

Eighth, the \(3: 3\) morpheme \(\mathbf{i}\) - (§17.1.2.1) does not occur in these clauses, as shown in (8a-b).
(8)
a. ¿Toohitim?
Rl-UO-eat-ImpF
‘¿Está comiendo?’
Is s/he eating? RMH_08-04-07_59
b. * ¿Itoohitim?
3:3-RL-UO-eat-ImpF
(‘¿Está comiendo?’)
(Is s/he eating?)

\subsection*{19.1.1 Unspecified object morphology}

Unspecified object morphology only appears on underived stems. Therefore other kinds of verbs described in this chapter (denominal verbs and causative verbs, for example) do not have any overt unspecified object morphology although they may be used in clauses with an unspecified direct object. The prototypical schema is the one shown in (9).
\begin{tabular}{lll}
\hline \hline Transitive verb stem & & Unspecified object verb stem \\
{\([\mathrm{X}]\)} & & {\(\left[\mathbf{o}_{\mathrm{Abl}}[\mathrm{X}]\right]\)} \\
Agent/Experiencer & Patient & Agent/Experiencer \\
Subject & Direct Object & Subject \\
\hline \hline
\end{tabular}

Some simple pairs of verbs are given in (10), giving only the uninflected singular stems.
\begin{tabular}{|c|c|c|}
\hline Transitive stem a-initial roots & \multicolumn{2}{|l|}{Unspecified object stem} \\
\hline \(\checkmark\) ahit & \(\checkmark\) Vohit & eat \\
\hline \(\checkmark\) afmoj & \(\checkmark\) oofmoj & gather firewood \\
\hline \(\sqrt{\text { am }}\) & Voom & swallow \\
\hline \(\sqrt{\text { ap }}\) & Voop & sew basket \\
\hline e-initial roots & & \\
\hline \(\checkmark\) emen & Voomen & shake from side to side \\
\hline \(\sqrt{\text { epeza }}\) & \(\checkmark\) oopeza & lick lips \\
\hline
\end{tabular}


Apparently all verbs with roots beginning with aa and ee have unspecified object stems that are identical to the transitive stems.
\begin{tabular}{ll} 
a. & \(\sqrt{ }\) aa \\
b. & \(\sqrt{\text { aai }}\) \\
c. & \(\sqrt{\text { aaa }}\) \\
d. & \(\sqrt{\text { aaco }}\) \\
e. & \(\sqrt{\text { aaisx }}\) \\
f. & \(\sqrt{\text { aao }}\) \\
g. & \(\sqrt{\text { leet }}\)
\end{tabular}
b. Vaai
c. Vaaa
d. Vaaco
e. Vaaisx
g. Veet
Vaa
Vaai
\(\sqrt{ }\) aaa
Vaaco
\(\sqrt{ }\) aaisx
\(\sqrt{ }\) aao
\(\sqrt{ }\) eet
hold
make
call (by voice or by signalling)
build house
wash
pass by (a place)
contradict, argue

A few other basic verbs exceptionally have unspecified object stems that also are identical to the transitive stems.
\begin{tabular}{ll} 
a. & \(\sqrt{\text { âaij }}\) \\
b. & \(\sqrt{ }\) amjö \\
c. & \(\sqrt{\text { ataje }}\)
\end{tabular}

Vâaij
\(\sqrt{\text { ampö }}\)
\(\sqrt{\text { ataje }}\)
fetch water
hunt
vomit
\begin{tabular}{llll} 
d. & Veque & Veque & give as a gift \\
e. & \(V_{\text {iimosim }}\) & Vimosim & ask for (food) \\
f. & \(V_{\text {iiquet }}\) & \(V_{\text {iiquet }}\) & be pregnant with \\
g. & \(V_{\text {itat }}\) & Vitat & collect limberbush
\end{tabular}

A few verbs have unspecified object stems that do not match any of the patterns shown above. Some of these have an \(\mathbf{0}\) or \(\mathbf{o c o}\) in the derived stem. \({ }^{2}\)
\begin{tabular}{ll} 
a. & \(\sqrt{\text { âaom }}\) \\
b. & (irregular) \\
c. & \(\sqrt{\text { ah }}\) \\
d. & \(\sqrt{\text { acö }}\) \\
e. & \(\sqrt{ }\) Cim \\
f. & \(\sqrt{\text { aaal }}{ }^{4}\) \\
g. & \(\sqrt{\text { aho }}\) \\
h. & \(\sqrt{\text { ap }}\) \\
i. & \(\sqrt{\text { âaix }}\)
\end{tabular}
\begin{tabular}{ll} 
Vaaom & beg for \\
Vaa & grind \\
Voaah & put, cause, say \\
Voicö & kill \\
Voiimtim \({ }^{3}\) & throw stones at \\
Vocoaal & order to do \\
Vocoho & see \\
Vocóp & sting \\
Vocooix & win (a race)
\end{tabular}

\subsection*{19.1.2 Unspecified object verb with addressee as direct object}

The verb \(\sqrt{ }{ }^{\text {âaom }}{ }^{5}\) beg, ask for (a gift) is a simple transitive verb that subcategorizes for a direct object that is the item being requested; see \(\S 18.5 .5\) for more details. This transitive verb has its expected unspecified object counterpart that is \(\sqrt{ }\) aaom - different from the transitive stem in that the unspecified-object stem has a simple long vowel aa and thus conjugates differently (see §27.4). With the unspecified object stem, the gift that is being requested cannot be mentioned. It is intransitive in its simplest usage.
(14) Moxíma quih hpyaaom.
yesterday the.Fl 1SgS.In-Dt-UO.beg
'Ayer yo mendigaba.'
I was begging yesterday. (DS2008, caaom) RMH_08-04-07_60a
This derived verb is unusual in that it allows for the expression of the addressee, but the

\footnotetext{
\({ }^{2}\) The intransitive stem \(\sqrt{ }\) ocosi bite and suck (like mosquitos) is apparently derived at least historically from the root \(\sqrt{\text { asi }}\) drink on the same pattern.
\({ }^{3}\) This stem is unusual in that it (apparently) has a long \(\mathbf{i}\) whereas the transitive root has a short one, and in its (apparent) obligatory use of the IMPF suffix -tim. Otherwise the form is what is expected for a verb root that begins with the empty consonant (see §27.5).
\({ }^{4}\) This root is unusual in that the first vowel is a short a, as evidenced by its conjugation pattern: iyoaal \(s / h e\) ordered him/her.
\({ }^{5}\) The circumflex with \(\sqrt{\text { âaom }}\) is meant to indicate that this diphthong-initial verb conjugates like it begins with a short vowel (see \(\S 27.4\) for details on the diphthong issue); the lack of circumflex on the stem \(\sqrt{ }\) aamom is meant to indicate that this verb conjugates like it begins with a long vowel.
}
addressee is always presented as a direct object in this situation.
\begin{tabular}{llll}
\hline \hline \begin{tabular}{ll} 
Vaaom \\
ask for gift
\end{tabular} & \begin{tabular}{l} 
Semantics: \\
Syntax:
\end{tabular} & \begin{tabular}{l} 
Agent \\
Subject
\end{tabular} & \begin{tabular}{l} 
(Addressee) \\
(Direct Object)
\end{tabular} \\
\hline \hline & Hin yaaomoj. & b. & Hizi yaaomoj. \\
& 1SGDO DT-UO.beg-PL & & 1PLDO DT-UO.beg-PL
\end{tabular}

The examples in (17) are meant to illustrate that alternative morphology (indirect object inflection in (17a), postpositional marking in (17b)) is not possible with the unspecified object verb \(\sqrt{\text { aaom }}\) beg.
a. * He yaaomoj.
1sIO Dt-UO.beg-Pl
b. * Hiti yaaomoj.
1P-on Dт-UO.beg-Pl
('Me/nos mendigaban.') (They were begging from me/us.)

\subsection*{19.1.3 Unspecified object verb with goal as direct object}

The verb \(\sqrt{ } \mathbf{i s x} \boldsymbol{0}\) is a transitive verb that means hide (see \(\S 18.5\) ); the direct object is the item that is hidden. The unspecified object version of this verb, \(\sqrt{ }\) eesxö used with the adverb hacx apart, alone, is like the lexical reflexives discussed in §18.4.6 - no reflexive pronoun is used with it but the meaning is always that one is hiding oneself. \({ }^{6}\) The intransitive allomorph of the first person singular subject inflection prefix appears in (18) as expected.

Hacx ihpseesxö aha.
apart 1SGS.In-Ir.Id-UO.hide Aux-Dcl
'Me esconderé.'
I will hide myself. RMH_08-04-07_176a RMH_08-04-07_61a
¿Me hacx queesxö
2Pro apart SN-UO.hide
-ya?
¿Te estás escondiendo?'

This same verb may occur with mention of the person from whom the hiding is done, expressed as a direct object. Note in (20) the 2 SGDO prefix ma and the transitive prefix for first person singular subject \(\mathbf{h}\)-.

\footnotetext{
\({ }^{6}\) See \(\S 19.12\) for another use of the verb \(\sqrt{ }\) eesxö.
\({ }^{7}\) This example also has the reading Are you hiding yourself from him/her?, as the discussion below explains.
}
(20) Hacx ma hseesxö aha.
apart 2SGDO 1SGS.Tr-Ir.Id-UO.hide Aux-Dcl
'Me esconderé de ti.'
I will hide (myself) from you. (DS2005, queesxö) OP_2-07-07_54 RMH_08-04-07_62a
(21) ¡Hacx heesxö!
apart Im-UO.hide
'Escóndete de él/ella.'
Hide (yourself) from him/her! RMH_08-04-07_62b RMH_08-14-07_72e
(22) ¿Hacx iheesxö intamzo?
apart Inf.Tr-UO.hide 2SGS-Rl-want
¿¿Quieres esconderte de él/ella?’
Do you want to hide (yourself) from him/her? RMH_08-04-07_62C RMH_08-14-07_72f
(23) ¡Hacx ihpeesxö!
apart 1SGDO-Im-UO.hide
‘¡Escóndete de mí.’
Hide (yourself) from me! RMH_08-04-07_62d RMH_08-14-07_72g
The argument that is the person from whom the hiding is done is labeled a goal in the subcategorization frame below.
\begin{tabular}{llll}
\hline \hline hacx \(\sqrt{ }\) eesxö & Semantics: & Agent+Patient & (Goal) \\
hide oneself (from someone) & Syntax: & Subject & (Direct Object) \\
\hline \hline
\end{tabular}

\subsection*{19.1.4 Unspecified object verb with recipient as PP}

The transitive verb \(V_{\mathbf{i z i}}\) defeat also has the meaning of earn (money), and its unspecified object form \(\sqrt{ }\) eezi also has the meaning of earn.
a. Transitive

Pedro quih moxima peez ihanl capxa iyizi.
the.FL yesterday peso(s) 3P-PON-ten SN-three 3:3-DT-defeat/earn
'Pedro ganó treinta pesos ayer.'
Pedro earned thirty pesos yesterday. RMH_08-04-07_63a
b. Unspecified Object

Pedro quih anxö xeezi.
the.Fl Intns 3Em-UO.defeat/earn
'Pedro gana mucho.'
Pedro earns a lot. RMH_08-04-07_63b
This usage of \(\sqrt{ }\) eezi is extended to mean rent, in which case the verb subcategorizes for a
recipient (the person to whom the item will be rented), but not for a patient. \({ }^{8}\) The recipient appears only with the default marking for recipient/addressees, namely the postpositions \(\sqrt{ } \mathrm{Vti}\) (on) and \(\sqrt{ }\) ano (in) (see §22.3.3). (In example (27) the word for house appears in a separate clause and is only conceptually implied in the clause with rent.) The clauses are intransitive.
\begin{tabular}{llll}
\hline \hline Veezi & Semantics: & Agent & Recipient \\
rent & Syntax: & Subject & \(\|\) PP \(\|\) \\
\hline \hline
\end{tabular}
(27) Haaco hyaa \(^{\circ}\) cop cmiique ihmaa \(z\) ano piih ta \(x\), Abs.house mine the.VT person/Seri another a 3P.in Ir.Dp-be.Fl DS UT
\begin{tabular}{lll}
\(\mathbf{i t i}\) & hpseezi & aha. \\
3P-on & 1SGS.In-Ir.Id-UO.defeat/earn AUX-DCL
\end{tabular}
'Voy a alquilar mi casa a otra persona.'
I am going to rent my house to someone. (More literally, Another person will live in my house, I will rent to him/her.) (DS2005, quezi) RMH_08-04-07_63c
Mino hpscmeezi aha.

2P-in 1SGS.In-Ir.Id-N-UO.defeat/earn Aux-Dcl
'No alquilaré a ustedes.'
I won't rent to you (pl.) RMH_08-04-07_64

\subsection*{19.1.5 Special cases}

The (transitive) verbs \(\sqrt{\text { inim }}\) splash and \(V\) aatajquim insult subcategorize for a patient (see §18.6), where the patient in question is the person or item receiving the splash or hearing the insult. If the patient is plural, these verbs cannot be used. In the situation that a plural patient is to be expressed, unspecified object versions of these verb stems are used - Veenim and \(\sqrt{ }\) ocótajquim, respectively, and the plural patient appears with the postposition \(\sqrt{ }\) ano (in), the default marking in such cases. The clauses are intransitive, as evidenced by the first person singular prefix hp-in (31) and the lack of 3:3 \(\mathbf{i}\) - in (32).
\begin{tabular}{lllll}
\hline \hline Veenim & Semantics: & Agent & Patient \(_{\mathrm{pl}}\) & Instrument \\
splash & Syntax: & Subject & \(\|\mathrm{PP}\|\) & Indirect Object \\
\hline \hline
\end{tabular}
\begin{tabular}{lllll}
\hline \hline Vocótajquim & Semantics: & Agent & \(\left(\right.\) Patient \(\left._{\mathrm{pl}}\right)\) & Topic \\
utter insults & Syntax: & Subject & \((\|\mathrm{PP}\|)\) & Indirect Object \\
\hline \hline
\end{tabular}

\footnotetext{
\({ }^{8}\) One might think of this verb as meaning earn (from someone, especially by renting).
}
(31) Xicaquiziil \({ }^{\circ}\) tacoi hamt pac ano cohpyeenim.
children Md-Pl soil some 3P.in 3IO-1SGS.In-Dt-UO.splash
'Salpiqué tierra en esos niños.'
I threw dirt on those children. RMH_08-04-07_65a
(32) \(\quad \quad^{\circ}\) Ziix imiipla haa \({ }^{\circ}\) cötocótajquim? deceased.person 3IO-RL-UO.insult
‘¿Dijo cosas difamatorias acerca de la difunta?’
Did s/he say defamatory things about the deceased? (DS2005, cocococtajauim) RMH_08-04-07_65b
(33) Hino cöyacótajquim. \({ }^{9}\)

1P-in 3IO-Dt-UO.insult
'Nos dijo cosas defamatorias acerca de él/ella.'
S/he told us defamatory things about him/her. RмH_08-04-07_65c

\subsection*{19.2 Simple denominal verbs}

Simple intransitive verbs may be formed on simple noun roots by inflecting them for mood (§17.1.1). Few of these verbs are listed in the 2005 dictionary because they are so transparent and the process is so productive although not widely used. The general schema is given in (34).
\(\left[[X]_{\mathrm{N}}\right]_{\mathrm{V}}\)
be \(X\)
where X is a simple (unpossessed, uninflected) noun
The noun must be a simple noun; apparently a synthetic compound (§13.5) such as mosnípol leatherback sea turtle cannot be the base in this schema. The noun eenim metal has a glottal stop before it in the derived verb: \(\sqrt{ }\) heenim. A few examples are given here.
(35) ¡Pomojet, hax tama! noun \(=\) mojet

Ir.Dp-big.horn.sheep IntNS \(\mathrm{SB}_{\mathrm{B}} \mathrm{be}_{\text {Irreg }}\)
'Ojalá sea borrego cimarrón.'
I hope it's a borrego cimarrón. RMH_05-17-08_279

\section*{Pohast \(x\), siiscan aha.}
noun \(=\) hast

Ir.Dp-stone UT Ir.Id-hard Aux-Dcl
'Si es una piedra, será duro.'
If it is a rock, it will be hard. RMH_05-17-08_280

\footnotetext{
\({ }^{9}\) A variant on this sentence is also acceptable: Hino he yacótajquim. This variant seems to have a double marking of the first person.
}
(37) Pohehe \(x\), smaaiscan aha. noun = hehe

Ir.Dp-plant UT Ir.Id-N-hard Aux-Dcl
'Si es una planta / un palo, no será duro.'
If it is a plant / a stick, it won't be hard. RMH_05-17-08_281
(38)

\section*{Yoheenim.}

DT-metal
'Era metal.'
It was metal. (*It was a knife) RMH_05-17-08_282
A few intransitive verbs are listed in the dictionary that have this general pattern but have additional morphology and often divergent meanings. They are unusual as verbs in that they do not have non-negative subject-oriented deverbal nouns. That is, the otherwise expected forms with the c- prefix (SN, §14.1) of these predicates do not exist.
\begin{tabular}{|c|c|c|c|c|}
\hline a. & Noun cmaam cmajiic & \begin{tabular}{l}
woman, female \\
(plural)
\end{tabular} & \begin{tabular}{l}
Verb stem \\
\(\sqrt{ }\) cmaamat \\
\(\sqrt{ }\) cmajiic
\end{tabular} & be short and wide (plural) \\
\hline b. & ctam ctamcö & man, male (plural) & \begin{tabular}{l}
\(\sqrt{ }\) ctamot \\
\(\sqrt{ }\) ctamcö
\end{tabular} & be male; long and narrow (plural) \\
\hline c. & cmiique comcaac & \begin{tabular}{l}
person \\
(plural)
\end{tabular} & \(\checkmark\) cmiiquet \(\sqrt{ }\) comcaac & be person (and other meanings) (plural) \\
\hline d. & comcaii comquee & old.woman (plural) & \(\sqrt{ }\) comcaiit \(\sqrt{ }\) comqueej & be old [woman] (plural) \\
\hline
\end{tabular}

\subsection*{19.3 Denominal verbs}

The lexicon includes some verbs that are composed around a noun root: denominal verbs. \({ }^{10}\) The number of such verbs in the 2005 dictionary is between 100 and 200 ; the exact number depends on the definition that one uses for "denominal verb". The higher count includes the denominal verbs formed from kinship terms, such as \(V i c a a c a t ~ h a v e ~ a s ~ g r a n d c h i l d ~(h e r ~ d a u g h t e r ' s ~ c h i l d), ~\) which is based on the root \(\sqrt{ }\) caac (her) daughter's child. These kinship verbs are discussed separately in §19.3.4 below although they are simply a subset of the verbs discussed in this section. The higher count would also include those presented above in \(\S 19.2\).

The lower count is primarily composed of verbs formed from inherently possessed nouns other than kinship terms, such as \(\sqrt{ }\) iteems have beard, which is based on the root \(\sqrt{ }\) teems beard. Many of the noun roots are body part terms, like \(\sqrt{ }\) teems beard, but others are possessed nouns that include loanwords. The common factor in all of the productive cases of denominal verb

\footnotetext{
\({ }^{10}\) See the general discussion of this topic in Gerdts \& Marlett (2008). This chapter reprises Marlett (2008f).
}
stems appears to be a possessed noun root, regardless of its origin.
Therefore, alongside such simple nouns as caamiz shirt (see Appendix A) and caamijoj shirts, one also finds possessed nouns like hicaamiz my shirt, hicaamijoj my/our shirts, micaamiz your shirt, and icaamijoj their shirts; see \(\S 13.1 .1\). And besides these nouns, a verb \(\sqrt{ } \mathbf{i c a a m i z}\) also exists, which means have a shirt, or wear a shirt, or put on a shirt. Two simple examples with this verb are given in (40).
a. ¿Iticaamiz?
3:3-RL-HAVE-shirt RMH_07-11-07_3a ‘¿Se la puso (una camisa)?'
Did s/he put it (a shirt) on?
b. Yicaamiz.
DT-HAVE-shirt
'Llevaba camisa.' RMH_07-11-07_3b
S/he was wearing a shirt.

The denominal verb is the most common way to express the relevant concept and most generally means have \(X\). There may be alternative ways to express similar ideas using standard verbs and direct objects in some cases, but they are not synonymous as there is no generic kind of 'have' verb. An explicit verb such as \(\sqrt{ } \mathbf{y a a}\) own indicates a more permanent possession than that expressed by the denominal verb. Also, since the verb \(\sqrt{ }\) yaa means own it does not collocate with many of the nouns on which denominal verbs are formed (namely the body part terms). The verbal expression iti \(\sqrt{ } \mathbf{a h}\) (on put.FL) put on (clothes) means just that and does not mean wear, and thus is not synonymous with the denominal verbs based on nouns for articles of clothing.

The basic facts about the denominal verbs are quite simple. (Morphological details are presented in \(\S 19.3 .3\).) The prefix \(\mathbf{i}-\) occurs with noun stems - mostly bound noun stems, and for the most part inherently possessed nouns. The result is a verb form that means ambiguously or vaguely have \(X\), be with \(X\), wear \(X\) (stative meanings) or put on \(X\), get \(X\), use \(X\), acquire \(X\) (as by making) (active meanings). The abstract gloss HAVE is used in the examples below for the prefix i-. The basic schema is shown in (41), and a simple example is shown in (42). The label "possessed noun root" here is meant to identify the class of noun stems of the inherentlypossessed type (primarily kinship terms and body part nouns, see §13.1.1).
```

    Verb stem = [ [ i ] [Possessed Noun Root ] ]
    ```
(42) \(\quad\) iteems have beard \(=[[\mathbf{i}][\) teems \(]]\)

The denominal verb may be transitive (with an explicit or implicit direct object), or intransitive (with an unspecified direct object). The stem is identical whether the verb is transitive or intransitive, unlike what is true for most basic verbs (see §19.1); the difference in transitivity is obvious from the way the verbs conjugate.

The following examples illustrate these verbs; two have stative meanings and two have
active meanings:
(43) Stative meaning (transitive):

Ziix cmeque zo quicápota zo toc cöimiij iha.
thing SN-warm a SN-Tr-HAVE-jacket a there 3IO-SN-N-sit DcL
'Nadie tenía una chaqueta cálida.'
No one was wearing (or had) a warm jacket. (More literally, There wasn't anyone who was wearing-as-jacket a warm thing.) (Vije_Tibuon_3) RNH \(07-11-07-4 a\)
(44) Stative meaning (intransitive):

Comcaac xahxaii hoox oo quizil ih hamiiht.
person/Seri-Pl somewhat.resembling Intns Dl SN-small-Pl Foc 1PlS-Px-see-PL
Mizil xo miteemosoi, teeyo, [yoque].
Px-small-Pl but Px-hAVE-beard-Pl Rl-say-Pl Dt-US-say
""Hemos encontrado algunas personas pequeñas. Son pequeñas pero tienen barbas," dijeron, se dice.'
"We have found some little people. They are little but they have beards," they said,
it is said. (Dos_Hermanos_34-35)
(45) Active meaning (intransitive):

Ihptahaapl, ihpmicápota.
1SGS.In-RL-feel.cold 1SGS.In-Px-have.jacket
‘Tenía frío y me puse una chaqueta.'
I felt cold and put on a jacket. RWH-07-11-07-40
(46) Active meaning (ambiguous transitivity):
Haxz heeque quisil com cói imitoj ipi ha.
dog juvenile SN-small the.Hz still SN-N-HAVE.eye-Pl yet Dcl
'El perrito recién nacido todavía no ha abierto los ojos.'
The newborn puppy hasn't opened its eyes yet. (OS2005, quito, imporved) RNHH_05-17-08_283
When the verb is morphologically transitive (see below), the meaning is typically have, use as, put on (item). For example, \(\sqrt{ } \mathbf{i}\)-taamt (have-sandal(s)) would mean use (something) as sandals when it occurs in a transitive clause. In an intransitive clause, it typically means have sandals on, wear sandals, but it can also mean put on sandals.
(47) Transitive

Tiix hataamt \({ }^{\circ}\) cmaa quiih \({ }^{\circ}\) pac imitaamt.
DDS Abs-sandal new some 3:3-PX-HAVE.sandal(s)
'Está llevando huaraches nuevos.'
S/he is wearing new sandals. RHH-07-11077.5b
(48) \(\frac{\text { Ihsitaamt }}{1 \text { SGSa. }}\) aha.

1SGS.Tr-Ir.Id-HAVE-sandal(s) Aux-DCL
'Me lo/los pondré (huaraches).'
I will put it/them (sandals) on. RMH_07-11-07_14d
(49) Intransitive

Yomeesjö. Yitaamt.
Dt-N-barefoot Dt-have-sandal(s)
'No estaba descalzo/a. Llevaba huaraches.'
S/he wasn't barefoot. S/he was wearing sandals. RMH_05-17-08_284
(50) Hant ihtamatj,
ihpyitaamt.
land 1SGS.Tr-Rl-feel.heat 1SGS.In-Dt-HAVE-sandal(s)
'Porque sentí el calor de la tierra, me puse huaraches.'
Because I felt the heat of the earth, I put on sandals. RMH_07-11-07_14b
(51) Ihpsitaamt
aha.
1SGS.In-IR.ID-HAVE-sandal(s) Aux-DCL
'Me pondré huaraches.'
I will put on sandals. RMH_07-11-07_14c

\subsection*{19.3.1 Syntactic facts}

A denominal verb in an intransitive clause usually is not making reference to a particular item. In the intransitive clauses no nominal corresponding to the item that is had or worn may appear in the clause with the verb.
(52) Canoaa com ano siij ta, yicápota, tahaapl. boat the.Hz 3P.in Ir.ID-sit Aux.RL Dt-have-jacket Rl-feel.cold
'Cuando estaba por entrar en la panga, se puso la chaqueta porque tenía frío.'
When s/he was about to get in the boat, s/he put on a jacket, because s/he felt cold.
(DS2005, quicápota) RMH_07-11-07_6a
(53) * Ziix zo yicápota. thing a DT-HAVE-jacket
('Tenía algo puesto como chaqueta.') (S/he was wearing something as a jacket.)
Siip tintica tiihi, xepe iyoyaai.
young.man Md-Aw RL-HAVE-harpoon sea 3:3-DT-go.to
'El joven tenía arpón y fue al mar.'
The young man had a harpoon and went out to sea. (DS2005, quilii) RMH_07-11-07_7a
* Siip tintica ticom viihi. young.man Md-Aw Md-Hz DT-have-harpoon
('El joven tenía ése como arpón.) (The young man had that one as a harpoon.)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{4}{*}{(56)} & Haxz & hizquih & tiifnii, & titoj, & iii \\
\hline & dog & Px.Pl-F & RL-HAVE & RL-HA & \\
\hline & \multicolumn{5}{|l|}{'El perro tiene narices, tiene ojos, tiene hocico.'} \\
\hline & \multicolumn{5}{|l|}{A dog has a nose, eyes, and a snout. (HE9} \\
\hline
\end{tabular}

When the denominal verb is in a transitive clause (active or passive), it may have either an indefinite direct object (subject in the passive) or a definite one. If the direct object of a denominal verb is overt, it may be of a variety of forms, most of which are possible with ordinary verbs.

The direct object may be a nominal phrase with a head noun that has the same root as the one appearing in the verb. This nominal may be indefinite or definite.

\section*{(57) Haat impoozyax,}
limberbush 2SGS-Ir.Dp-saw-ImpF

\title{
[ hacalca queejim pac] inseaacalca aha.
} Abs.clothing SN-old some 2SGS-Ir-HAVE-clothing Aux-DCL
'Cuando cortas torote, debes llevar ropa vieja.' RMH_07-11-07_8a
When you are going to cut limberbush, you should wear old clothes. (DS2005, queáacalca)
(58) Ctam ticop [ caamiz \({ }^{\circ}\) cmaa quiih \(\left.{ }^{\circ} \mathrm{z}\right]\) itexl, iyicaamiz. man MD-VT shirt new a 3:3-Rl-take 3:3-DT-HAVE-shirt 'El hombre compró una camisa nueva y se la puso.'
That man bought a new shirt and put it on. (DS2005, quicáamiz) RMH_07-11-07_8b

\section*{[ Caamiz hipquih ] insicaamiz aha.} shirt Px-Fl 2SGS-Ir.ID-HAVE-shirt Aux-Dcl
'Debe llevar esta camisa.'
You should wear this shirt. RMH_07-11-07_8C
(60) Hant impamatj \(x\), [mitaamt quih ] hitaamt.
land 2SGS-Ir.Dp-feel.heat UT 2P-sandal(s) the.Fl Im-have.sandal(s)
'Si el suelo te parece caliente, ponte los huaraches.'
If the ground seems hot to you, put on your sandals. (DS2005, quitáamt) RMH_07-11-07_8d
(61) Tiix Socaaix quihiizitim iha.

DDS Punta Chueca SN-have-birthplace DCL
'Nació en Punta Chueca.'
S/he was born in Punta Chueca. RmH_08-04-07_68a
(62) i Zó hant -ya htihiizitim?
which? place QM 1SGS.Tr-RL-HAVE-birthplace
‘¿Dónde nací?’
Where was I born? RмH_08-04-07_68b
The direct object may be a nominal phrase that has a head noun that is not cognate with the
root of the denominal verb.
(63) [Hataamt coopol pac] intipazaatoj? \({ }^{11}\)

Abs-sandal(s) SN-black some 2 SGS-RL-HAVE-shoe-PL
‘¿Tienes zapatos negros?’
Do you have black sandals? (DS2005, quipazáatoj) RMH_08-24-07_79
(64) [Saaco quih ] imeaacalca. long-sleeved.blouse the.FL 3:3-Px-HAVE-clothing
'Está llevando/poniéndose una blusa con mangas largas.'
She is wearing/putting on a long-sleeved blouse. RmH_07-11-07_9b
(65) [ Ziic hipquij] ihsiixz aha.
bird Px-Cm 1SgS.Tr-Ir.Id-have-pet Aux-Dcl
'Tendré este pájaro como mascota.'
I will have this bird as a pet. RMH_07-11-07_9c
(66) \(\quad\).. [ hanaj haaonam xah \({ }^{\circ}\) hehe hamasij \({ }^{\circ}\) xah ], taax itiionatz, ... raven ABs-hat CRD ceremonial.crown CRD DDP 3:3-RL-HAVE-hat-PL
'... llevaban adorno de plumas y coronas ceremoniales, ...'
... they were wearing feather headdresses and wooden ceremonial headpieces, ...
(unpublished text) RMH_08-24-07_80
The direct object of the transitive denominal verbs, like those of other verbs, may be a nominal with one of the modifiers as fused head (see \(\S 4.3\) ). An indefinite article (§4.3.1), demonstrative (§4.3.2), adjective (§4.3.3) or deverbal noun (§4.3.4) (including those based on the number predicates) may be fused with the head in these nominals. (The ungrammatical examples included here demonstrate that these overt nominals cannot combine with intransitive versions of these predicates.)
(67) [ Zo \(]\) hsicaamiz aha. a/one 1SGS.Tr-Ir.Id-hAVE-shirt Aux-DcL
'Llevaré una (camisa).' o 'Me pondré una (camisa).'
I will wear one (shirt). or I will put one (shirt) on. RMH_07-11-07_11d
[Pac ] ihsicaamijoi aha. some 1 GGS.Tr-Ir.Id-have-shirt-Pl Aux-Dcl
'Llevaré algunas (camisas).' o 'Me pondré algunas (camisas).'
I will wear some (shirts). or I will put some (shirts) on. RMH_07-11-07_11e
a. \(\underset{\text { Px-FL }}{\text { Hipquih }]}\)
hsicaamiz
aha. Px-Fl 1SGS.Tr-Ir.ID-HAVE-shirt Aux-Dcl

\footnotetext{
\({ }^{11}\) The clash between the root of the denominal verb and the root of the direct object noun in this example that makes it less acceptable for some speakers. The singular form coopol is entirely appropriate, however.
}
b. \(\quad\)\begin{tabular}{lll}
{\([\underset{\text { Px.FL }}{\text { Hipquih }}]\)} & hpsicaamiz & 1SGS.In-IR.ID-HAVE- shirt \\
& AUX-DCL
\end{tabular}
'Llevaré ésta (camisa).' o 'Me pondré esta (camisa).'
I will wear this one (shirt). or I will put this one (shirt) on. RMH_07-11-07_11c
[ Tazo] hyicaamiz.
one 1SGS.Tr-Dt-have-shirt
'Yo estaba llevando UNA camisa.'
I was wearing ONE shirt. RMH_07-11-07_10b
(71) [ Tazo ] iyitaamt. one 3:3-Dt-HAVE-sandal(s)
'Se puso UN huarache.' RMH_07-11-07_14f I was wearing ONE sandal.
\begin{tabular}{|c|c|c|}
\hline a. & [ Coocj quih & hyomicaamiioj. \\
\hline & SN-two the.Fl & 1SGS.Tr-Dt-N-HAve-shirt-PL \\
\hline b. & *[Coocj quih ] & hpyomicaamijoj. \\
\hline & SN-two the.Fl & 1SGS.In-DT-N-HAVE-shirt-PL \\
\hline
\end{tabular}
'No estaba llevando dos camisas.'
I was not wearing two shirts. RmH_07-11-07_10a
(73) [Coocj] -ya ntitrooquij?

SN-two QM 2SGS-RL-HAVE-vehicle-PL
‘¿Tienes dos vehículos?’
Do you own two vehicles? RMH_07-11-07_10c
(74) Me [coocj] sitrooquii quee -ya?

2Pro SN-two Ir.Id-have-vehicle-Pl Aux.SN QM
‘¿Tendrás dos vehículos?’
Will you own two vehicles? RMH_07-11-07_10d
(75) [Cheel zo] hyomicáamiz.

SN-red a 1SGS.Tr-Dt-N-have-shirt
'No estoy llevando una camisa roja.'
I'm not wearing a red shirt. RMH_07-11-07_11a
(76) Ziix [cmeque zo ] \({ }^{12}\) quicápota zo toc cöimiij iha.
thing SN-warm a SN-Tr-HAVE-jacket a there 3IO-SN-N-sit DCL
'Nadie llevaba una chaqueta cálida.'
No one was wearing a warm jacket. (Viaje_Tiburon_3) XмH_07-11-07-7b
\(\left[\underset{\text { Hizcoi }]}{\text { Hx-PL }} \frac{\text { hsitaamt }}{1 \text { SGS.TR-IR.ID-HAVE- sandal(s) Aux-DCL }}\right.\)
'Me pondré éstos (huaraches). o Llevaré éstos (huaraches).'
I will put these (sandals) on. or I will wear these (sandals). RMH_07-11-07_14e

\footnotetext{
\({ }^{12}\) The word ziix in this example could potentially be taken as the head of the object DP rather than the subject DP.
}

A definite article does not fuse with the empty head to form a DP (§4.3) and therefore there are no cases of direct objects of denominal verbs that consist of solely a definite article.
a. * [ Quih ] hyomicaamiz.
the.Fl 1SGS.Tr-Dt-N-have-shirt
b. * [ Quih ] hpyomicaamiz.
the.Fl 1SGS.In-Dt-N-have-shirt ('No estoy llevando la camisa.') (I'm not wearing the shirt.)

The intensifying adverb anxö easily modifies an intransitive denominal verb, although the translation may require a direct object. The intransitivity of the construction is overtly indicated in (80) by the allomorph hp- of the first person singular subject inflection.
\begin{tabular}{lllll} 
(79) Anxö quitaast iha. (80) & He anxö ihptitaast? \\
& INTNS SN-HAVE-tooth DCL & & 1PRO INTNS 1SGS.In-RL-HAVE-tooth \\
& 'Tiene muchos dientes.' & & ‘Tengo muchos dientes?' \\
& S/he/it has a lot of teeth. RMH_07-11-07_13a & & Do I have a lot of teeth? RMH_07-11-07_13r
\end{tabular}

\subsection*{19.3.1.1 Direct object with material noun}

One kind of direct object is apparently unique with the denominal verb. Recall that a noun may be modified by a preceding noun phrase that indicates the material of which the second noun (the head noun) consists (§8.2.1). So mooj poosj (cotton rope) means cotton rope. The direct object of a denominal verb can be a noun that is understood as modifying the noun root of a transitive denominal verb. This kind of object cannot be used with intransitive versions of the denominal verbs.
\begin{tabular}{|c|c|c|}
\hline [ Hooro ] & quitaast & iha. \\
\hline gold & SN-have-tooth & DCL \\
\hline 'Tiene die & te(s) de oro.' & \\
\hline S/he has & gold tooth/teeth. & RMH_07-11-07_1 \\
\hline
\end{tabular}
a. ¿[ Hooro ] htitaast? gold 1SGS.Tr-RL-HAVE-tooth
‘¿Tengo diente(s) de oro?’
Do I have a gold tooth/teeth? RMH_07-11-07_12b
```

a. [Hooro ] ititaast?
gold 3:3-RL-HAVE-tooth

```
b. * ¿Hooro hptitaast? gold 1SGS.In-RL-HAVE-tooth
\begin{tabular}{rl} 
a. & Hooro ] \\
gold & \begin{tabular}{l} 
ititaast? \\
3:3-RL-HAVE-tooth
\end{tabular}
\end{tabular}
b. * ¿Hooro titaast? gold RL-HAVE-tooth
‘¿Tiene diente(s) de oro?’
Does s/he have a gold tooth/teeth? RMH_07-11-07_12c
[ Eenim ih ] ititáamt, yoque.
metal Foc 3:3-RL-have-sandal(s) Dt-US-say
'Llevaba huaraches de metal, se dice.'
He wore metal sandals, it is said. (Apostador_31) RMH_07-11-07_12d
i [ Ziic ina ih ] iticaamiz?
bird 3P-feather Foc 3:3-Rl-haVe-shirt
‘¿Se puso (o, llevaba) una camisa de plumas?’
Did s/he put on (or, was s/he wearing) a feather shirt? RmH_07-11-07_149
Such direct objects cannot be used with typical verbs for the intended readings, as shown in (86)-(89). A suitable substitution requires a nominal that includes a copular verb, as shown in (90).
* [ Hateeya ] \begin{tabular}{lll} 
ano & hpsoosi & aha. \\
glass & 3P.in & 1SGS.In-Ir.Id-UO-drink AUx-DCL
\end{tabular} ('Tomaré de el de vidrio.') (I will drink from the glass one.)
[ Hooro quih ] hyooho. gold the.FL 1SGS.Tr-DT-see
'Vi el oro.' (No significa 'Vi el de oro.')
I saw the gold. (Doesn't mean I saw the gold one.) RMH_07-11-07_14i
[Eenim ih ] itexl ... metal Foc 3:3-Rl-take
'Llevó el metal/cuchillo.' (No significa ‘Llevó el de metal.')
S/he took the metal/knife. (Does not mean S/he took the metal one.) RMH_07-11-07_14h
?* \(\left[\begin{array}{llllll}\text { Ziic } & \text { ina } & \text { ih }\end{array}\right]\) \(\mathbf{i t i} \quad\) hsiih \(\quad\) aha.
[ Hateeya quih chaa quij] ano hpsoosi aha.
glass the.FL SN-EQ the.Cm 3P.in
'Tomaré de el de vidrio.'
I will drink from the glass one. RMH_-07-11-07_13a

In working to verify this, consultants offered and confirmed the following as grammatical examples. These require careful explanation. (The free translations do not necessarily represent the structure of the sentence, of course.) First, they are clearly intransitive (note the allomorph \(\mathbf{h p}\) - of the first person subject inflection). Second, they have NPs that are not the subject. It is crucial to notice the third person indirect object inflection co- on the verb in (91) and the second person indirect object inflection me on the verb in (92).
(91) Juan quih cohpxitrooqui.

Juan the.Fl 3IO-1SGS.In-Em-have-vehicle
'Tengo un vehículo como el de Juan.'
I have a vehicle like John's! RMH_07-11-07_13b
(92) ¿Me hptitrooqui?

2IO 1SGS.In-Rl-HAVE-vehicle
‘¿Tengo un vehículo como el tuyo?’
Do I have a vehicle like yours? RMH_07-11-07_13c
These sentences are similar to those found with simple verbs where an oblique object of comparison is included (§2.4). They may even be a bit more complicated: an oblique object of comparison is present as well as a NP of material.
(93) Ctam, tiix hooro cohptitaast?
man DDS gold 3IO-1SGS.In-RL-HAVE-tooth
‘¿Tengo un diente de oro como ese hombre tiene?'
Do I have a gold tooth like that man has? RMH_07-11-07_13d
The translation of the preceding example is important: the speaker is comparing the fact that \(\mathrm{s} / \mathrm{he}\) has gold dental work like the man in question has some kind of gold dental work. Nevertheless, transitive examples such as the following are also possible. As these examples were explained, the comparison here is much more explicit and direct: the gold dental work of the speaker and the man are being compared.
(94) Ctam, tiix hooro cohtitaast?
man DDS gold 3IO-1SGS.Tr-RL-HAVE-tooth
'¿Tengo diente de oro como el de ese hombre.'
Do I have a gold tooth like that man's? RMH_07-11-07_13e
(95) Ctam, tiix hooro cöixitaast.
man DDS gold 3IO-OM-RL-HAVE-tooth
'Tiene un diente de oro como el de ese hombre.'
S/he has a gold tooth like that man's. RмH_07-11-07_13f

\subsection*{19.3.2 Anaphora}

\subsection*{19.3.2.1 Clauses with denominal verbs referring to an established referent}

Not surprisingly, the transitive denominal verb may have a pronominalized (and hence nonovert) direct object that refers to a previously introduced nominal.
\begin{tabular}{lllllll} 
Xalaa & heecto & pac & haa & yaii & tax, & \\
cactus.wren & juvenile-PL & some & there & DT-be.Fl.PL & SBRD
\end{tabular}
'Esa niña trajo una de las matracas chiquitas que estaban allí y la domesticó.'
Some little cactus wrens were there (and) that child brought one and had it as a pet. (DS2005, quiixz) RMH_07-11-07_13g
\begin{tabular}{|c|c|c|}
\hline \[
\begin{array}{ll}
\text { Caamiz } & { }^{\circ} \text { cmaa quiih }{ }^{\circ} \\
\text { shirt } & \text { new }
\end{array}
\] & \[
\begin{aligned}
& \text { hipquih }]_{\mathrm{i}} \\
& \text { Px-FL }
\end{aligned}
\] & me hmacóxetol, 2IO 1SGS.Tr-Px-buy.for \\
\hline \(\emptyset_{\mathrm{i}}\) insicaamiz & ta & ma \\
\hline 2SGS-Ir.ID-HAVE & irt Aux.P & \\
\hline
\end{tabular}
'Compré esta camisa nueva para ti para que la lleves.'
I bought this new shirt for you to wear. RMH_07-11-07_13h
The denominal verb in example (97) is ambiguous in its transitivity, but apparently the denominal verb may be either transitive or intransitive in similar contexts (although the translations offered are not identical), as the following unambiguous examples show.
(98) a. Transitive
\(\varnothing_{i}\) He yacóxetol, \(\varnothing_{i}\) ihsicaamiz ta ma.
1IO Dt-buy.for 1 SGS.Tr-Ir.ID-HAve-shirt Aux.Rl DS
'Me la compró para que la llevara.'
S/he bought it for me, so that I would wear it. RMH_07-11-07_13i
b. Intransitive

Ø He yacóxetol, ihpsicaamiz ta ma. 1 IO Dt-buy.for 1 SGS.In-Ir.Id-have-shirt Aux.Rl DS
'Me la compró para que yo tuviera una camisa.'
S/he bought it for me, so that I would have a shirt. RMH_07-11-07_13j
In (99) the denominal verb is passivized.
\begin{tabular}{cll}
{\([\) Hataamt } & quiifazim \(]_{i}\) & quih hyomqueepe; \\
AbS-sandal(s) & SN-make.snapping.sound.ImPF & the.FL \\
1SGS.Tr-DT-N-like
\end{tabular}

'No me gustan las hawaianas; cuando se llevan, hacen un sonido desagradable.'
I don't like flip flops; when they are worn, they make an unpleasant snapping sound. (DS2005, hataamt) RMH_07-11-07-7c

\subsection*{19.3.2.2 Denominal verbs setting up reference}

When it comes to the question of whether or not the denominal verb can set up reference for a subsequent anaphor, the facts are not so clear. In the most common examples, the intransitive denominal verb does not have a referential base. But in order to check the facts more thoroughly, examples were constructed and elicited in a simple context to establish the reference. The results shown here are fully acceptable, although some seem to be a bit awkward nonetheless. If the
denominal verb is transitive, as in (100) and (101), there is no problem, of course. One example, (102), is ambiguously transitive or intransitive. The other examples have unambiguously intransitive denominal verbs, and these also are grammatical as best as could be determined.
\begin{tabular}{|c|c|}
\hline (100) & \begin{tabular}{l}
\(\varnothing_{i} \frac{\text { Ihticaamiz }}{\text { 1SGS.TR-RL-HAVE-shirt }} \mathbf{~ D S ~} \quad \varnothing_{i} \quad \begin{aligned} & \text { tihizlc ma, mirty DS }\end{aligned}\) \\
\(\emptyset_{i}\) hax ano hyooh. \\
water 3P.in 1SGS.Tr-Dt-put.FL
\end{tabular} \\
\hline & \begin{tabular}{l}
'La llevaba, se ensució, y la lavé.' \\
I was wearing it, it got dirty, and I washed it. RMH_07-11-07_13k
\end{tabular} \\
\hline (101) & [Caamiz quihizlc quih ] ihacaamiz hiimzo piquix, shirt SN-dirty the.Fl Inf.Tr-have-shirt 1P-PON-want Hypoth \(\varnothing_{i}\) hax ano hsiih aha. water 3P.in 1SGS.Tr-Ir.Id-put.Fl Aux-Dcl \\
\hline & \begin{tabular}{l}
'Si yo llevara la camisa sucia, la lavaría.' \\
If I were to want to wear the dirty shirt, I would wash it. RMH_07-11-07_13n
\end{tabular} \\
\hline (102) & \begin{tabular}{l}
 \\
1P-PON-have-shirt Hypoth water 3P.in 1SgS.Tr-Ir.Id-put.Fl Aux-Dcl \\
'Si hubiera llevado una camisa, la lavaría.' o 'Si la hubiera llevado, la lavaría.' \\
If I had worn a shirt, I would wash it. or If I had worn it, I would wash it. \\
[ambiguous transitivity] RMH_07-11-07_13m
\end{tabular} \\
\hline (103) &  \\
\hline & \(\emptyset_{i}\) hax ano hyooh. water 3P.in 1SGS.Tr-Dt-put.Fl \\
\hline & \begin{tabular}{l}
'Llevaba una camisa, se ensució, y la lavé.' \\
I was wearing a shirt, it got dirty, and I washed it. RMH_07-11-07_131
\end{tabular} \\
\hline (104) & Iquicaamiz hiimzo piquix, \\
\hline & Inf.IN-HAVE-shirt 1P-PON-want Hypoth \\
\hline & \(\emptyset_{i}\) hax ano hsiih aha. water 3P.in 1SgS.Tr-Ir.Id-put.Fl Aux-Dcl \\
\hline & \begin{tabular}{l}
'Si yo llevara una camisa, la lavaría.' \\
If I were to want to wear a shirt, I would wash it. RMH_07-11-07_130
\end{tabular} \\
\hline (105) & \(\begin{array}{lllll}\text { ¿Cocsar } & \text { tiquij } & \text { ihyaai! } & \text { ¿Hoocta! } & \text { ¿Tiixa? } \\ \text { Mexican } & \text { MD-CM } & \text { Im-go.to } & \text { IM-look.at } & \text { RL-HAVE-water }\end{array}\) \\
\hline
\end{tabular}
\begin{tabular}{lllllll} 
Piixa & ta & \(\mathbf{x}\), & pac & iti & caaom. & Sasyoj. \\
Ir.DP-HAVE-water DS & UT & some & 3P-on & Im-beg & IR.ID-1Em.S.TR-drink-PL
\end{tabular}
'Vete a ese mexicano no indígena para ver si tiene agua. Si tiene agua, pídesela.
Bebámosla.'
Go over to that non-Indian Mexican to see if s/he has any water. If s/he has water, ask her/him for some. Let's drink it. RMH_07-11-07_13p
(106) Iiztox quipxa poome ta \(\mathbf{x}\), sitaast aha.

3P-moon/month-Pl SN-few Ir.Dp-end DS UT Ir.Id-HAVe-tooth Aux-Dcl
'Dentro de pocos meses tendrá dientes.'
In a few months she will have teeth. RмH_08-24-07_81
ma htcmahásaquim
1SGS.In-RL-N-HAVE-brush 2SGDO 1SGS.Tr-Rl-N-brush.someone DS
\begin{tabular}{lll} 
milít & quij & mozazni. \\
2P-hair/head & the.CM & Px-tangled
\end{tabular}
'No tengo cepillo y no puedo cepillarte, tu cabello está desarreglado.'
I don't have a brush, I can't brush your hair, your hair is messed up. RMH_07-11-07_13q
(108) He ziix \(z\) imiime ha. ¿Ziix zo ntcmiime?

1Pro thing a SN-N-have-home Dcl thing a 2SGS-RL-N-have-home
'No tengo casa. ¿No tienes tú?'
I don't have a house. Don't you have one? rмн_08-04-07_69
(109) Zixquisiil \({ }^{\circ}\) quih hax imiit oo cöquiih iha. child the.Fl Intns SN-N-HAVe-head.louse-Pl DL 3IO-SN-be.Fl Dcl 'El niño/ La niña tiene pocos piojos.'
The child has very few head lice. (DS2005, hax) RMH_08-04-07_70

\subsection*{19.3.3 Morphology of denominal verbs}

A denominal verb stem consists of a root preceded by a verbalizer \(\mathbf{i}\)-, as shown in (41) above. In a few cases, the denominal verb (unpredictably, so far as is known) also requires a suffix such as -t (unknown meaning, perhaps an allomorph of -ot, see note 66 in §19.7), or has irregular stem changes (change in vowel, inclusion of a vowel). These facts would indicate, it seems, that this word formation rule is quite old. Some of these irregular stems are presented in (110).
\begin{tabular}{llll} 
& Noun root & Verb stem & \\
a. & \(V_{\text {taasi }}\) & \(V_{\text {itaasit }}\) & have name \\
b. & \(V_{\text {csaai }}\) & \(V_{\text {icsaa }}\) & have brush \\
c. & \(V_{\text {lit }}\) & \(V_{\text {iliti }}\) & have long hair \\
d. & \(V_{\text {scam }}\) & \(V_{\text {iscama }}\) & have reed boat \\
e. & \(V_{\mathbf{s x a p}}\) & Visxapa & have crown of head \\
f. & \(V_{\text {sliic }}\) & Visliiqui & be left-handed
\end{tabular}
\begin{tabular}{llll} 
g. & \(V_{\mathbf{x a a i}}{ }^{13}\) & Vixaa & have roots \\
h. & \(\sqrt{\text { yeen }}\) & Vyeeno & have face \\
i. & \(\sqrt{ }\) VVf & Viifa & have nose \\
j. & \(\sqrt{ }\) Vx & Viixa & have water \\
k. & \(V_{\text {Vstalca }}{ }^{14}\) & Vihístalca & have leaves, ruffles
\end{tabular}

While the formation of denominal verbs seems to be productive, it is limited by the fact that the eligible roots must be bound nominal roots - such as body part noun roots, personal items, and kinship terms. A few verbs appear to have free noun stems, but such derivation is not productive and is semantically unpredictable. None of the examples of denominal verbs that have been recorded or elicited is a complex noun stem (compound or derived noun), and none is a name.

Denominal verb stems indicate subject number inflection as do common verbs. But they may commonly indicate the number of the items "had", and the same kind of ambiguity may arise with them as does with possessed nouns (§13.2.2). See the stems in (111).


\subsection*{19.3.3.1 Allomorphy}

The morpheme that derives denominal verb stems from noun roots with the meaning HAVE is quite evidently \(\mathbf{i}\)-. This is seen most clearly with consonant-initial roots, as in (112).
(112) Examples of denominal verb formation on consonant-initial roots
\begin{tabular}{llll} 
& Noun root & Verb stem & \\
a. & \(V_{\text {caamiz }}\) & Vicaamiz & wear shirt \\
b. & \(V_{\text {cápota }}\) & Vicápota & wear jacket \\
c. & \(V_{\text {hmiiha }}\) & Vihmiiha & leave footprints \\
d. & \(V_{\text {mazaj }}\) & Vimazaj & have clay pot \\
e. & \(V_{\text {meanoin }}\) & Vimcanoin & have pot (especially of metal)
\end{tabular}

\footnotetext{
\({ }^{13}\) The plural noun stem is \(V_{\mathbf{x a a i c o j}}\); note that the derived verb has a distinct shape.
\({ }^{14}\) This is a plural noun stem.
\({ }^{15}\) The stem \(\sqrt{ }\) iionam may also be used here.
\({ }^{16}\) The singular root for louse is \(\sqrt{ } \mathrm{V} \mathbf{i}\), but it is the plural stem \(\sqrt{ }\) Vit that is used to form the deverbal noun.
}
\begin{tabular}{llll} 
f. & \(V_{\text {naail }}\) & \(V_{\text {inaail }}{ }^{\text {17 }}\) & have skin \\
g. & \(V_{\text {neezj }}\) & \(V_{\text {ineezj }}\) & have scales \\
h. & \(V_{\text {nlaz }}\) & \(V_{\text {inláz }}\) & have fingers \\
i. & \(V_{\text {nooslca }}\) & \(V_{\text {inooslca }}\) & have fingernails, claws \\
j. & \(V_{\text {pazaatoj }}\) & \(V_{\text {ipazaatoj }}\) & have shoes \\
k. & \(V_{\text {pnaail }}\) & \(V_{\text {ipnaail }}\) & have skirt \\
l. & \(V_{\text {quejöc }}\) & \(V_{\text {iquejöc }}\) & have firewood \\
m. & \(V_{\text {slaaizil }}\) & \(V_{\text {islaaizil }}\) & have shoulders \\
n. & \(V_{\text {sxap }}\) & \(V_{\text {isxáp }}\) & have crown of head \\
o. & \(V_{\text {taamt }}\) & \(V_{\text {itaamt }}\) & have sandals \\
p. & \(V_{\text {taast }}\) & \(V_{\text {itaast }}\) & have tooth, teeth \\
q. & \(V_{\text {taamalca }}\) & \(V_{\text {itaamalca }}\) & have horns \\
r. & \(V_{\text {teel }}\) & \(V_{\text {iteel }}\) & have edge \\
s. & \(V_{\text {teen }}\) & \(V_{\text {iteen }}\) & have mouth \\
t. & \(V_{\text {teems }}\) & \(V_{\text {iteems }}\) & have beard \\
u. & \(V_{\text {toaa }}\) & \(V_{\text {itoaa }}\) & have skin \\
v. & \(V_{\text {tom }}\) & \(V_{\text {itóm }}\) & have money \\
w. & \(V_{\text {yaacni }}\) & \(V_{\text {yaacni }}\) & have weapon (bow or gun) \\
x. & \(V_{\text {yanopj }}\) & \(V_{\text {yanopj }}\) & have hoof, fist
\end{tabular}

This prefix, unlike the \(3: 3\) prefix that occurs in subject-oriented deverbal nouns (§17.1.2.1), does not delete before an ordinary consonant, obviously. But like that morpheme and also like the final or only \(\mathbf{i}\) of the possessive prefixes, it deletes (or is absent) before \(\mathbf{y}\) and before the (rare) explicit vowel-initial roots (such as \(\sqrt{ }\) eenim have knife from the root \(\sqrt{ }\) eenim knife).

The prefix is either short or long when used in combination with V and VV -initial roots, respectively; see the examples in (113) and (114). It has the allomorph \(\mathbf{e}\) when it occurs before a, as it does in have/wear clothing: لeáacalca.
(113) Examples of denominal verb formation on short vowel-initial roots
\begin{tabular}{|c|c|c|c|}
\hline & Noun root & Verb stem & \\
\hline a. & \(\checkmark\) Vcalca & Veaacalca & clothing \\
\hline b. & \(\checkmark\) Vhic & \(\checkmark\) ihic & seed \\
\hline c. & \(\checkmark\) Vleca & \(\checkmark\) V́leca & drool \\
\hline d. & \(\checkmark\) Vmas & \(\checkmark\) imas & pubic hair \\
\hline e. & \(\checkmark\) Vmjö & \(\checkmark\) imjö & anus \\
\hline f. & \(\checkmark \mathrm{Vms}\) & \(\checkmark \mathrm{Vims}\) & \(\operatorname{gill}(s)\) \\
\hline g. & \(\checkmark \mathrm{Vmt}\) & \(\checkmark\) imt & breast \\
\hline h. & \(\sqrt{ }\) Vna & \(\checkmark\) ina & fur \\
\hline 1. & \(\checkmark\) Vnl & \(\checkmark\) inl & hands \\
\hline j. & \(\sqrt{ }\) Vnol & \(\checkmark\) inol & hand and arm \\
\hline
\end{tabular}

\footnotetext{
\({ }^{17}\) This verb stem also means be empty.
}
\begin{tabular}{|c|c|c|c|}
\hline k. & \(\checkmark\) Vpij & \(\checkmark\) ipij & lower leg \\
\hline 1. & \(\checkmark\) Vsc & \(\checkmark\) isc & body lice \\
\hline m . & \(\checkmark\) Vselca & \(\checkmark\) Víselca & wings \\
\hline n. & \(\checkmark\) Vsloj & \(\checkmark\) isloj & outer ears \\
\hline o. & \(\sqrt{ }\) Vtac & \(\checkmark\) itac & bone \\
\hline p. & \(\checkmark \mathrm{Vtj}\) & \(V_{\text {itj }}\) & trunk of body \\
\hline q. & \(\sqrt{ }\) Vte & \(\checkmark\) itc & scrotum and testicles \\
\hline r. & \(\checkmark\) Vtoj & \(\checkmark\) itoj & eyes \\
\hline s. & \(\checkmark\) Vtox & \(\checkmark\) itox & tears \\
\hline t. & \(\sqrt{ }\) Vts & \(\checkmark\) its & umbilical cord \\
\hline
\end{tabular}
(114) Examples of denominal verb formation on long vowel-initial roots


In a transitive infinitive, the \(\mathbf{i}\) is replaced by or changed to \(\mathbf{a}\); thus ihacáamiz (Inf.Tr-haveshirt) to wear it (shirt), as in (101). The presumed underlying form is \{iha \(\left.\mathbf{a b b l}_{\mathrm{Ab}} \mathbf{- i}-\mathbf{c a a m i z}\right\}\), where the typical pattern is for that particular infinitive prefix to change the quality of the following vowel and for the first vowel (the a) to delete; see \(\S 17.2\). . The intransitive infinitive does not have this ablauting characteristic and the infinitive is as expected: iquicáamiz from underlying
\{ica-i-caamiz\} (INF.IN-HAVE-shirt).
The prefix \(\mathbf{i}-(\operatorname{HAVE})\) is also phonetically absent when the denominal verb is passivized. \({ }^{18}\)

\footnotetext{
\({ }^{18}\) It might be argued that the prefix \(\mathbf{i}-\) does occur underlyingly, however, since the passive prefix has two completely regular suppletive allomorphs: \(\mathbf{p}\) - before vowel-initial roots, and \(\mathbf{a h}-\) elsewhere, including before consonant-initial roots and vowel-initial prefixes (Marlett 1981b). The fact that the allomorph ah- occurs in the passive form of -itaamt have sandals is uninteresting perhaps, as we expect \(\mathbf{a h}\) - before vowel-initial prefixes as well as consonants; it's just matter of accounting for the absence of the \(\mathbf{i}-\). The passive form of -eenim have knife is more interesting: the fact that the same allomorph ah-occurs in the passive form of this verb follows directly if the verb stem is -[i [eenim]]. If the base to which passive is applied were [eenim], one would incorrectly expect \(\mathbf{p}-\). Alternatively, one might claim that the denominal stem is \({ }_{\mathrm{V}}[\mathrm{N}[\mathbf{e e n i m}]]\) and that the correct generalization is that \(\mathbf{p}\) - occurs before vowel-initial verb roots, and \(\mathbf{a h}\)-elsewhere. The allomorph \(\mathbf{a h}\)-occurs at the beginning of a verb stem and at the beginning of a noun root, but not at the beginning of a verb root.
}
\begin{tabular}{llll} 
& Active stem & Passive stem & \\
a. Vitaamt & Vahtaamt & have sandal(s) \\
b. Veenim & Vaheenim & have knife
\end{tabular}

The denominal verbs may have causative forms. For example, Vitaasi have name has a causative counterpart \(\sqrt{ }\) ataasitot give name to. These forms are discussed in §19.5.7.

A few verbs are similar to the denominal verbs based on possessed nouns in that they have the vowel \(\mathbf{i}\) before a noun root, but the noun base of these is an independent noun. Some of these have fairly predictable meanings based on the productive pattern above, but they are generally used intransitively. \({ }^{19}\)
\begin{tabular}{lllll} 
a. & xeele & fog & Vixeele & foggy \\
b. & heexoj & torch & Viheexoj & have torch \\
c. & hapoj & digging stick & Vihapoj & have digging stick
\end{tabular}

Others show a much less direct relationship between the two lexical items; it may even be in some cases that the relationship is spurious.
\begin{tabular}{lllll} 
a. & ctam & man & \(\sqrt{ }\) ictamo & fierce \\
b. & hehe & plant & \(\sqrt{ }\) ihehe & be leader \\
c. & caay & horse & \(\sqrt{ } \mathbf{i c a a y o t}\) & go on four feet \\
d. & csipx & certain resin & \(\sqrt{ } \mathbf{i c s i p x}\) & have reddish birthmark \\
e. & haxöl & clam & \(\sqrt{ } \mathbf{i h a x o ̈ l ~}\) & have spoon, use as spoon
\end{tabular}

The process has gone a further step in a couple of cases, resulting in some near synonyms. The possessed nouns \(\sqrt{ }\) Vmoz (see imoz her/his heart) and \(\sqrt{ }\) VVsax (see iisax) are the obvious bases of the verbs \(\sqrt{\operatorname{imoz}}\) think, expect and \(\sqrt{\text { iisax }}\) have life, respectively, which also occur in various other expressions. Nouns derived from these verbs, لVihimoz thought and \(\sqrt{ }\) ihiisax breath, spirit, life now stand alongside the original base nouns and sometimes are freely interchanged in some idiomatic expressions. (The noun iisax does not have a strong lexical status outside of these idiomatic expressions, however, and therefore is not translated here.)

One special piece of evidence favors the claim that the verbalization is based on the possessed noun. The verb stem \(\sqrt{\text { yaacni }}\) have a bow stands alongside the possessed noun stem \(\checkmark\) yaacni bow and the unpossessed form haacni bow. The form of the denominal verb is obviously more similar to, and straightforwardly derivable from, the possessed noun stem but not from the unpossessed form.

\footnotetext{
\({ }^{19}\) The expression \(\sqrt{ }\) ihaxöl have spoon is one that can easily be used transitively.
}

\subsection*{19.3.4 Kinship verbs}

In a way completely analogous to the denominal verbs discussed above, and using the same morphology, the obligatorily possessed kinship noun roots may appear in denominal verb forms. \({ }^{20}\) As an example, consider the root \(\sqrt{ } \mathrm{Vtcz}\) younger sister (of female), which has the overt forms atcz her younger sister, matcz your younger sister, hitcz my younger sister (woman speaking), and hapétcaz, among others; see \(\S 13.2 .3\).1. Alongside these exist the verb \(V_{\text {itcaz }}\) have as younger sister. A set of examples is listed in (118). \({ }^{21}\)
\begin{tabular}{|c|c|c|c|c|}
\hline (118) & \multicolumn{4}{|l|}{Some examples of kinship verbs derived from kinship noun bases} \\
\hline & & Nominal root & Derived stem & have as or call ... \\
\hline & a. & \(\sqrt{ } \mathrm{Vi}\) & \(\checkmark\) leaa & father (of male) \\
\hline & b. & \(\sqrt{ } \mathrm{Vaz}\) & \(\sqrt{ }\) eaaz & maternal grandfather \\
\hline & c. & \(\sqrt{ }\) Vac & \(\checkmark\) eac & child of sister (of male) \\
\hline & d. & \(\checkmark\) Vlxemaam & \(\checkmark\) ilxemaam & husband's brother's wife \\
\hline & e. & \(\sqrt{ } \mathrm{Vm}\) & \(\checkmark\) ima & father (of female) \\
\hline & f. & \(\sqrt{ } \mathrm{Vmaz}\) & \(\checkmark\) imaz & paternal grandmother \\
\hline & g . & \(\sqrt{ } \mathrm{Vpaz}\) & \(\checkmark\) ipaz & paternal grandfather \\
\hline & h. & \(\sqrt{ }\) Vpxaz & \(\checkmark\) ipxaz & child of older sister (of female) \\
\hline & i. & \(\sqrt{ }\) Vta & \(\checkmark\) ita & mother \\
\hline & j. & \(\sqrt{ }\) Vtcz & \(\checkmark\) itcaz & younger sister (of female) \\
\hline & k & \(\sqrt{ } \mathrm{Vzcz}\) & \(\checkmark\) izcaz & younger brother (of male) \\
\hline & 1. & \(\sqrt{ }\) VVet & \(\checkmark\) iict & have a as maternal grandmother \\
\hline & m . & \(\checkmark\) VVitz & \(\checkmark\) iitz & younger paternal uncle \\
\hline & n. & \(\checkmark\) VVcaz & \(\sqrt{ }\) eequez & younger brother (of female) \\
\hline & o. & \(\checkmark\) caac & \(\checkmark\) icaacat & child of daughter (of female) \\
\hline & p. & \(\checkmark\) caaitz & \(\checkmark\) icaaitz & older sister's husband \\
\hline & q. & \(\checkmark\) caasac & \(\checkmark\) icaasac & child of son (of female) \\
\hline & r. & \(\checkmark\) cacám & \(\checkmark\) icacama & son-in-law \\
\hline & S. & \(\checkmark\) camaz & \(\checkmark\) icamaz & daughter-in-law \\
\hline & t. & \(\checkmark\) catazata & \(\checkmark\) icatazata & wife of older brother (of male) \\
\hline & u. & \(\checkmark\) cmaahaj & \(\checkmark\) Vicmaahaj & child of younger brother (of male) \\
\hline & v. & \(\checkmark\) coaac & \(\checkmark\) icoaacat & wife of brother (of female) \\
\hline & w. & \(\checkmark\) comiique & \(\checkmark\) icomiique & son-in-law or daughter-in-law \\
\hline & x. & \(\checkmark\) coome & \(\checkmark\) icoomet & younger sister (of male) \\
\hline & y. & \(\sqrt{\text { maac }}\) & \(\checkmark\) imaacat & older brother (offemale) \\
\hline
\end{tabular}

\footnotetext{
\({ }^{20}\) See Evans (2000).
\({ }^{21}\) The 2005 dictionary lists these verbs and cross-references to them from the kinship terms. In addition, it gives the plural stems, which are another level of complexity. The subject-oriented nominal form of a stem beginning with a stressed \(\mathbf{i}\) followed by consonant has a long \(\mathbf{i}\) because of non-elision of the transitive marker (see §14.1). Thus the citation form of \(\sqrt{ } \mathbf{i m a}\) have as father (offemale) is quiima.
}
\begin{tabular}{|c|c|c|}
\hline z. \(V_{\text {mahaj }}\) & \(\checkmark\) imahaj & older paternal uncle \\
\hline aa. Vmaquete & \(\checkmark\) imaquete & wife's younger sister \\
\hline bb. Vntaac & \(\checkmark\) intaacat & younger maternal aunt \\
\hline cc. Vnyaac & \(\checkmark\) inyaacat & older brother (of male) \\
\hline dd. \(\sqrt{\text { paac }}\) & \(\checkmark\) ipaacat & older sister (of male) \\
\hline ee. Vqueemez & \(\checkmark\) iqueemez & mother-in-law (of female) \\
\hline ff. Vqueemot & \(\checkmark\) iqueemot & wife's brother \\
\hline gg. Vqueepez & \(\checkmark\) iqueepez & father-in-law (of female) \\
\hline hh. Vqueec & \(\checkmark\) iqueequet & husband's sister \\
\hline ii. Vqueetz & \(\checkmark\) iqueetz & husband's younger brother \\
\hline jj. Vqueezi & \(\checkmark\) iqueezi & (male's) daughter's child \\
\hline kk. Vquiipaz & \(\checkmark\) iquiipaz & (male's) son's child \\
\hline 11. Vquiitaz & \(\checkmark\) iquiitaz & (male's) older brother's child \\
\hline mm . \(V_{\text {saac }}\) & \(V\) isaacat & son (of male) \\
\hline nn. Vtalxiicom & \(\checkmark\) italxiicom & wife's sister's husband \\
\hline oo. Vtcamahaj & \(\checkmark\) itcamahaj & (female's) younger sister's child \\
\hline pp. Vtemajeem & \(\checkmark\) itcmajeem & (female's) younger sister's husband \\
\hline qq. Vtmahaj & Vitmahaj & older maternal aunt \\
\hline rr. Vxaac & Vixaacat & maternal uncle \\
\hline ss. Vxiiha & \(\checkmark\) ixiihat & older brother \\
\hline tt. Vzaac & Vizaacat & older sister (of female) \\
\hline uu. Vzmii & Vizmiit & maternal uncle \\
\hline vv. Vzooc & \(V\) izoocat & (female's) brother's child \\
\hline
\end{tabular}

These verbs, which are used with decreasing frequency today since the kinship terms themselves are also used with decreasing frequency, sometimes compete with the kinship term itself. The verb \(\sqrt{ }\) eaa have as father, call father (man) is related to the kinship noun \(\sqrt{ }\) Vi. (Obviously the derivation is not a simple morphological operation in this case unlike others.) An expression with the kinship verb may substitute for an expression using the kinship term.
```

¿Ma teaa?
2SgDO Rl-HAVE-father.of.male
`¿Te llama padre?' = `¿Eres su padre?'
Does he call you father? = Are you his father? RMH_08-04-07_71

```

Another example is the kinship verb \(\sqrt{ }\) ita have as mother, call mother, based on the same root as \(\sqrt{ } \mathrm{V}\) ta mother. \({ }^{22}\)

\footnotetext{
\({ }^{22}\) The English gloss in the 2005 dictionary was in error here: it should have been be mother of (rather than to) and even better (although more literal) would have been call mother, have as mother.
}
(120) Himita ha.

1Pos-ON-N-HAVE-mother DcL
'No es la que llamo madre.' = 'No es mi madre.'
She is not whom I call mother. \(=\) She's not my mother. RMH_08-04-07_72a
(121) Him imita
ha.
1SGDO SN-N-have-mother Dcl
'No es la que me llama madre.' = 'No soy su madre.'
She does not who calls me mother. \(=\) I'm not her mother. RмH_08-04-07_72b

\subsection*{19.4 Experiencer verbs}

A few stative predicates have transitive counterparts to them that include an experiencer as subject. Some examples of these verbs are listed in (122). \({ }^{23}\)
(122) Experiencer verbs based on stative verb roots
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{2}{|l|}{Stative verb} & \multicolumn{2}{|l|}{Experiencer verb} \\
\hline a. Vâaiscan & hard & Vacaaiscan & find hard \\
\hline b. Vaapl & cold & \(\checkmark\) ahaapl & find cold \\
\hline c. Vacat & salty, bitter & Vacaacat & find salty, bitter \\
\hline d. Veomea & noisy & Vacomea & find noisy \\
\hline e. Viipe & good & \(\checkmark\) queepe & like \\
\hline f. \(\quad \backslash \mathbf{j i z i}\) & painful & \(\checkmark\) Vjíz & experience pain from \\
\hline g. haa \(\checkmark^{\text {maco }}\) & unobvious & haa \(\sqrt{ }\) amacot & find unobvious \\
\hline h. \(V_{\text {matj }}\) & hot & \(\checkmark\) amatj & find hot \\
\hline i. \(\quad V_{\text {miipla }}\) & bad & \(\checkmark\) amiipla & dislike \\
\hline j. haai \(\sqrt{\text { mipi }}\) & easy & haai , amipit & find easy \\
\hline k. \(V_{\text {msisíin }}\) & pitiful, cute & \(\checkmark\) amsisiin & have pity on, love \\
\hline 1. Voaatjö & sweet & Vaatjö & find sweet \\
\hline m. \(V_{\text {simta }}\) & itchy & \(\checkmark\) asimta & find itchy \\
\hline m. Vtoozi & tough & \(\sqrt{\text { atoozi }}\) & find tough \\
\hline
\end{tabular}

The verbs pass all of the tests for transitivity (see Appendix C); note that in (123) the 3:3 prefix (§17.1.2.1) occurs on the verb and that in (126) the transitive allomorph of the prefix for first person singular subject ( \(\S 17.1 .2 .1\) ) occurs. The direct object of the experiencer verb is the item that one finds to have the characteristic indicated by the root of the verb. The derived verbs have quite regular meanings with respect to their bases but there is some flexibility, as the translation of \(\sqrt{ }\) aatjö find sweet in the following example illustrates.

\footnotetext{
\({ }^{23}\) Not all of these verbs were recorded in the 2005 dictionary. Two intransitive predicates that do not have experiencer counterparts include \(\sqrt{ }\) isil small and \(\sqrt{ }\) aacoj big.
}
(123) Hiictoj \({ }^{\circ}\) coi pajoocsim quih ixahoaatzil. our.children the.PL saltwort the.FL 3:3-Em-find.sweet-PL
'A nuestros niños les gusta mucho la dulzura de "dedito".' RMH_08-04-07_73a
Our children [women speaking] really like the sweetness of saltwort. (DS2005, caajio)
a.
¿Xojizi!
Em-painful
‘Duele!’
It is painful! RMH-08-04-07_73b
a. ¿Xomiipla!

Ем-bad
‘EEs malo/feo (etc.)!’
It is bad/ugly (etc.)! RMH_08-24-07_82a
a. ¿Quiipe -ya?

SN-good QM
‘¿Es bueno/a?’
Is it good? RMH_08-24-07_82C
a. ¿Tacat?

RL-bitter/salty
‘¿Es amargo/salado?’
Is it bitter/salty? RMH_08-04-07_73h
a. ¿Tsimta?

RL-itchy
‘¿Es hormigoso?’
Is it itchy? RMH_08-04-07_73j
a. ¿Xocomca!

Em-noisy
' \(\ddagger\) Es ruidoso! \({ }^{\prime}\)
It's noisy! RMH_08-04-07_731
b. Hilít ihyajíz.

1P-head 1SGS.Tr-Dt-exper.pain.from
'Me duele la cabeza.'
My head hurts me. RMH_08-04-07_73c
with Experiencer verb \({ }^{24}\)
b. ¿Itamiipla?

3:3-RL-find.bad
¿¿Le parece malo/feo?’
Does s/he dislike it? RMH_08-24-07_82b
b. Ihyoqueepe.

1SGS.Tr-Dt-find.good
'Me gusta/gustó.'
I like/liked it. RMH_08-24-07_82d
b. ¿Intacaacat? RMH_08-04-07_73i

2SGS-RL-find.bitter/salty
‘¿Te parece amargo/salado?’
Do you find it bitter/salty?
b. ¿Intasimta?

2SGS-RL-find.itchy
¿¿Te parece hormigoso?'
Do you find it itchy? RMH_08-04-07_73k
b. Ihmacomea.

1SGS.Tr-Px-find.noisy
'Me parece ruidoso.'
I find it noisy. RMH_08-04-07_73m

\footnotetext{
\({ }^{24}\) The occasional example where a body part is involved as direct object may cause one to think of possessor ascension analyses. However, the direct objects are commonly not body parts or possessed nouns of any sort and yet the syntactic and morphological facts are the same.
}
(130) a. He tazoj \({ }^{25}\) oo, comsisiin iha. 1Pro Rl-alone Dl SN-pitiable DcL 'Soy el único pobre.'
I am the only pitiful/poor one. RMH_08-04-07_73n
b. with Experiencer verb
¡Him xamsisiijc!
1SGDO Em-love-Pl
‘¡Me aman!'
They love me. RмH_08-04-07_730
The following additional examples show the fact that the derived verb may be passivized if the experiencer is unspecified. (Passive examples are only possible on transitive verbs.)
a. Pahcaacat
x, ...
Ir.Dp-Pv-find.bitter/salty UT
'Si uno lo ve amargo/salado, ...'
If it is found to be bitter/salty, ... RMH_08-04-07_73p
b. Quilít pomahjíz \(\mathbf{z}\), ...

US-3P-head Ir.Id-N-find.painful UT
'Si la cabeza de uno no duele, ...'
If one's head does not hurt ... RMH_08-04-07_73q
Impersonal verbs that describe meteorological conditions also have experiential verb counterparts as shown in (132). In this case, the experiential verbs are intransitive; the experiencer is the subject.
(132) Experiencer verbs based on impersonal verbs

Stative verb Experiencer verb
a. Vaapl be cold Vahaapl be cold (because of weather)
b. Vcozim hot (weather) Vacozim be hot (because of weather)
c. Vmeque warm Vameque be warm (because of weather)
a. Ihpyacozim.

1SGS.In-DT-feel.hot.weather
'Tengo calor.'
I'm hot. RMH_08-04-07_74a
b. ¿Tacozim?

RL-feel.hot.weather
‘¿Tiene calor?'
Is she hot? RMH_08-04-07_74b

\footnotetext{
\({ }^{25}\) The dependent verb is not inflected for first person singular subject because the main predicate is expressed with a denominal verb. See §10.4.2.
}
\begin{tabular}{rl} 
a. & Ihpmahaapl. \\
1SGS.In-DT-feel.cold \\
'Tengo frío.' \\
I'm cold. RMH_08-04-07_74c
\end{tabular}

I'm cold. RMH_08-04-07_74c
b. ¿Tahaapl?

RL-feel.cold
‘¿Tiene frío?’
Is she cold? RMH_08-04-07_74d

The morphology and the allomorphy of the prefix that derives experiencer verbs is similar to that which is found in causative verbs (§19.5). In fact, in some cases (but not all), the experiencer verbs are homophonous with the causative verbs. The verb \(\sqrt{ }\) ahaapl as a causative verb is typically transitive and means to cause something to be cold; as an experiencer verb based on the meteorological sense, it is intransitive and means to feel cold.

\subsection*{19.4.1 Sensory verbs without experiencers}

Transitive sensory verbs such as cpii taste that commonly occur with an experiencer as subject, pair up with derived intransitive verbs in which no experiencer is mentioned and in which the patient is the grammatical subject. The very small inventory of verbs displaying this pattern is given in (135). \({ }^{26}\)
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{3}{|c|}{Sensory verb} & \multicolumn{2}{|l|}{Sensory verb without experiencer} \\
\hline a. & \(\checkmark\) pii & taste & \(\checkmark\) apii & taste (like) \\
\hline b. & \({ }^{\text {sii }}\) & smell & \(\checkmark\) asii & smell (like) \\
\hline c. & \(\sqrt{\text { ziim }}\) & appreciate & \(\sqrt{ }\) aziim & pretty \\
\hline
\end{tabular}

The intransitivity of the experiencer-less verb is evidenced in (137b) by the lack of the \(3: 3\) prefix i- (§17.1.2.1).
(136) a. Sensory verb with experiencer

Xomcahiift zo hxompii.
oregano a 1SGS.Tr-Em-N-taste
'No he probado el orégano.'
I haven't tasted oregano. RмH_08-04-07_75a
b. Sensory verb without experiencer
¡Hax hizcop halx xah xepe xapii!
water Px-Vt Intns Atten sea Em-taste.of
'¡Esta agua sabe a agua salada!'
This water tastes like seawater! Rмн_08-04-07_75b

\footnotetext{
\({ }^{26}\) See also \(\S 2.3\) for discussion of these verbs with indirect/oblique objects.
}
c. Sensory verb without experiencer

Xapoo ipxasi quih hap ipxasi quih imapii ha. sea.lion 3P-flesh the.Fl mule.deer 3P-flesh the.FL SN-N-taste.of DcL 'La carne de lobo del mar no tiene el mismo sabor que la carne de venado bura.' RMH_08-04-07_75c
Sea lion meat does not have the same flavor as mule deer meat. (DS2005, capii)
a. Sensory verb with experiencer
¿Zixcám cooxi hipcom intsii?
fish SN-die Px-Hz 2SGS-RL-smell
¿¿Hueles este pescado muerto?’
Do you smell this dead fish? RMH_08-04-07_75d
b. Sensory verb without experiencer
¡Micaamiz quih halx xah zixcám xasii!
2P-shirt the.Fl Intns Atten fish Em-smell.of
‘¡Tu camisa huele a pescado!’
Your shirt smells like fish! RMH_08-04-07_75e
c. Sensory verb without experiencer
¿Minl coi zixcám xasii!
2P-finger-Pl the.Pl fish Em-smell.of
‘¡Tus manos huelen a pescado!’
Your hands smell like fish! (Offered) RMH_08-04-07_76a
(138) a. Sensory verb with experiencer
\({ }^{\circ}\) Hehe án \({ }^{\circ}\) com ano hptiihtim, hantoosinaj pac countryside the.Hz 3P.in 1SGS.In-Rl-be.Fl-ImpF sand.verbena some
ihtaho, anxö ihyoziim.
1 SGS.Tr-Rl-see Intns 1SGS.Tr-Dt-find.pleasant
'Andaba en el monte y vi algunas flores "hant oosinaj" que me gustaron mucho.' (DS2005, cziim) RMH_08-04-07_76b
I was in the desert and saw some sand verbenas that I liked a lot.
b. Sensory verb without experiencer
¿Mipnaail quih xaziim!
2P-skirt the.Fl Em-pleasant
Your skirt is pretty! RMH_08-04-07_760
c. Sensory verb without experiencer

Hehe yapxöt coi xaziim.
plant 3P-PON-bloom the.PL Em-pleasant
'Las flores son muy bonitas.'
The flowers are very pretty. (DS2005, caziim, improved) RMH_05-17-08_285

\subsection*{19.5 Causative verbs}

Morphological causative verbs are numerous and commonly used. \({ }^{27}\) (On the morphology, see §19.10.) In the 2005 dictionary they are listed separately from the verbs and nouns on which they are based. Obviously they are separate lexical items and it is necessary to record the meanings and the stem forms (for plurals) of each verb.

Causative clauses contain a morphologically complex verb (see \(\S 19.10\) ) and a subject that is the one who causes the action (generally) or sometimes permits the action. \({ }^{28}\) The causative clause (with a few systematic exceptions noted below) always entails a particular event that may be expressed as a simple clause with a non-causative verb. The latter is called the entailed event clause here. Sentence (134a) is a causative clause that is related to the entailed event clause (134b).


A number of general statements can be made about causative clauses. First, the entailed event clause is never passive. There are no causative clauses based on passive clauses. \({ }^{29}\)

Second, the entailed event clause is never reflexive (unless the verb is a lexical reflexive see \(\S 18.4 .6\) ). There are no causative clauses based on reflexive clauses. \({ }^{30}\)

\footnotetext{
\({ }^{27}\) Possible lexical causatives that one might propose (such as linking \(\sqrt{\text { acö }}\) kill with an expression for die) are not discussed here as there does not seem to be any particular purpose in doing so. However, see the verbs meaning put that pair up with etymologically unrelated verbs indicating a position discussed at the end of \(\S 13.3\).
\({ }^{28}\) Of course, if the causative clause is passive, the causer-subject is not overtly expressed.
\({ }^{29}\) To express something like that, a biclausal construction (not common) is used.
(iv) Ihpaai ta, insahcazni aha.

1SGS.Tr-Ir.Dp-make DS 2SGS-Ir.ID-Pv-bite AUX-DCL
'Lo causaré, serás mordido (como por una víbora).'
I will cause it, you will be bitten (as by a snake). RMH_08-14-07_75a
\({ }^{30}\) To express something like that, a biclausal construction (not common) is used. The causation may be direct or indirect and it may be physical or non-physical.
}

The causative of an impersonal entailed event clause is intransitive. Example (135), for instance, has no \(3: 3\) prefix \(\mathbf{i}\) - (§17.1.2.1) and (136) has the intransitive allomorph hp- of the first person singular subject prefix. (For tests on transitivity, see Appendix C.)
¿Tacozim?
RL-cause.hot.weather
‘¿Causó que hiciera calor?' RMH_08-14-07_74a
Did s/he (e.g. God) make it hot (weather)?
(136) Ihpyacozim. RMH_08-24-07_83 1SGS.In-Dt-cause.hot.weather 'Causé que hiciera calor.' I made it be hot (weather).

The subject of other intransitive entailed event clauses always corresponds to the direct object of the causative clause. In (134a) the nominal hax hizcop this water is the direct object of the causative clause just as it is the subject of the entailed event clause in (134b). The entailed event clause may be of any time of intransitive type - stative ( \(\S 18.2\) ), involuntary action (§18.3), bodily function (§18.3), voluntary action (18.4), action with unspecified object (§19.1).
(137) Causative (Vahooil make blue/green) of stative (Vooil blue/green)
©Itahooil?
3:3-RL-cause.blue/green
‘¿Lo hizo azul/verde?’
Did s/he make it blue/green? RмH_08-24-07_84b
(138) Causative ( \(\sqrt{ }\) apoct fill, cause to be full) of stative ( \(\sqrt{ }\) poct full)
¿Itapoct?
3:3-RL-cause.full
¿¿Lo/la llenó?
Did s/he fill it? RMH_08-24-07_84c
(139) Causative ( \(\sqrt{\text { acaanoj }}\) burn, cause to burn) of involuntary action ( \(\sqrt{\mathbf{a n o j} \text { ) burn }}\) (intr.))
¿Itacaanoj?
3:3-RL-cause.burn
‘¿Lo/la quemó?’
Did s/he burn it? RMH_08-24-07_84a
(140) Causative ( \(\sqrt{ }\) ahaazalxot make cough) of bodily function ( \(\sqrt{ }\) aazx cough)
(v) Tiix ah oo hin tah ma, hapi hisoj ihmiizt. DDS FOC DL 1 SGDO RL-do DS Intns 1P-self 1SGS.TR-PX-tattoo 'Hizo que me tatuara.' / S/he made me tattoo myself. RMH_08-14-07_75b

He Juan quih cahaazalxot iha.
1Pro Juan the.Fl SN-cause.cough DCL
'Estoy haciendo que Juan tosa.'
I am making Juan cough. RMH_08-24-07_84d
(141) Causative ( \(\sqrt{\text { apánozxot }}\) make run) of voluntary action ( \(\sqrt{\text { panzx } r u n ~) ~}\)

Mahsapánozxot aha.
2SGDO 1SGS.Tr-Ir.Id-cause.run Aux-Dcl
'Te haré correr.'
I will make you run. RMH_08-24-07_84e
(142) Causative (Vamoozitot make dream) of verb with unspecified object (Vomóozi dream)

Ma hsamoozitot aha.
2SGDO 1SGS.Tr-Ir.Id-cause.dream Aux-Dcl
'Te haré soñar.'
I will make you dream. RMH_08-24-07_84f
(143) Causative ( \(\sqrt{ }\) acómitot make swallow) of verb with unspecified object ( \(\sqrt{ }\) oom swallow)

Ma hsacómitot aha.
2SGDO 1SgS.Tr-Ir.Id-cause.swallow Aux-Dcl
'Te haré tragar.'
I will make you swallow. RMH_08-24-07_849
(144) Causative ( \(\sqrt{ }\) acópotot) of unspecified object (Voop 'make basket')

Ma hsacópotot
2IO 1SGS.Tr.Ir.Id-cause.make.basket Aux-Dcl
'Te haré hacer una canasta.'
I will make you make a basket. RMH_05-17-08_286
The subject of a transitive entailed event clause always corresponds to the indirect object of the causative clause; as indirect object it determines indirect object inflection (§17.1.2.4).
(145) Causative ( \(\sqrt{ }\) aatni make touch) of transitive ( \(\sqrt{ }\) atni make contact with)
a. ¿Hast quih hehe com contaatni? \({ }^{31}\)
stone the.FL stick the.Hz 3IO-2SGS-RL-cause.touch
'¿Hiciste que la piedra tocara el palo?’
Did you make the stone touch the stick? RMH_08-24-07_85a

\footnotetext{
\({ }^{31}\) The interpretation here is clear and unambiguous, but it is not entirely clear why. The choice of article is apparently important as comparison of the examples indicates.
}
\begin{tabular}{rllll} 
b. & ¿Hast & com & hehe & quih \\
stone & contaatni? \\
the.Hz & stick & the.FL & \(3 I O-2 S_{G S}-R L-c a u s e . t o u c h ~\)
\end{tabular}
'¿Hiciste que el palo tocara la piedra?'
Did you make the stick touch the stone? Rмн_08-24-07_85a

Siimet quih Pedro quih cohsacómitot aha. \({ }^{32}\) bread the.Fl the.Fl 3IO-1SGS.Tr-cause.swallow Aux-DCL 'Haré que Pedro tragara el pan.'
I will make Pedro swallow the bread. RмH_11-28p-07_41
A primary component of the meaning of a causative verb is that some agent (typically a sentient being, but not necessarily) is causing an action, most commonly by some direct physical means. \({ }^{33}\) It is not common for the causation to be less than directly physical.

The physical causation may be speech-related, as may be the case with the causative idiom \({ }^{\circ} \mathbf{i m o z}\) cö- \(\sqrt{ }\) aaitot \({ }^{\circ}\) remind of the intransitive idiom \({ }^{\circ} \mathbf{i m o z}\) cö- \(\sqrt{ }\) ooit \({ }^{\circ}\) remember. \({ }^{34}\)
(139) Me peez tazo me hyaazj. Taax imoz me hyaaitot \({ }^{\circ}\). 2Pro peso one 2IO 1SgS.Tr-Dt-lend DDP 3P-heart 2IO 1SGS.Tr-Dt-cause.?
'Te presté un peso y te lo recuerdo.'
I lent you a peso and I am reminding you about it. (DS2005, imoz cölcaaitot) RMH_08-04-07_77a
Certainly in some uncommon cases the causation is more a matter of obligation rather than direct physical coercion.
(140) Me icoos zo me hsacoiit aha.

2Pro 3P-PON-US-sing a 2IO 1SgS.Tr-Ir.Id-cause.do Aux-Dcl
'Te obligaré a cantar una canción.'
I will obligate you to sing a song. RMH_08-04-07_77b
A few causative verbs are typically interpreted with a sense of allowing rather than causing, although that sense apparently is not possible with most of the causative verbs.
(141) Moosni caacoj zo hsiicö ta, hyacám.
sea.turtle SN-big a 1SGS.Tr-Ir.Id-kill Aux.Rl 1SGS.Tr-Dt-let.live
'Iba a matar una caguama pero la dejé con vida.'
I was going to kill a turtle, but I let it live. (DS2005, cacám) RMH_08-04-07_78a

\footnotetext{
\({ }^{32}\) The nominals siimet and Pedro can be expressed in reverse order with the same meaning. If the article quih in either case is replaced with cah, a contrastive focus is indicated. But the nominal with cah must appear first.
\({ }^{33}\) This discussion distinguishes between the causatives, the assistives (see §19.6), and other derived verb forms that use similar morphology.
\({ }^{34}\) In the causative form the noun imoz is invariant; see §7.1.
}
(142) Honc zo hyonaaaij xo hscmahit quih hax tahii xah, sea.gull a 1 SGS.Tr-Dt-catch but 1 SGS.Tr-Ir.Id-N-eat the.Fl just Rl-Pv-feel -
```

hin taii ma, hyacapat.
1SGDO Rl-tell.Pl DS, 1SGS.Tr-Dt-let.fly

```
'Capturé una gaviota pero me dijeron que no la comiera, entonces la dejé volar.' I captured a sea gull but they told me that I shouldn't eat it, so I let it fly away. (DS2005, cacápat) RMH_08-04-07_78b
(143) Cmiique zo cöiscmaqueexot ha, teeye.
person a 3IO-3:3-Ir.ID-N-let.hear Aux Dt-say
'Dijo que no dejaría a otra persona escucharlo.'
He said that he wouldn't let someone else listen. (DS2005, cöcaquéexot) RMH_08-04-07_79
Some causative verbs based on denominal verbs have the meaning of remove the item indicated in the nominal root. More of these are discussed in \(\S 19.5 .7\) below. \({ }^{35}\)
(144) a. Valít remove head from
b. Vahihic remove seeds from
c. Vapxasit remove the meat from, fillet
d. Vacósejc remove thorn from

Most of the causatives typically occur with an agentive subject, but in some cases, at least, the subject may be an inanimate object. For example, as might be expected, the subject of \(\sqrt{ }\) ahaahazxot make sneeze (see (163f) below) can be something like black pepper.

Each causative verb occurs in one basic construction, and this is what is shown in the schemas presented with each group below.

Causative constructions using morphological causative verbs imply a
\begin{tabular}{lll}
\hline \begin{tabular}{l} 
Table 19.1: \\
base and causative constructions
\end{tabular} \\
Base & Causative \\
intransitive subject & \(\Leftrightarrow\) & direct object \\
direct object & \(\Leftrightarrow\) & direct object \\
transitive subject & \(\Leftrightarrow\) & indirect object
\end{tabular} caused event that is expressible using a separate and morphologically-related predicate. The relationships between the syntax of the clauses describing those events and the clauses describing the causative event are summarized in Table 19.1. \({ }^{36}\)

\footnotetext{
\({ }^{35}\) Some denominal verbs have assistive forms (see §19.6), which mean help to put on.
\({ }^{36}\) This pattern is described in Relational Grammar work (see Aissen 1983:288), where 'intransitive subject' and 'direct object' are unified under the concept 'absolutive'. The absolutive of the "embedded" clause is the direct object of the causative construction and the ergative of the "embedded" clause is the indirect object of the causative.
}

Although most causative verbs subcategorize for a direct object, it is also generally possible for a causative verb to be used intransitively, without a specified direct object, with no change in morphology (unlike most simple verbs), as described in §19.1.

Causative verbs based on denominal verb bases are simple transitives with the human patient as direct object despite the presence of an explicit non-human nominal; see \(\S 19.5 .7\) for details.

Causatives of verbs other than simple roots or denominal verbs are virtually nonexistent, although there are some interesting effects with transitive bases (see §19.5.8). No causatives of passives exist, although a few verbs look like this because of the reanalysis of a passive prefix as part of the root. \({ }^{37}\) No causatives of unspecified object forms exist, despite appearances to the contrary; see \(\S 19.5 .8\). One example has been elicited of what should be interpreted as the causative of an experiencer verb (§19.4). This example shows that the morphology is noncumulative: the verb form is not different from the experiencer verb itself. \({ }^{38}\)
(145) Cmiique himintica, zaah quij ipaai \(\mathbf{x}\), person DT-AW sun the.CM 3:3-Ir.Dp-make UT
isacozim
aha.
3:3-Ir.ID-cause.feel.hot.weather Aux-Dcl
'El sol va a hacer sentir calor a esa persona.'
The sun is going to make that person feel hot. RMH_08-24-07_86
Causative verbs may be passivized; see \(\S 17.1 .5\) for details about the morphology of the passive forms of causatives.

\subsection*{19.5.1 Causatives with impersonal verb base}

Impersonal verbs have no referential nominal associated with them in a core semantic relation (see §18.1). One well-established causative verb formed on an impersonal base is لacáapca

\footnotetext{
\({ }^{37}\) Marlett (2002) presents evidence for the reanalysis.
\({ }^{38}\) A version of this sentence without the words ipaai \(\mathbf{x}\) was reported as grammatical in Marlett (1981b). In 2007 one consultant rejected the same sentence and another accepted it. The one who accepted it proposed that it would be improved - made more understandable - by the inclusión of the clause ipaai \(\mathbf{x}\) in it. This inclusion prompts the question as to whether or not the verb \(\sqrt{\text { acozim }}\) here is a simple experiencer verb or the causative of the experiencer verb. Two facts point to the latter analysis. The lack of Different Subject marking between the two clauses indicates that the subjects are coreferential. The 3:3 prefix \(\mathbf{i}\) - (§17.1.2.1) occurs on the verb isacozim, indicating that it must be a transitive causative verb and not an experiencer verb or a simple intransitive causative verb based on the impersonal root.
}
make rain, based on the verb \(\sqrt{ }\) apca rain. \({ }^{39}\) This verb is used felicitously in the context of a divine being, shaman (ziix haaco cama, including the comcaii cacaapca, old.woman SNcause.rain, rainmaker woman), or other agent who is able to affect such things. The verb \(\sqrt{ }\) acaanloj cause to thunder, based on the imperfective stem \(\sqrt{ }\) anloj of the verb \(\sqrt{ } \mathbf{a n j}\) thunder does not appear in the 2005 dictionary but it was easily elicited.
(146) a. Vacaapca cause to rain
b. Vacaanloj cause to thunder

These causative verbs are intransitive. Note that in examples (147) and (148) the intransitive allomorph of the first person singular subject inflection hp- occurs (§17.1.2.1 and Appendix C).
Ihptacaapca ma, mas,
1SGS.IN-RL-cause.rain DS \begin{tabular}{l} 
mataht \\
2PLS-RL-see-PL also
\end{tabular}
\begin{tabular}{llll} 
hisacaapca & hac & \({ }^{\circ}\) haa matatoohajoj \({ }^{\circ}\) & aha. \\
1P-Ir.ID-cause.rain & the.LC & you.(pl.).imagine & RHET
\end{tabular}
'¿Cuándo me han visto hacer llover tal que imaginan que puedo hacer llover?’ When have you seen me make it rain to make you imagine that I can make it rain? (Implication: You haven't seen me make it rain.) (offered) RMH_08-24-07_87

\section*{(148) Zaah hipcop ihpsacaanloi aha.}
day Px-Vt 1SGS.IN-Ir.ID-cause.thunder Aux-DCL
'Hoy haré que haya truenos.'
Today I will make it thunder. RmH_08-04-07_80a
These verbs are obviously instantiations of a more general schema of causative formation that is found with other verbs, as this section continues to demonstrate below. The specific schema for the causatives formed on impersonal verbs is given here, where " \(A\) " represents the causative prefix morphology, disregarding allomorphs.
\begin{tabular}{lll}
\hline \hline Causative of IMPERSONAL Verb & Semantics: & Agent \\
{\(\left[\mathbf{A}[\mathrm{X}]_{\mathrm{v}}\right]_{\mathrm{v}}\)} & Syntax: & Subject
\end{tabular}
cause \(X\)
where X is an impersonal verb
A quite different kind of derived (augmented) form based on the impersonal root \(\sqrt{ }\) apca also exists. This verb, لaapca is also intransitive but it means cover up oneself from the rain. It may

\footnotetext{
\({ }^{39}\) The lengthening of the root vowel here is real but unexpected. Attempts to elicit other causatives based on impersonal roots have not been particularly successful. Sometimes this seemed to be due to interference from the experiencer verbs that have similar morphology (see §19.4).
}
occur with an oblique/indirect object.
(150) Hap inaail zo toc cötiih ma, itamjc, mule.deer 3P-skin a there 3IO-RL-be.FL DS 3:3-RL-bring

сӧуаарса.
3IO-DT-cover.up.from.rain.with RMH_08-04-07_80b
'Trajo una piel de venado bura y se cubrió de la lluvia con ella.' (DS2005, caapca) S/he brought a mule deer hide and used it to cover herself/himself from the rain.

And a semantically irregular form is also derived from the impersonal root \(\sqrt{ }\) hamoc become night; \(\sqrt{ }\) ahamoc means stay out late. \({ }^{40}\)
(151) Anxö inscmahamoc aha.

Intns 2SGS-Ir.ID-N-stay.out.late Aux-DCL
'No regreses muy noche.'
Don't stay out late at night. RMH_08-24-07_100b
(152) Moxima anxö ihpyahamoc.
yesterday Intns 1SGS.In-DT-stay.out.late
'Anoche regresé muy noche.'
I stayed out late last night. RMH_08-24-07_1000
(153) Cooza coi quiicot cöhihiij hac SN-speak.Pl the.Pl 3P-with.Pl 3IO-1P-PON-sit the.LC
anxö ihpmahamoc.
Intns 1SGS.In-Px-stay.out.late
'Estuve en la reunión muy noche.'
I was at the meeting until very late at night. RMH_08-24-07_100d

\subsection*{19.5.2 Causatives with stative verb base}

The largest group of causative verbs includes those formed on stative verb bases (§18.2) of a variety of semantic types. \({ }^{41}\) The schema is given in (154); some representative examples of these verbs are given in (155).
\begin{tabular}{llll}
\hline \hline Causative of Stative Verb & Semantics: & Agent & Patient \\
{\(\left[\text { A }[\mathrm{X}]_{v}\right]_{\mathrm{v}}\)} & Syntax: & Subject & Direct Object
\end{tabular}

\footnotetext{
\({ }^{40}\) This meaning doesn't appear in the 2005 dictionary.
\({ }^{41}\) These as well as those in the following section are classic unaccusative predicates (see Perlmutter 1978 and the large amount of literature that followed).
}
cause Patient to be or become \(X\)
where X is a stative verb
\begin{tabular}{|c|c|c|c|}
\hline & Causative & & Base \\
\hline a. & \(\sqrt{ }\) ahooxp, \({ }^{42}\) make white & Color & \(\checkmark\) Voxp, white \\
\hline b. & \(\sqrt{ } \mathbf{a h a a c o j}\), enlarge & Size & \(\sqrt{\mathbf{a a c o j}}\), large \\
\hline c. & \(\checkmark\) ahooitom, put five & Quantity & \(\checkmark\) Voitom, five \\
\hline d. & \(\checkmark\) acaacat, make bitter or salty & Taste & \(\checkmark\) acat, bitter, salty \\
\hline e. & \(\checkmark\) anopin, make convex & Form & \(\checkmark\) nopin, convex \\
\hline f. & \(\checkmark\) apaaisx, clean (tr.) & Condition & \(\checkmark\) paaisx, be clean \\
\hline g . & \(\checkmark\) ahacat, make blind & Condition & \(\sqrt{ } \mathrm{hac},(\mathrm{be})\) blind \\
\hline h. & \(\checkmark\) ahiipet, fix & Condition & \(\checkmark\) iipe, good \\
\hline i. & Vaahca, put & Position \({ }^{43}\) & \(\checkmark\) ahca, be situated \\
\hline
\end{tabular}

The following examples illustrate this type of causative verb. As explained earlier, they are simple transitives syntactically
... hiionam quih hax ihtanopin oo,...
1P-hat the.Fl Intns 1SgS.Tr-Rl-make.convex Dl
'.. hice que mi sombrero tuviera la copa para afuera, ...'
...I made my hat have the crown be pushed out, ... (DS2005, canópin) RMH_08-04-07_81b
(157) ¡Siimet tacoi hahooitom! ¡Himcac cooquim! bread Md-PL Im-cause.five Dt-LC 3IO-Im-put.items ‘¡Pon cinco panes allí!’’
Put five bread rolls over there! (DS2005, cahooitom) RMH_08-04-07_82
The causative forms of morphologically dative stative verbs (§18.2.6) also inflect for third person oblique/indirect object in all uses.
Comcaii quij oop quih zaah cop iti \begin{tabular}{l} 
iyooca, \\
old.woman the.CM \\
3P-ON-sew.basket the.FL sun the.VT
\end{tabular} 3P-on
3:3-DT-put.LQ
cöisahootii 3IO-3:3-Ir.ID-cause.dry AUX.RL
'La mujer puso su canasta en el sol para secarla.'
The woman put her basket in the sun to dry it. (DS2005, cöcahooti) RRR

\footnotetext{
\({ }^{42}\) If one is not making the item completely white (either the white doesn't cover well or there are blotches), then the verb takes the third person indirect object prefix: cöcahooxp.
\({ }^{43}\) Most of the positional verbs have etymologically unrelated transitive counterparts. See the last part of \(\S 13.3\).
}

\subsection*{19.5.3 Causative of equative verb}

The equative verb \(\sqrt{ }\) aa \(b e(\S 18.2 .1\) ) has a causative counterpart \(\sqrt{ }\) ahaa cause to be, which has the subcategorization frame shown in (159).


\subsection*{19.5.4 Causatives with non-agentive intransitive verb base}

Another large group of causative verbs is based on intransitive verbs of involuntary action (§18.3). In some cases, the base is ambiguous between a state and change of state. For example, the verb \(\sqrt{ }\) aas in (163b) below is ambiguous between be deflated and deflate (intr.) and the causative verb may be similarly ambiguous. The list of types in (163) should not be taken as an exhaustive typology.

As the subcategorization frame shows, these causatives are simple transitives.
\begin{tabular}{llll}
\hline \hline \multicolumn{5}{l}{ Causative of Involuntary Action Verb } & \\
{\(\left[\mathbf{A}[\mathrm{X}]_{\mathrm{V}}\right]_{\mathrm{V}}\)} & Semantics: & Agent & Patient \\
cause Patient to \(X\) & Syntax: & Subject & Direct Object
\end{tabular}
where X is an verb indicating involuntary action

\section*{Causative}
a. Vaacsx, awaken (tr.)
b. Vahaas, deflate (tr.)
c. Vahaama, put in liquid
d. Vafitot, cause or help stand
e. Vahitaj, burn (tr.)
f. Vahiimot, put to sleep
g. Vacniiix, make flow
h. Vahaahnij, make tremble
i. لahaahazxot, make sneeze
j. Vahaazalxot, make cough

Base
Accomplishment verbs
\(\sqrt{\text { acsx, awaken (intr.) }}\)
\(\sqrt{ }\) aas, deflate (intr.)
\(\checkmark\) aama, fill up with liquid \({ }^{44}\)
\(\checkmark\) fit, stand up, be standing
Activity verbs
\(\checkmark\) itaj, burn (intr.)
\(\checkmark\) iim, sleep
Verbs of involuntary motion
\(\sqrt{ }\) aheniiix, flow strongly
Involuntary bodily action
\(\checkmark\) aahnij, tremble
\(\sqrt{ } \mathbf{a a h z x}\), sneeze
\(\sqrt{ }\) aazxl, cough

The following examples illustrate this type of causative verb.
(164) Hin yafitot.

1SGDO DT-make.stand
'Me hizo parar.'
S/he had me stand up. RMH_08-04-07_84a
(165) María quih quisiil \({ }^{\circ}\) com ivahiimot.
the.Fl child the.Hz 3:3-Dт-cause.sleep
'Hizo dormir al bebé.'
She put the baby to sleep. RMH_08-04-07_84b
(166) ¿Coqué coopol coi ma tahaahazxot?
pepper SN-black the.PL 2SGDO RL-cause.sneeze
‘¿Te hace estornudar pimienta negra?'
Does pepper make you sneeze? RмH_08-04-07_85a
The impersonal verb \(\sqrt{ }\) apca rain (see \(\S 18.1\) ) is used with the noun xat hail as subject for the expression to hail (see §18.3). This expression may be causativized like any simple intransitive; the resulting construction is transitive.

Zaah hipcop xat ihsacaapca
ha.
sun/day Px-Vt hail 1SGS.Tr-Ir.Id-make.rain Aux-Dcl
'Hoy voy a hacer caer granizos.'
Today I'm going to make it hail. RMH_08-04-07_85b

\footnotetext{
\({ }^{44}\) The 2005 dictionary indicates that this is specifically by percolation.
}

\subsection*{19.5.5 Causatives with voluntary action verb base}

The base of a causative verb may also be an intransitive verb that usually indicates voluntary action (§18.4). (In some cases the base is actually ambiguous between an voluntary and involuntary reading and even between agentive and non-agentive.) These verbs are less common than the preceding types of causatives although they are not different from them syntactically. \({ }^{45}\)
\begin{tabular}{llll}
\hline \hline \multicolumn{4}{l}{ Causative of Voluntary Action Verb } \\
{\(\left[\mathbf{A}[\mathrm{X}]_{\mathrm{V}}\right]_{\mathrm{V}}\)} & Semantics: & Agent & Patient \\
cause Patient to \(X\) & Syntax: & Subject & Direct Object
\end{tabular}
where X is an verb indicating involuntary action
Causative
a. Vapánozxot, make run

Base
\(\checkmark\) panzx, run
, aato, fight
Vacat, swim
\(\checkmark\) oos, \(\operatorname{sing}\)
Vonaaij, return
\(\sqrt{ }\) atax, go
(170) Ctam ticop xicaquiziil \({ }^{\circ}\) coi iyahaato. man \(\mathrm{MD}-\mathrm{V}_{\mathrm{T}}\) children the.PL 3:3-Dт-cause.fight 'Ese hombre hizo pelear a los niños.'
That man made the children fight. (DS2005, caháato) RMH_08-04-07_86a

\subsection*{19.5.6 Causatives with morphologically transitive involuntary action verb base}

The morphologically transitive involuntary action verb \(V\) imt open ( \(\S 18.5 .6\) ) has a causative counterpart as well. Active clauses with this causative are ditransitive although only two nominals typically occur in them, as illustrated by the following example. Note the presence of the third person indirect object prefix cö- and the \(3: 3\) prefix \(\mathbf{i}\)-.

\footnotetext{
\({ }^{45}\) These are the classic unergative verbs; see Perlmutter (1978) and much later work.
\({ }^{46}\) This verb is not in the 2005 dictionary. However, another causative verb based on the root \(\sqrt{ }\) oos sing is listed: \(\sqrt{ }\) ahoosit sing to receive the power of (something, like a cave) and also turn on (something like a radio).
}
\begin{tabular}{lllll}
\hline Causative of Transitive Involuntary Action Verb & \\
Veemt & Semantics: & Agent & Patient & - \\
\begin{tabular}{lllll} 
cause Patient & Syntax: & Subject & Direct Object & Indirect Object \\
to open
\end{tabular} & & & & \\
\hline
\end{tabular}

'El niño abrió el azucarero y comió el azúcar.'
The child opened the sugar bowl and ate the sugar. (DS2005, cöqueemt) RMH_08-04.07_86b

\subsection*{19.5.7 Causatives with denominal verb base}

A denominal verb (§19.3) may also be the base of a causative verb. \({ }^{47}\) Superficially it appears that the prefix \(\mathbf{i}\) - used in forming a denominal verb is just being replaced by the causative prefix, but some evidence points to it being a bit more complicated. The construction is not entirely productive, apparently. An attempt to generate the causative of \(\sqrt{ }\) ipazaatoj wear shoes, which ought to be something like Vapazaatoj or Vapazaatojot, only produced amusement for the consultant.
\begin{tabular}{ll} 
& Causative \\
a. Vacápota, put jacket on \\
b. Vataamatot, put sandals on \\
c. Vacaamizot \({ }^{48}\) put shirt on \\
d. Vapnaaatol, put skirt on \\
e. Vaacalcot, \(\sqrt{ }\) aacalca, \({ }^{49}\) put clothes on \\
f. Vaaonamot, put hat on
\end{tabular}

Base
Wear clothing
\(\checkmark\) icápota, have/wear jacket
\(\sqrt{ }\) itaamt, have/wear sandals
Vicaamiz, have/wear shirt
\(\checkmark\) ipnaail, have/wear skirt
Veaacalca, have/wear clothing
Viionam, have/wear hat
Have body part
Viliti, have hair/head
\(\checkmark\) yeeno, have face
Vitaamalca, have antlers
\(\checkmark\) yaacni, have weapon

\footnotetext{
\({ }^{47}\) It is possible that these should be taken as assistive verbs (§19.6) rather than causatives.
\({ }^{48}\) This verb is not in the 2005 dictionary.
\({ }^{49}\) These are considered to be completely interchangeable verbs.
}
k. Vataasitot, give name

Have other item
\(\checkmark\) itaasit, have name \({ }^{50}\)
The direct object of the causative verb based on a denominal verb is the person, animal or thing that wears or has the item (shoes, shirt, body part, name, etc.) regardless of whether or not the item is explicitly mentioned as an overt nominal.

> Causative of Denominal Verb
\begin{tabular}{lllll}
{\([\mathbf{A}[\mathrm{X}]]\)} & Semantics: & Agent & Patient \(_{1}\) & (Patient \({ }_{2}\) ) \\
cause Patient \({ }_{1}\) to & Syntax: & Subject & Direct Object & (Indirect Object)
\end{tabular}
have or put on
(Patient \({ }_{2}\) ) as \(X\)
where X is the stem of a denominal verb
(175) Ma hsaacalca
ha.
2SGDO 1SGS.Tr-Ir.Id-dress Aux-Dcl
'Te voy a vestir.'
I am going to dress you. (DS2005, caacalca) RMH_08-04-07_87a
(176) Ma hsataamatot
aha.
2SGDO 1SGS.Tr-Ir.Id-cause.have-shoes Aux-Dcl
'Te voy a poner los huaraches.'
I am going to put sandals on you. (DS2005, catáamatot) RMH_08-04-07_87b
(177) \({ }^{\circ}\) Hant xepe imac quiij \({ }^{\circ}\) zo haa tiij ma, mos hiiqui imataasitoj. island a there RL-sit DS also 1P-toward 3:3-Px-name.PL
'Han nombrado una isla por mí.'
They have named an island after me. (Lagartias 10) RMH_08-04-07_87c
The verb always implies in itself (because of the root) that some item is worn or has some particular body part, but an explicit nominal may also be included in the clause that references a particular item of that type. For example, boots might be worn as shoes, or a rag might be worn as a shirt, or a particular name might be given. This nominal - Patient \({ }_{2}\) in the schema above is syntactically an oblique object when it is present, requiring indirect/oblique object inflection (co-/cö- for third person), as in (178).
(178) Priscila hapáh hac, taax consataasitot aha.

SN-Pv-say the.LC DDP 3IO-2SGS-Ir.ID-give.name Aux-DcL
'Debes darle el nombre de Priscila.'
You should give her the name Priscila. (DS2005, cataasitot) RMH_08-04-07_88b

\footnotetext{
\({ }^{50}\) The final \(\mathbf{t}\) of this word is not part of the noun root.
}
(179) Haptco cheel quih cohyacaamizot.
already SN-red the.Fl 3IO-1SGS.Tr-Dt-cause.have.shirt
'Ya le puse la camisa roja.'
I already put the red shirt on him/her. RMH_08-04-07_88a
(180) Hataamt hizcoi me hsataamatot aha.

Abs-sandal(s) Px.Pl 3IO+2SGDO 1SGS.Tr-Ir.ID-cause.have-shoes Aux-Dcl
'Te voy a poner estos huaraches.'
I am going to put these sandals on you. RMH_08-04-07_88d
(181) Hipcom me hsayaacanot
aha.
Px.Hz 2IO +2 SGDO 1SGS.Tr-Ir.Id-cause.have.weapon Aux-Dcl
'Te daré éste como arma.'
I am going to give you this pistol as a weapon. RNH_08-04-07_88c
Some causative verbs based on noun roots mean to remove the noun.
\begin{tabular}{|c|c|c|}
\hline \begin{tabular}{l}
Removal verb \\
a. Vapxasit, fillet
\end{tabular} & Noun Root \(\checkmark\) pxasi, flesh & Related denominal verb \(\checkmark\) ipxasi, have flesh \\
\hline b. Vayaaicoj, fillet (fish) & \(\checkmark\) yaaicoj, side-PL & - \\
\hline c. Vahihic, remove seeds & \(\sqrt{ }\) Vhic, seed & \(\checkmark\) ihic, have seed \\
\hline d. Vahisjc, remove body lice & \(\checkmark\) Vsjc, body lice & \(\checkmark \mathbf{i s j c}\), have body lice \\
\hline e. \(\sqrt{\text { apocj, remove carapace }}\) & \(\checkmark\) pocj, carapace & \(\checkmark \mathbf{i p o c j}\), have carapace \\
\hline f. Valít, remove head & \(\checkmark\) lit, head & \(\checkmark\) ilít, have head \\
\hline g. Vacósejc, remove thorn & \(\checkmark\) cosi, thorn & - \\
\hline Zixcám quih insapxasit & aha. & \\
\hline fish the.Fl 2SGS-Ir.ID-fillet & Aux-Dcl & \\
\hline '¡Filetee el pescado!' & & \\
\hline Fillet the fish! (DS2005, capxasist) RMH_08-0 & & \\
\hline
\end{tabular}
(184) Zixcám hipcom ihsayaaicoj aha.
fish Px-Hz 1SGS.Tr-Ir.ID-fillet Aux-Dcl
'Voy a filetear este pescado.'
I am going to fillet this fish. (DS2005, cayáaicoj) RMH_08-04-07_-88e
(185) Xnoois pac haa toii ma, itahíhijoi ma, eelgrass.seed some there RL-be.Fl.PL DS 3:3-RL-remove.seeds-PL DS
zaah cop hanso miime.
day the.Vт just Px-end
'Sacaban semillas de trigo de mar todo el día.'
All day they removed the seeds from the eelgrass. (DS2005, cahihic) RMH_08-04-07_89
The intransitive causative verb \(\sqrt{ }\) ajoeene based on the noun joeene dust, however, means raise dust rather than remove dust.

\subsection*{19.5.8 Causatives with simple transitive verb base}

Causative verbs formed on transitive bases are less common than those formed on intransitive bases. Morphologically they are a bit more complicated than those as well, as they commonly have the sequence acó- (or something similar), which looks suspiciously like the ac- allomorph (see §19.10) followed by the unspecified object prefix \(\mathbf{o}_{\text {Abl }^{-}}\)(§19.1.1), and it might be just that etymologically. This "extra" morphology is obligatory, however, and there is no evidence that the patient of the transitive base is omitted from the syntactic configuration of the causative verb, nor is there evidence that the patient is anything other than the direct object of the causative verb. Regardless of how this sequence is analyzed, these verbs are morphologically less transparent to the casual observer.

Causative verbs formed on transitive bases are typically ditransitives.
\begin{tabular}{lllll}
\hline \hline Causative of Transitive Verb & & & \\
{\(\left[\mathbf{A}[\mathrm{X}]_{\mathrm{V}}\right]_{\mathrm{V}}\)} & Semantics: & Agent & Patient \(_{1}\) & Patient \(_{2}\) \\
\begin{tabular}{l} 
cause Patient
\end{tabular} to & Syntax: & Subject & Indirect Object & Direct Object \\
\begin{tabular}{l} 
X Patient
\end{tabular} \\
where X is a transitive verb & & & \\
\hline
\end{tabular}

Causative Base:
a. Vacooix

Motion of one item with respect to another
remove \(x\) from \(y\), take \(x\) from \(y\) (person),
make \(x\) (person) go away from \(y\) (place)
b. لacoxot, make \(x\) jump over \(y\)

Viẍ̈, \(x\) jump over \(y\)
c. \(\sqrt{\text { acozxot }}\)
\(\sqrt{ } \mathbf{a a z i}, x\) carry \(y\)
give \(y\) to \(x\), cause \(x\) to have \(y\)
d. Vacohot
\(\sqrt{ }\) aho, see
show y to \(x\), cause \(x\) to see \(y\)
e. Vacocta Voocta, look at
show y to \(x\), cause \(x\) to look at \(y\)
f. Vacózixot Vazix, saw (cut)
cause \(y\) to saw (cut) \(x\)
(188) Ctam himcap eenim z itcooz ma, itaht, cöivacoaaxoj. man Dт-Vt knife a 3:3-Rl-steal DS 3:3-Rl-see-Pl 3IO-3:3-DT-remove 'Ese hombre robó un cuchillo. Ellos lo vieron y se lo quitaron.' RMH_ \(08-04-07 \_90\)
That man stole a knife. They saw him and took it away from him. (DS2005, cöcacooix)
```

Zixquisiil }\mp@subsup{}{}{\circ}\mathrm{ quih haxöl inaail caziim ocoho quih
child the.Fl clam 3P-shell/skin SN-pleasant 3IO-ON-see the.FL
cöimacocta.
3IO-3:3-cause.look.at

```
'El niño le mostró la concha bonita que había encontrado.'
The child showed her/him the pretty shell that s/he had found. (DS2005, cacócta) RMH_08-24.07_88
(190) ¡Micanoaa com he hacóhotim!

2P-boat the.Hz 1IO Im-cause.see-ImpF
‘¡Muéstranos tu panga!'
Show us your boat! RMH_08-14-07_71d

\subsection*{19.5.9 Causatives with ditransitive or other verb base}

No causatives based on ditransitive verbs have been found or elicited.

\subsection*{19.5.10 Causatives with highly irregular semantics}

A number of causative verbs are highly irregular in their semantics. These also demonstrate the greatest diversity of bases on which they are formed and in some cases (not detailed below, but illustrated) more irregular allomorphy of the causative prefix.

The first group presented below has a base that is similar or identical to a common noun.
(191) Verb
a. Vacmiiquet, love, respect, honor
b. Vacoene, harm someone through sorcery
c. isoj Vacoleelo, proud of one's looks
d. Vacsipxa, solder, glue
e. Vajoeene, raise dust
f. Vaseenelim, sleep face-up with legs separated
g. Vayooz, worship
h. Vaziix, appreciate, respect, esteem

Noun
cmiique, Seri person
Coen
spirit that harms a child
coleelo
an unidentified small owl
csipx, resin
joeene, dust
seenel, butterfly
Yooz, God
ziix, thing

At least two semantically irregular causative verbs appear to have a closer relationship to the absolutive form of a possessed noun than to the simple root.
(192) a. Vahajc, ask for liquid nourishment
```

hax, water (cf. \sqrt{ Vx}{}\mathbf{x},\mathrm{ liquid)}
heme }\mp@subsup{}{}{\circ}\mathrm{ , camp (cf. \VVme home)

```

Some irregular causatives have an etymological but unclear relationship to a body part noun.
(193) a. Vacaapxom, fatten
b. Vasleepec, remove head lice
c. Vasxeenot, respect
d. Vateenot, close (something cylindrical)
e. Vaxaa, collect roots
f. Vahitix, use the best and leave sediment
```

$\checkmark$ Vpxom, firm fat
$\checkmark$ sleepec, place behind ear
$\checkmark$ sxeen, abdomen
$\checkmark$ teen, mouth
$\checkmark_{\text {xaai, root }}$
$\downarrow$ Vtix, sediment, remains, leftovers

```

One verb appears to be based on the unusual adverb ijáaptoj, which has the idea of something strange and unfavorable, especially relating to sex: \(\sqrt{\text { ajaaptoj rape. }}\)

A few verbs are based on morphemes that are loans from other languages (see Appendices A and B) and which only appear in these verb forms and forms obviously derived from them. (See also the verb Vatascar in (200) below.) These are fairly few in number. \({ }^{51}\)
(194) a. Vapreent, pawn
b. Vargüéyotim, wander
c. Vaticpan, work
d. Vapásiroj, go for a stroll / ride

Some causative verbs with irregular semantics are based on other verbs.
a. Vaahit, go fishing Vahit, eat
b. Vacoohitim, rob food from Vahit, eat
c. Vaapca, protect oneself from rain Vapca, rain
d. Vahicös, bring in (thorny fruit) Vicös, thorny
e. Vaahal, take with oneself \(\quad \mathbf{a l}_{\text {Irreg }}\), accompany
f. Vacozit, pay \(x\) (with \(y\) ) \(\sqrt{\mathbf{i z i}}\), defeat, earn \({ }^{52}\)
g. Vacóxemot, fear for security of \(V \mathbf{i i x i m}\), fear

\subsection*{19.5.11 Causatives with nominal base}

A regularly formed causative verb based on a nominal base is relatively (and surprisingly) very uncommon. The meaning of some of these is rather straightforward, however: make \(X\) (from \(Y\) ),

\footnotetext{
\({ }^{51}\) There does not seem to be any propensity to incorporate Spanish infinitives this way, unlike in other languages.
\({ }^{52}\) These two glosses go with this root when used in different syntactic configurations.
}
as shown in (196), and not make \(X\) into \(Y .{ }^{53}\) The nominal base of these verb forms is a common noun.

Causative Verb with Nominal Base
\begin{tabular}{llll}
{\(\left[\mathbf{A}[\mathrm{X}]_{\mathrm{N}}\right]_{\mathrm{V}}\)} & Semantics: & Agent & (Patient) \\
make \(X\) (from Patient) & Syntax: & Subject & (Direct Object)
\end{tabular}
where X is a common noun (not inherently possessed)

Verb
a. Vahaaho, \({ }^{54}\) make road
b. Vasiimet, make bread
c. Vazeee, make strips of
limberbush (for basket-making)

Noun base
haaho, road
siimet, bread
zeee, limberbush fiber that forms the
base roll of a basket and is covered with finer strips of limberbush)

These verbs are probably most commonly used intransitively, as illustrated by the simple example shown in (198) with the intransitive allomorph (hp-) of the first person singular subject prefix (§17.1.2.1).

Moxima hpyasiimet.
yesterday 1SGS.In-DT-make.bread
'Ayer hice pan.'
Yesterday I made bread. RMH_08-04-07_92a
The simple example in (199) with the transitive allomorph (h-) demonstrates that, given the proper context, these verbs may be used transitively (the "from Patient" option in the schema shown in (196)).
(199) Moxima haas copxöt coi pac ihyasiimet.
yesterday mesquite SN -loose the.Pl some 1 SGS .Tr-Dt-make.bread
'Ayer hice pan de harina de mezquite.'
Yesterday I made bread from mesquite flour. RMH_08-04-07_93
See \(\S 19.5 .12\) for deponent causatives that are similar to these in that some have noun bases, although they are different in a crucial way.

\subsection*{19.5.12 Deponent causatives}

Deponent causatives are verbs that seem to clearly include the idea of causation and also appear

\footnotetext{
\({ }^{53}\) If one want to say make \(X\) into \(Y\), one can use the causative verb \(\sqrt{ }\) ahaa cause to be.
\({ }^{54}\) The word yahaaho (3P-PON-make.road) its path is a deverbal noun based on this verb.
}
to have causative morphology (namely, an unstressed a in stem-initial position) but which do not have corresponding verbs or nouns from which they are synchronically derived. The verbs in (194) are all examples of deponent causatives. The intransitive verb \(\sqrt{ }\) anaao meow is an unusual one that appears to be based on an onomatopoeic bound root \(\sqrt{ }\) naao (which only occurs in the causative verb).

The examples shown in (200) have a corresponding noun that has the morphology of a passive subject-oriented deverbal noun (see §14.1). For example, hatascar tortilla is \{ha-ahatascar\} SN-Pv-atascar. \({ }^{55}\) This is why all of the corresponding nouns begin with the sequence ha.
\begin{tabular}{lll} 
& Verb stem & Derived noun \\
a. Vamaax, make alcolohic beverage & hamaax, alcoholic beverage \\
b. Vapát, make meat-drying rack & hapát, meat-drying rack \\
c. Vaqueeposlc, make cat's cradle & haqueeposlc, cat's cradle \\
d. Vasoma, make frame for shade shelter & hasooma, frame for shade shelter \\
e. Vatascar, make tortillas & hatascar, tortilla \\
f. Vazaamt, make adobes & hazaamt, adobe
\end{tabular}

\subsection*{19.5.12.1 Verbs and cognate nouns}

The verbs in (201) are simple transitives and not deponent causatives. This group is interesting, however, in that there is a corresponding cognate noun. The verbs are not obviously derived from the nouns; the verbs do not have any morphology to indicate this and cannot even be analyzed as zero derivations because the nouns are not identical to the verb roots. The nouns are not obviously derived from the verbs because the noun does not show evidence of being a synchronic derivation as a passive subject-oriented deverbal noun (§14.1). If they are derived from the verbs, their derivation is irregular. For example: the productive passive subject-oriented deverbal noun based on \(\sqrt{ } \mathbf{a z t o j}\) is hapaztoj ( \(<\left\{\mathbf{h a - \mathbf { p } _ { \mathrm { Abl } } - \mathbf { a z t o j } \}} \mathrm{SN}-\mathrm{Pv}-\right.\) cook.with.water); this form is actually attested.
\begin{tabular}{ll} 
& Verb \\
a. & Vaaco, build house \\
b. Vaztoj, cook in water \\
c. Vapis, smoke \\
d. Vatxi, fart
\end{tabular}

Cognate noun haaco, house (ABs.house) \({ }^{56}\)
haaztoj, porridge
haapis, cigarette
hatxi, fart

\footnotetext{
\({ }^{55}\) In this case we also know that the part tascar comes from another language. See Appendix A.
\({ }^{56}\) The possessed stem is \(\sqrt{ }\) yaaco.
}

\subsection*{19.6 Assistive verbs}

The 2005 dictionary lists a few verbs - less than twenty, but the list is clearly not complete which look similar to causative verbs but have special semantics; these are called assistive verbs here. \({ }^{57}\) The idea expressed is not that of causing someone to do something, but of helping someone to do it, usually (but not always) by assisting that person to perform the action through cooperative action. \({ }^{58}\) The morphology of assistive verbs is discussed in \(\S 19.10\); it is similar if not identical to causative morphology.

The syntax of assistive verbs is different from that of causative verbs, as the contrast between the assistive verb \(\sqrt{ }\) acocta help see/find and the morphologically identical causative verb \(V\) acocta cause to see/find shows. (The fact that the difference is found in the syntax and not in the morphology makes the glossing of words somewhat misleading.) The patient of the assistive verb \(\sqrt{ }\) acocta is a direct object and the patient of the causative verb \(\sqrt{ }\) acocta is an indirect object. More examples are presented below.
\begin{tabular}{lll} 
(202) & Assistive verb & (203)
\end{tabular} \begin{tabular}{l} 
Causative verb \\
Hin yacocta. \\
1SGDO DT-cause.look.at \\
\\
'Me ayudó a verlo.'
\end{tabular}

Two assistive verbs have (active) intransitive verb bases. Their syntax is similar to that of simple transitives.

Assistive Verb on Intransitive Base
\begin{tabular}{llll}
{\(\left[\mathbf{A}[\mathrm{X}]_{\mathrm{V}}\right]_{\mathrm{V}}\)} & Semantics: & Agent & Patient \\
help Patient \(X\) & Syntax: & Subject & Direct Object \\
\begin{tabular}{l} 
(usually by doing \(X\) with Patient) \\
where X is an intransitive verb
\end{tabular} & & \\
when & &
\end{tabular}

\footnotetext{
\({ }^{57}\) In Marlett (1981b) they were discussed under the topic of the 'help' construction. The term 'assistive' is adopted from Haspelmath et al. (2001:892), where it is reported that similar forms are also found in Georgian, Quechua, Guarani, Cashibo, and some other Amerindian languages.
\({ }^{58}\) A periphrastic expression is also available, illustrated by the following example.
}
\begin{tabular}{lllll} 
(v) Hax & tacop & cömihameque & hac & ihsaai \\
water & MD-VT & 3IO-2P-PON-make.warm & the.LC & 1SGS.TR-IR.ID-make AUX-DCL \\
& 'Te ayudaré a calentar esa agua.' / I will help you warm that water. RRR
\end{tabular}

Assistive
a. Vacaaitom, \({ }^{59}\) act as interpreter for, ask on behalf of
b. Vaaicot, help kill
c. Vahaanipxot, help return home

Base
\(\sqrt{ }\) âaitom, speak (intr.)

Voicö, kill (intr.)
\(\sqrt{\text { aanpx, return home }}\)
(206) María quih iihax itáai, itacaaitom ma, the.FL 3P-with.SG 3:3-RL-make 3:3-RL-help.speak DS
cmaax \({ }^{\circ}\) hayaa cacox \({ }^{\circ}\) cap ziix isexl ha quih imiya. now storekeeper the.VT thing 3:3-Ir.Id-buy Aux the.Fl 3:3-Px-know
'Cuando María le ayudó e interpretó por él/ella, el tendero entendió.'
When Maria helped him/her and interpreted for him/her, the storekeeper understood. RMH_08-04-07_95a
(207) Hin yacaaitom.

1SGDO DT-help.speak
'Lo pidió por mí.'
S/he asked on my behalf. \({ }^{60}\) (Ds2005, cacaaitom) RMH_08-04-07_95c

\title{
Moosni zo hataht, seehe cöhatcmaaj ma,
} sea.turtle a 1PLS-RL-see-Pl to.do.(it) 3IO-1PLS-RL-N-know-PL DS

Pedro quih hizi vaaicot.
the.FL 1PLDO DT-help.kill RMH_08-04-07_95b
'Vimos una caguama y no la pudimos matar, entonces Pedro nos ayudó a matarla.'
We saw a turtle and we couldn't kill it, so Pedro helped us kill it. \({ }^{61}\) (DS2005, caaicot)
(209) Hamatoonipxoj.

1PLS-Px-help.return.home
'Lo/la ayudamos a regresar a su casa.'
We helped him/her return home. (DS2005, caháanipxot) RMH_08-04-07_96
(210) Ma hsacópotot aha.

2SGDO 1SGS.Tr-Ir.Id-cause.make.basket
'Te ayudaré a hacer una canasta.'
I will help you make the basket. RmH_08-24-07_84i
Assistives formed on lexical reflexives (§18.4.6) express that one is helping the person

\footnotetext{
\({ }^{59}\) This verb also has the meaning read as a causative verb.
\({ }^{60}\) The desired object cannot be mentioned in the clause. *Sahmees hin yacaaitom.
\({ }^{61}\) The free translation includes reference to the animal that was killed, but the Seri clause cannot contain such a reference.
}
(expressed as direct object) by doing that action to him or her.


Ma hsahásaquim aha.
2SGDO 1SGS.Tr-Ir.Id-comb.hair.of Aux-Dcl
'Te ayudaré a peinarte.' = 'Te peinaré.'
I will help you comb your hair. \(=\) I will comb your hair. RMH_05-17-08_287
Assistives formed on transitive bases are more numerous. The syntax of these clauses is also different from that of causatives of transitives. While causatives of transitives are typically ditransitives (§19.5.8), the assistives are transitives plus a bare nominal. \({ }^{62}\) The direct object is the person who is being helped to do the action.
\begin{tabular}{lllll}
\hline \hline Assistive Verb on Transitive Base & & & \\
{\(\left[\mathbf{A}[\mathrm{X}]_{\mathrm{V}}\right]_{\mathrm{V}}\)} & Semantics: & Agent & Patient \(_{1}\) & (Patient \(\left.{ }_{2}\right)\) \\
help Patient \({ }_{1} X\left(\right.\) Patient \(\left._{2}\right)\) & Syntax: & Subject & Direct Object & \(\|\mathrm{DP}\|\) \\
where X is a transitive verb & & & & \\
\hline \hline
\end{tabular}
(213)

Assistive verb
a. Vacocta, help see
b. Vacoiit, help do
c. Vacómosim, beg on behalf of
d. Vaconxot, help carry
e. \(\quad \dagger \sqrt{ }\) acooi, help carry
f. Vacoomenot, help winnow
g. Vacoonec, help carry (plural items) \({ }^{64}\)
h. لacooomot, beg on behalf of
i. Vacooxat, help take care of baby of
j. Vacospoj, \({ }^{65}\) help write
k. Vacozixot, help saw (cut)
1. Vaheezit(ot), help earn, pay
m. Vazápatol, sew for
n. hamác Vacotlim, kindle fire for
o. hant \(\sqrt{\text { acócamot, help lower }}\)
p. hax ano \(\sqrt{ }\) aahit, wash clothes for
\(\checkmark\) aaspoj, write
Vazix, saw(cut)
\(\sqrt{i z i}\), earn
\(\checkmark\) zaplim, sew
hamác \(\sqrt{ }\) itlim, kindle fire
Vaquim, put
hax ano \(\sqrt{ }\) ah, wash clothes
... ilhpacocta, zixquisiil \({ }^{\circ}\) ctam, imxöafeaa tax. 1SGDO-Im-help.see child male 2SGS-Em-have.good.eyesight Sbrd
'... ¡Ayúdame verla [la aguja], niño, porque tienes buena vista.' RMH_08-04-07_97c
... Help me see it (the needle), boy, because you have good eyesight. (DS2005, cacócta)
(215) María quih isacómenot
aha. the.Fl 3:3-Ir.Id-help.winnow Aux-DCL
'Va a ayudar a María a limpiar las semillas.'
She is going to help María clean the seeds. (Ds2005, cacómenot) RMH_08-04-07_97b
(216) Hácalca quih anxö imxanoocaj tax,

Abs.clothing the.Fl Intns 2SGS-Em-carry.in.arms Sbrd
pac mahsaconxot.
some 2 SGDO 1SGS.Tr-Ir.ID-help.carry
'Estás llevando mucha ropa; te ayudaré a llevarla.' RмH_08-04-07_97a \(^{\text {a }}\)
You are carrying lots of clothing; I will help you carry it. (DS2005, caconnot, modified)
(217) Quisiil \({ }^{\circ}\) quih amaz quih cafee iyacooomot. child the.Fl 3P-father's.mother the.Fl coffee 3:3-Dт-beg.on.behalf.of 'El/la niño/a mendigó café (en paquete) para su abuela.' RMH_08-04-07_98a The child begged coffee (in packet) for his/her grandmother. (DS2005, cacóomot)
(218) Seehe compomaa ta \(\mathbf{x}\), sahmees yatoiilcam tacoi to.do.(it) 3IO-2SGS-Ir.Dp-N-know DS UT orange(s) 3P-ON-distribute-PL Md-PL pac mahsacooomot aha. some 2 SGDO 1SGS.Tr-Ir.Id-request.for Aux-Dcl
'Si tú no puedes, voy a pedir algunas de esas naranjas por ti.' \({ }^{\text {RMH_08-04-07_98b }}\) If you aren't able, I will ask for some of those oranges for you. (DS2005, cacooomot)

\footnotetext{
\({ }^{65}\) This form is highly unusual in that it is ostensibly a derived verb formed on a derived verb, since \(\sqrt{ }\) aaspoj is presumably a causative form of \(\sqrt{ }\) oospoj spotted.
}
(219) Caztaz hizcoi ma hyacóomenot.
wheat Px-Pl 2SGDO 1SGS.Tr-Dt-help.winnow
'Te ayudé a limpiar este trigo.'
I helped you winnow this wheat. RмH_-05-17-08_288
(220) Cmaam tiquij iiquet \({ }^{\circ}\) quih isipnaail ha zo cazápatol iha.
woman Md-Cm her.child the.Fl 3:3-Ir.ID-HAVE-skirt Aux a SN-sew.for Dcl
'Esa mujer está cosiendo una falda para su hija.'
That woman is sewing a skirt for her daughter. RmH_08-04-07_99b
(221) Hiiquet \({ }^{\circ}\), insipnaail ha zo mahyazápatol.
my.child 2SGS-Ir.Id-have-skirt Aux a 2 SGDO 1SGS.Tr-Dt-sew.for 'Mi hija, estoy cosiendo una falda para ti.'
My daughter, I am sewing a skirt for you. RMH_08-04-07_99c
(222) \({ }^{\circ}\) Haaco ano hapaspoj cöicacoaat \({ }^{\circ}\) cop ano tiij, itaasi quih school the.VT 3P.in RL-sit 3P-name the.FL
\begin{tabular}{llllll} 
itaaspoj & itcmaxi & ma, & Pedro & quih & iyacospoj. \\
3:3-RL-write & 3:3-RL-N-finish & DS & & the.FL & 3:3-DT-help.write
\end{tabular}
'Estaba en la escuela y no pudo escribir su nombre, entonces Pedro le ayudó a escribirlo.'
S/he was in school and couldn't write her/his name, so Pedro helped her/him write it. (DS2005, ac-) RMH_07-11-07_38a RMH_08-04-07_98c

Miizj ma hsaheezitot aha.
well 2SGDO 1SGS.Tr-Ir.ID-help.earn Aux-Dcl
'Te voy a pagar bien.'
I am going to pay you well. (Offered) RMH_08-04-07_99a
(224) Zacaam ticop cmaacoj am quih hamác iyacotlim. young.woman Md-Vt old.man 3P-father.FE the.Fl fire 3:3-Dt-help.kindle 'Esa muchacha atizaba lumbre para su padre.'
That girl kindled fire for her father. (DS2005, hamác cacótim) RMH_08-04-07_99d
\begin{tabular}{lll}
\(\ldots\) & hácalca & yahasquim
\end{tabular}\(\quad\) coi

\section*{hant ihyacócamot.}
land 1SGS.Tr-Dt-help.lower
'Le ayudé a bajar sus cosas ...'
I helped him get his things down ... (DS2005, hant cacócamot) RMH_08-04-07_99e
```

(226) Hizaac quih hax an hizi maahtoj.
1P-older.sister the.FL water 3P.in 1PLDO Px-put.Fl.for-PL
'Mi hermana mayor nos lava la ropa.'
My older sister washes clothes for us. (DS2005, hax ano caahit) RMH_08-04-07_99f

```

\subsection*{19.7 Benefactive verbs}

Benefactive clauses contain a morphologically complex verb that subcategorizes for a beneficiary. Such verbs are few in number - the ones listed in this section may be all that exist - and they are not productively formed.

One verb stem, لatólecot ask (someone) for help for (someone) is different only from its simple transitive counterpart \(\sqrt{ }\) atolec ask (someone) for help (§18.5.2) by the inclusion of the suffix -ot. \({ }^{66}\)
(227)
\begin{tabular}{lllll}
\hline \hline Vatólecot & Semantics: & Agent & Addressee & Beneficiary \\
\begin{tabular}{l} 
ask Addresseefor \\
help for Beneficiary
\end{tabular} & Syntax: & Subject & Direct Object & Indirect Object \\
\hline \hline
\end{tabular}
(228)
María quih Tomás quih haaco isaai ha cop the.Fl the.Fl Abs.house 3:3-Ir.Id-make Aux the.VT

Juan quih cöiyatólecot.
the.Fl 3IO-3:3-DT-ask.for.help.for
'María le pidió ayuda a Tomás para Juan con respecto a su construcción de una casa.'
Maria asked Tomás for help for Juan in his house-building. RMH_08-04-07_100b
Another benefactive verb is \(\sqrt{\text { acóxetol buy (something) on behalf of (someone), which is }}\) related to the verb \(\sqrt{ } \mathbf{e x l}\) buy.
\begin{tabular}{lllll}
\hline \hline Vacóxetol & Semantics: & Agent & Patient & Beneficiary \\
\begin{tabular}{l} 
buy Patient for \\
Beneficiary
\end{tabular} & Syntax: & Subject & Direct Object & Indirect Object \\
\hline \hline
\end{tabular}
(230) Hoyacj quih caamiz zo cohyacóxetol.

1P-ON-call.sibling the.Fl shirt a 3IO-1SGS.Tr-Dт-buy.for
'Compré la camisa para mi hermano/a.'
I bought the shirt for my brother/sister. RMH_08-04-07_101

\footnotetext{
\({ }^{66}\) This suffix also appears on some causative (§19.5) and assistive (§19.6) verbs.
}

The verb لacóquetot give (a gift) to (someone) on behalf of (someone) is at least functionally related to the irregular ditransitive verb \(\sqrt{ } \mathbf{e}_{\text {Irregular }}\) give (gift) (§18.6).
\begin{tabular}{llllll}
\hline \hline Vacóquetot & Semantics: & Agent & Patient & Recipient & Beneficiary \\
give Patient to & Syntax: & Subject & \(\|\mathrm{DP}\|\) & Direct & Indirect \\
Recipient for & & & & Object & Object \\
Beneficiary & & & & & \\
\hline \hline
\end{tabular}
(232)
\begin{tabular}{|c|c|c|c|}
\hline \({ }^{\circ}\) Eenm haacni \({ }^{\circ}\) hipcom & Pedro quih & cohsacóquetot & aha. \\
\hline rifle Px-Hz & the.FL & 3IO-1SGS.Tr-Ir.ID-give.for & Aux-Dcl \\
\hline 'Daré un rifle a ellos por & edro.' & & \\
\hline I will give a rifle to them & or Pedro. rmh_o8 & -4-07_91 & \\
\hline
\end{tabular}

The verb Vapacot cover (someone) to protect from the rain is another benefactive verb. \({ }^{67}\) It is related to the verb root \(\sqrt{ }\) apca rain.
\begin{tabular}{lllll}
\hline \hline لaapacot & Semantics: & Agent & \(?\) & Patient \\
\begin{tabular}{l} 
cover Patient to \\
protect from rain
\end{tabular} & Syntax: & Subject & Direct Object & Indirect Object \\
\hline \hline
\end{tabular}

Cöiyaapacot.
(qqq needs to be checked)
(qqq - example needed to expose the syntax)

\subsection*{19.8 Miscellaneous}

The intransitive verb \(\sqrt{ }\) aalim play is the base for a derived transitive verb \(\sqrt{ }\) acaalim, which means play with (an item, not a person).
\begin{tabular}{llll}
\hline \hline Vacaalim & Semantics: & Agent & Patient \\
play with Patient & Syntax: & Subject & Direct Object
\end{tabular}
(where Patient is being used as a toy)
\begin{tabular}{llllll}
\multicolumn{6}{c}{ (where Patient is being used as a toy) } \\
\hline \hline
\end{tabular}

\footnotetext{
\({ }^{67}\) This verb does not appear in the 2005 dictionary.
}
\begin{tabular}{lcccl} 
hacaaiz & \begin{tabular}{c} 
heeque \\
ABS-fishing.spear \\
juvenile
\end{tabular} & quih mos & the.FL & also
\end{tabular} 3:3-Px-play.with
'El niño de la orilla del mar jugaba con una pequeña panga, jugaba con un pequeño pollero, y jugaba con pequeños arpones.'
The seaside child played with a toy boat, played with a toy fishing spear, and played with toy harpoons. (ES2007 ool_itac 03) RMH_08-04-07_185

\subsection*{19.9 The age construction}

Expressions of age take a transitive verb that looks, for all intents and purposes, as a causative of the number verb (see §18.2). A noun that expresses a unit of time (e.g., hant year(s)/land, iizax month/moon / iiztox months/moons, zaah day/sun / ixaap \({ }^{\circ}\) days) is (presumably) the direct object. The construction is transitive by all available tests. \({ }^{68}\)

\section*{(237)}

Quisiil quih hant saazoj caha.
child the.Fl year Ir.Id-AUG-one Aux.SN-Dcl
'El niño va a cumplir un año.'
The child is going to be one year old. RMH_08-14-07_78a
(238) Hant ihmazooxöc.
land/year 1SGS.Tr-Aug-four
(239) Iiztox imaaitom.
'Tengo cuatro años.'
3P-moon/month-PL 3:3-Px-AUG-five 'Tiene cinco meses.'
I am four years old. RMH_08-14-07_78b
(240) Hant pahahanl, icaahit spá ha.
land/year Ir.Dp-Pv-Aug-ten Inf.In-fish Ir.Id-Pv-know Aux-DcL
'Cuando uno tiene diez años, puede ir a la pesca.'
When one is ten years old, one can go fishing. RMH_08-14-07_78e
(241) Hoox oo ixaap \({ }^{\circ}\) caapxa ha.

IntNS DL days SN-AUG-three DCL
'Tiene sólo tres días.'
S/he is only three days old. (DS2005, quitasit) RMH_08-14-07_78f

\subsection*{19.10 Allomorphy of the augment prefix}

The prefix used in forming causatives, assistives and benefactives - referred to here as the augment prefix - has several very obvious allomorphs: \(\mathbf{a}-\), ac-, \(\mathbf{c}-\), aco-, and \(\mathbf{a h}-\), besides an

\footnotetext{
\({ }^{68}\) Note, for example, the first person singular subject transitive allomorph \(\mathbf{h}-\), the \(3: 3\) prefix \(\mathbf{i}-\), and the ability to passivize when the subject is unspecified.
}
allomorph that changes \(\mathbf{i}\) to \(\mathbf{a}\), and another process-type allomorph that produces aa. Some of these have predictable variants: a- becomes aa- when stressed, and aco- has an allomorph acóo-- \({ }^{69}\) The allomorph a- becomes e- by Low Vowel Harmony (§27.2.3). None of the variation seems to be correlated directly with the difference between causative and benefactive. Some causatives, assistives and benefactives also carry the suffix -ot (or its presumed allomorph -t).

The distribution of the six major allomorphs is not entirely predictable, although there are three strong generalizations that can be made plus a few tendencies.

First, when the base begins with a consonant, the prefix a- is the only one possible. Examples: Vanopin make convex based on \(V\) nopin convex; Vameque heat and \(\sqrt{\text { amequet }}\) barbecue on a stick based on \(\sqrt{ }\) meque warm.

Second, when the base is a denominal verb, the only allomorph possible is the one that simply changes \(\mathbf{i}\) to \(\mathbf{a}\). The vowel \(\mathbf{i}\) is changed to a. Example: Vazaamatot put sandals on based on \(\sqrt{ }\) izaamt have sandals, wear sandals. The same kind of ablaut happens when the verb begins with an unstressed i. Examples: ل ataaho make ready based on \(\sqrt{ }\) itaaho ready; \(\sqrt{ }\) axonj loosen based on \(\sqrt{ }\) ixonj loose.

Third, when the base is a transitive root, the causative prefix is most commonly aco-.\(^{70}\) Examples: Vacooix remove \(x\) from \(y\) based on Vaiix \(x\) go away from \(y\); Vacoxot make \(x\) jump
 Vacohot show (with short o) based on \(\sqrt{\text { aho }}\) see. Two transitive roots have causatives formed
 \(\sqrt{ }\) asi \(\operatorname{drink}\) (note the loss of the vowel \(\mathbf{i}\) in the causative form).

Before other types of bases, only tendencies may be observed. One of these is that when an intransitive base begins with a short low vowel (e or a), the likelihood is very great that the prefix ac- is the correct one. The root-initial vowel in the causative form also lengthens (for unknown reasons), making this a bit difficult to see. In addition, the diphthong effect comes into play; see §28.3.4. Examples: Vacaapca make rain based on Vapca rain (v.), Vacaacat make salty based on لacat salty, لacaaitic make soft based on \(\sqrt{ }\) âaitic soft. A few transitive verb roots also have augmented forms using this allomorph: Vacaatajc make vomit based on Vatajc vomit

\footnotetext{
\({ }^{69}\) Alternatively, and just as plausibly, the underlying form is aa- and the vowel shortens when it is not stressed. Furthermore, the allomorph acó- inexplicably keeps its short vowel in situations where a long one is expected.
\({ }^{70}\) One might consider proposing that the morphology is actually causative plus unspecified object marking. But there is no syntactic evidence that the verb base is intransitive. The nominal that would be the direct object of the base verb may be expressed in the causative construction; see §19.5.7. Furthermore, no other transitive verb (such as those beginning with a consonant) requires this allomorph aco- when it is made into a causative.
}
(something); Vaconxot help carry (plural items) based on Voon carry (plural items) (note the shortening of the vowel in the augmented form); Vacocta help see, show based on Voocta look at (note the shortening of the vowel in the augmented form). \({ }^{71}\)

Some causative verbs based on roots beginning with a take the allomorph a- (which presumably lengthens by a regular rule; see §27.3.1). Examples: Vaacsx awaken (tr.) based on \(\sqrt{ } \mathbf{a c s x}\) awaken (intr.), Vaactim cut based on \(\sqrt{ }\) actim be cut. Before a root beginning with e, the vowel harmonizes: \(\sqrt{ }\) eeme deplete based on \(\sqrt{ }\) eme depleted.

A few causative verbs based on roots beginning with a take the allomorph \(\mathbf{c}_{\mathrm{Abl}}-\). Examples: \(\sqrt{\mathbf{c}} \mathbf{z z x}\) tear based on \(\sqrt{ } \mathbf{a z x}\) torn, \(\sqrt{\mathbf{c}} \underline{\mathbf{c}} \mathbf{z z x}\) tear out based on \(\sqrt{ } \mathbf{a p z x}\) torn out. This allomorph causes the following vowel to change quality in some examples: Vqueetc drip (trans.) based on \(\sqrt{ }\) iite drip (intr.), \(\sqrt{ }\) queefz cause make snapping noise based on \(\sqrt{\text { iifz }}\) make snapping noise, \(\sqrt{ } \mathbf{q u e e j c}\) make wet, explode (tr.) based on \(\sqrt{ } \mathbf{i i j} \mathbf{c}\) wet, explode (intr.), \(\sqrt{ } \mathbf{q u e e m j}\) clarify (liquid) based on \(\sqrt{i i m j}\) clear (liquid).

As mentioned above, some causatives are formed by changing the vowel of the root to a different quality. The common change is from \(\mathbf{0}\) or \(\mathbf{0}\) o to aa. Examples: Vaaipj put in tranverse position based on Vooipj be in tranverse position; Vaaspoj mark, write, draw, record based on Voospoj spotted; Vaalali make flap based on Voalali flap; Vaanj put poison (on arrow points) based on Voaanj be poisonous; Vaaipot pay based on Voopot paid (note the addition of \(\mathbf{i}\) to the augmented stem as well); \(\sqrt{ }\) aaxit based on \(\sqrt{ }\) ooxi die. \(^{72}\)

A few verbs are identical in form in the simple form and the causative. One example is causative \(\sqrt{ }\) aanim cover and also be covered.

When an intransitive verb begins with an unstressed ah sequence (not a common situation), the causative form is made by deleting the \(\mathbf{h}\). Examples: Vacniiij cause to flow based on \(\sqrt{ }\) aheniiij flow strongly; Vataasim make foamy based on Vahtaasim be foamy.

All other augmented forms, namely intransitive roots beginning with a vowel that is not a regular a or e take the prefix ah-. Examples: Vahooil make blue/green based on Vooil blue/green; ل ahooxp make white based on \(\sqrt{\text { ooxp }}\) white; ل ahaanpx return something based on



\footnotetext{
\({ }^{71}\) Two of these might be thought to belong to the preceding group with aco-, but the causative of the transitive verb for vomit (something) does not have the expected \(\mathbf{o}\).
\({ }^{72}\) The augmented form \(\sqrt{ }\) aaxit is apparently used only in the idioms \({ }^{\circ}\) hamatj \(\sqrt{ }\) aaxit \({ }^{\circ}\) cause to be thirsty (cf.
\({ }^{\circ}\) hamatj \(\sqrt{ }\) ooxi \({ }^{\circ}\) be thirsty) and \({ }^{\circ}\) psaac \(\sqrt{ } \mathbf{a a x i t}^{\circ}\) cause to be hungry (cf. \({ }^{\circ}\) psaac \(\sqrt{ }\) ooxi \({ }^{\circ}\) be hungry).
}
house.
The augment prefixes a-, ac- and aco- lose their vowels when they follow the passive prefix (§17.1.5) and if the prefix vowel is not carrying stress.
a. tahmeque
\{t-ah-a-meque\}
'fue calentado'
RL-Pv-Aug-warm
it was heated
\{t-ah-ac-âaitic \}
b. tahcaaitic

RL-PV-AUG-soft
'fue ablandado'
it was softened
c. tahcoomenot
\{t-ah-aco-emen-ot \}
'fue ayudado a limpiar'
RL-Pv-AUG-winnow-?
s/he was helped winnow
The causative prefix \(\mathbf{a h}\) - and the stressed version of \(\mathbf{a}\) - do not lose their vowels.
a. tahahitaj
'fue quemado'
it was burned
b. tahahaas
'fue desinflado'
it was deflated
c. tahaactim
'fue cortado'
s/helit was cut
\{t-ah-ah-itaj\}
Rl-Pv-AUG-burn
\{t-ah-ah-aas\}
RL-Pv-Aug-deflate
\{t-ah-a-actim \}
Rl-Pv-Aug-be.cut

\subsection*{19.11 Times morphology}

The intransitive verbs that appear in the times construction described in §9.1.2 are based on verb roots that are predicates of number or quantity (see Table 19.2). The list of known predicates is given in Table 19.2. The morphology is similar to that which is used for causatives and assistives, but some of these forms are different from the causative forms that mean put. On the other hand, the stems are identical with those used in the (transitive) age construction (see \(\S 19.9\) ), except in the case of seven (see below). The put forms, typically transitive, are included here for comparison.

The expressions for six and nine are composite expressions, as shown in Table 18.1. Other than in the basic expressions, derived verbs with the Augment prefix are used.
\begin{tabular}{llll} 
(244) & a. & isnaap \(\sqrt{ }\) azoj & six \\
& b. & isnaap \(\sqrt{ }\) aazoj & (Times/Raising) \\
& c. & isnaap \(\sqrt{ }\) aazoj & put six (causative) \\
& d. & hant isnaap \(\sqrt{ }\) aazoj & six years of age \\
\((245)\) & a. & csoi \(\sqrt{ }\) hanl & nine \\
& b. & csoi \(\sqrt{ }\) ahanl & (Times/Raising) \\
& c. csoi \(\sqrt{ }\) ahanl & put nine \\
& d. & hant csoi \(\sqrt{ }\) ahanl & nine years of age
\end{tabular}

Seven uses the invariant expression tomcoj plus either the verb \(\sqrt{ }\) iih be or the intransitive verb \(\sqrt{ } \mathbf{a a h}\) (not used elsewhere), or the transitive verb \(\sqrt{ } \mathbf{a h} p u t\).Fl (all inflected for a third person oblique/indirect object).
\begin{tabular}{lll} 
a. & tomcoj cö- \(\sqrt{ } \mathbf{i i h}\) & seven \\
b. & tomcoj cö- \(\sqrt{ }\) aah & (Times/Raising) \\
c. & tomcoj cö- \(\sqrt{ }\) ah & put seven \\
d. & hant tomcoj cö- \(\sqrt{ }\) ah & seven (years of age)
\end{tabular}

\subsection*{19.12 Dative and Antidative}

When the verb meaning tell has no addressee or a plural addressee, the basic verb \(\sqrt{ } \mathbf{a m x}\) is used (see \(\S 18.5 .5\) ), but if it has a singular addressee, the derived verb \(\sqrt{ } \mathbf{a a m x}\) is used and the addressee is encoded as an indirect object.
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{Table 19.2: Derived number predicates} \\
\hline & Root & Times/Raising (intransitive) & \begin{tabular}{l}
'age' forms \\
(transitive)
\end{tabular} & 'put' forms (transitive) & \\
\hline a. & \(\sqrt{ }\) azoj & \(\checkmark\) aazoj & & & one \\
\hline b. & \(\checkmark\) Vocj & \(\checkmark\) aacj & & \(\checkmark\) ahóocj & two \\
\hline c. & \(\checkmark\) apxa & \(\checkmark\) Vapxa & & & three \\
\hline d. & \(\sqrt{\text { zooxöc }}\) & \(\sqrt{ }\) azooxöc & & & four \\
\hline e. & \(\checkmark\) Voitom & \(\checkmark\) aaitom & & \(\checkmark\) Vahóoitom & five \\
\hline f. & \(\checkmark\) zooxolcam & \(\sqrt{ }\) azooxolcam & & & eight \\
\hline g . & \(\checkmark\) hanl & \(\checkmark\) ahanl & & & ten \\
\hline h. & \(\checkmark\) ipxa & \(\checkmark\) ahipxa & & & few \\
\hline i. & \(\sqrt{ }\) atxo & \(\sqrt{ }\) ahaatxo & & & many \\
\hline
\end{tabular}
\begin{tabular}{lllll}
\hline \hline Vaamx & Semantics: & Agent & Topic & Addressee \\
tell, promise & Syntax: & Subject & Direct Object & Indirect Object \\
\hline \hline
\end{tabular}
(248) Cohyaamx.

3IO-1SGS.Tr-Dt-say+IO
'Se lo dije.'
I said it to him/her. RMH_07-20-07_51c RMH_08-13-07_30c

\section*{(249)}

Ziix zo me spaamx
aha.
thing a 2IO Ir.Id-Pv=say+IO Aux-Dcl
'Algo será dicho a ti.'
Something will be said to you (sg.). RmH_08-14-07_72a
The verb \(\sqrt{ } \mathbf{i s x} \boldsymbol{0}\) hide is a simple transitive verb that takes a patient as direct object (see \(\S 18.5) .{ }^{73}\) But any idea of hiding that mentions the person from whom one is hiding the object must use the verb \(\sqrt{ }\) eesxö, syntactically a simple ditransitive verb.
\begin{tabular}{lllll}
\hline \hline\(\sqrt{\text { leesxö }}\) & Semantics: & Agent & Patient & Goal \\
\begin{tabular}{l} 
hide Patient \\
from Goal
\end{tabular} & Syntax: & Subject & Direct Object & Indirect Object \\
\hline
\end{tabular}
(251)
¡He heesxö!
1IO Im-hide+IO
'Escóndelo/la de mí/nosotros.'
Hide it from me/us! RMH_08-14-07_72b
Icaaspoj \({ }^{\circ}\) quih me iscmeesxö aha.
3P-PON-US-write the.Fl 2IO 3:3-Ir.Id-N-hide+IO Aux-Dcl
'No esconderá el lápiz de ti/Uds.'
S/he will not hide the pencil from you (sg./pl.). RMH_08-04-07_102a RMH_08-14-07_72c
\begin{tabular}{lll} 
Icaaspoj & quih \(\quad\) he ipesxö & ihmiimzo. \\
3P-PON-US-write the.FL & 1IO 3P-PON-Pv-hide+IO & 1SGS.TR-PX-want \\
'Quiero que el lápiz se esconda de mi.' & \\
I want the pencil to be hidden from me. RMH_08-04-07_1020 RMH_08-14-07_72d
\end{tabular}

The verb for ask is \(V_{\text {miiit }}\) when an addressee is expressed as indirect object (§18.5.2); that addressee must be singular. But when an addressee is not present, or if a plural addressee is expressed (necessarily as a postpositional phrase) the stem \(\sqrt{\text { amiiit }}\) is used, as shown in (254) and the examples that follow. These examples are all demonstrably intransitive by the tests in Appendix C.

\footnotetext{
\({ }^{73}\) See \(\S 19.1 .3\) for another use of the verb \(\sqrt{ }\) eesxö.
}
\begin{tabular}{lllll}
\hline \hline Vamiiit & Semantics: & Agent & Patient & \(\left(\right.\) Addressee \(\left._{\mathrm{pl}}\right)\) \\
ask regarding & Syntax: & Subject & Indirect Object & \((\|\mathrm{PP}\|)\) \\
\begin{tabular}{l} 
Patient (to
\end{tabular} & & & & \\
Addressee) & & & & \\
\hline \hline
\end{tabular}
a. ¿Cötamiiit?

3IO-RL-ask RMH_08-04-07_102c
‘¿Preguntó acerca de él/ella/ello?’
Did s/he ask about him/her/it?
b. ¿He tamiiit?

1IO RL-ask RMH_08-04-07_103a
‘¿Preguntó acerca de mí?’
Did s/he ask about me?
(256) Juan quih cohpyamiiit.
the.Fl 3IO-1SGS.In-Dt-ask
'Pregunté acerca de Juan.'
I asked about John. (DS2005, cöcamiit) RMH_08-04-07_103b
(257) ¿Ziix zo mino cötamiiit?
thing a 2P-in 3IO-Rl-ask
‘¿Os preguntó acerca de algo?'
Did s/he ask you (pl.) about something? RMH_08-04-07_103c
(258) ¿Ziix \(z\) ano cötamiiit?
thing a 3P.in 3IO-RL-ask
¿¿Les preguntó acerca de algo?'
Did s/he ask them about something? RMH_08-04-07_103d

\section*{20. Auxiliaries and modals}

A number of small words - some stressed and some not stressed - occur in various constructions with very important uses that are nonetheless not always easily described or classified. In this grammar some of them are referred to as auxiliaries and some are referred to as modals. In some constructions these two categories of words co-occur, in the order Auxiliary - Modal ( \(\$ 20.5\) for some examples).

The words called auxiliaries do not form a homogeneous class. They are for the most part short words - some would call them particles - that subcategorize for special verb forms and are used in a limited number of constructions. These constructions are important to understand, in part because they are so very common.

The words called modals tend to indicate declarative mood vs. interrogative mood, but they also sometimes conflate tense.

The auxiliaries and modals always follow the words to which they relate, which in some cases may be thought of as their complements.

There are two types of auxiliaries: those giving a nominal output and those giving a verbal output. These are taken up in that order below.

\subsection*{20.1 Auxiliaries as verbs}

The words paa and taa are presumably dependent irrealis and dependent realis forms of the same verb (glossed 'be' here) in the following examples. They typically are unstressed, however, and the vowel is subsequently shortened phonetically. They are followed by Different Subject markers (§3.6.1) like verbs of other clauses

\begin{tabular}{ll}
\hline \multicolumn{2}{c}{ Table 20.1: Nominal-forming auxiliaries } \\
& Subcategorizes for ... \\
ha (with variants haa and a) & inflected irrealis \\
ca (with variants que and quee) & stripped irrealis
\end{tabular}
(4) Miizj tàa ma, he iyaamx.
well/correctly RL-be DS 1IO 3:3-DT-tell
'Me lo dijo correctamente.'
S/he told me correctly. RRR

\subsection*{20.2 Nominal-forming auxiliaries}

The nominal-forming auxiliaries ha and ca (Table 20.1) subcategorize for a verbal form and give a nominal output. The main reason for saying that there is a nominal output is that the form may then occur with the Declarative modal ha or the Question modal - ya, modals that otherwise only occur following nominals (see §20.5).

These auxiliaries subcategorize for independent irrealis forms (formed with si-, §17.1.1.3), but two types of forms are used. The auxiliary ha takes an ordinary inflected independent irrealis form. The auxiliary ca takes a "stripped" irrealis form that omits the subject inflection (§10.4.5).

\subsection*{20.2.1 Auxiliary ha (and variants haa and a)}

The auxiliary ha has a fairly wide distribution, which makes it a bit complicated to explain. In addition, it has three common allomorphs: ha, haa, and a; these are described below. This auxiliary does not have any obvious semantic content.

Besides its nominal-forming function, the auxiliary ha also simply occurs with irrealis deverbal nouns in relative clauses; these are described in §20.2.1.3.

\subsection*{20.2.1.1 Irrealis verbs in irrealis independent clauses}

The auxiliary ha is commonly used to form a normal independent irrealis clause. The irrealis form that occurs with it is fully inflected for person. A modal must follow the auxiliary in order to complete the clause when it is not embedded (see §20.2.1.2). The choice of modal affects the exact form of the auxiliary: either unstressed a or ha, or stressed haa.
(5) Auxiliary with basic modals ( \(\$ 20.5\) )
\begin{tabular}{llll} 
a. & AUX-DCL & a-ha \(^{1}\) & (Declarative mood) \\
b. & AUX-QM & haa-ya & (Interrogative mood)
\end{tabular}

Auxiliary with special declarative modal (\$20.7)
c. AUX DCL haa hi (Declarative mood)

Auxiliary with past tense modal (\$20.6)
d. Aux Past
ha iihi
(Declarative mood)

The examples below underscore the subject inflection on the irrealis form, to make clear that the form is the fully-inflected type; the auxiliary is also underscored in each example. \({ }^{2}\)

\section*{Examples with basic declarative modal}
(6) Insiitax aha.

2SGS-Ir.Id-go Aux-DCL
'Debes ir.'
You should go. RMH_11-28p-07_42
Hipiix \(\underset{\text { ihsiihit }}{1 S_{G} S P S}\) aha.

DPS 1SGS.Tr-Ir.ID-eat Aux-Dcl
'Comeré éste/a.'
I will eat this one. RMH_11-28p-07_43
(8) Sheel aha.

Ir.ID-red AUX-DCL RMH_11-28p-07_46
'Debe hacerse rojo/roja'
It should be/become red.
(9) Minl quih pozatx ta \(\mathbf{x}\), insooha ha.

2P-finger-PL the.FL Ir.Dp-have.glochids DS UT 2SGS-Ir.Id-cry Aux-DCL
'Si tus dedos se llenan de alguates, vas a llorar.' RMH_08-13-07_40b RMH_11-28p-07_44
If your fingers get glochids in them, you will cry. (Consejos_choya_03)
(10) Inscmexl aha.

2SGS-Ir.Id-N-take Aux-Dcl
‘¡No lo debes agarrar!’
You shouldn't grab it! RMH_11-28p-07_45
(11) Inscmexl áha.

2SGS-Ir.Id-N-buy Aux-DcL
‘No lo debes comprar!’
You shouldn't buy it! RMH_05-20-08_18

\footnotetext{
\({ }^{1}\) After a verb ending in an unstressed a, the allomorph a of the is auxiliary is not distinctly perceived. As a result, the dictionary committee decided to not even write that vowel. See the verb in (9), for example. Some speakers actually drop the auxiliary vowel (phonetically) when it is preceded by other vowels, and prefer to write the examples with the truncated form. These examples are nevertheless still glossed with AUX in this grammar in order to make the facts clear.
\({ }^{2}\) Intransitive verbs with third person subject have inflected irrealis forms that are homophonous with stripped irrealis forms since subject inflection for third person is null.
}

\section*{Examples with basic question modal}
(12) iInsiitax haa -ya?

2SGS-Ir.Id-go Aux QM
‘¿Piensas ir?’
Are you (thinking about, planning on) going? RMH_05-20-08_19
(13)
ilhpsiitax haa -ya? 1SgS.In-Ir.Id-go Aux QM
'¿Debo ir?’
Shall I go? RMH_11-28p-07_47
(14) Impaacat \(x\), itoox insiizquim haa -ya?

2SGS-Ir.Dp-swim UT far 2SGS-Ir.ID-enter Aux QM
'¿Vas a nadar lejos?’
Are you going to swim out far? RMH_11-28p-07_48
(15) ¿Az insiihit haa -ya?
what? 2SGS-Ir.Id-eat Aux QM
'Qué vas a comer?'
What are you going to eat? RMH_11-28p-07_49

\section*{Examples with special declarative modal}
(16) Masiiht haa hi.

2PlS-Ir.Id-see-Pl Aux Dcl
'Ustedes lo/la van a ver.' (pequeña duda)
You (pl.) will see him/her/it. (some doubt) RMH_11-28p-07_50
(17) Ihpspanim haa hi.

1SGS.In-Ir.ID-wash.hair Aux Dcl
'Me voy a lavar el cabello.' (pequeña duda)
I will wash my hair. (some doubt) RMH_11-88p-07_51
(18) Hin satoosiploj haa hi.

1SGDO Ir.Id-photograph-PL AUX DCL RMH_11-28p-07_52
'Posiblemente tienen la intención de fotografiarme (sin permiso).'
They might have the intention of taking pictures me (without permission).
(19) He hin satoosiploj haa hi.

1Pro 1SGDO Ir.ID-photograph-Pl AuX DCL RMH_11-28p-07_53
'Posiblemente tienen la intención de fotografiarme A mí (sin permiso).'
They might have the intention of taking pictures ME (without permission).

\section*{Examples with past tense modal}
(20) Ihsiicatx ha iihi, ihyaticpan hac.

1SGS.Tr-Ir.Id-abandon AUX Past 1P-PON-work the.LC
'He pensado en dejar mi trabajo.'
I have thought about quitting my job. (offered) RMH_11-28p-07_54
An irrealis form with the auxiliary ha always indicates some matter of the will, as the translations of the preceding examples illustrate. If such a reading cannot be obtained, the phrase is nonsensical.
\begin{tabular}{ll} 
\%** \\
Ir.Id-hot.(weather) & aha. \\
AuX-DCL
\end{tabular}

Independent clauses with an inflected future may use other words instead of the auxiliary plus modal combinations described here. These are described in §17.1.1.3.

\subsection*{20.2.1.2 Embedded irrealis clauses}

When an inflected independent future clause is presented as an indirect quotation, the auxiliary ha appears without any modal. \({ }^{3}\)
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{a.} & Poyaam ta, & \(\underline{\text { isexl }}\) & ha, & teeme. \\
\hline & Ir.Dp-later DS & 3:3-Ir.ID-buy & Aux & Px-say \\
\hline \multirow[t]{2}{*}{b.} & \multirow[t]{2}{*}{* Poyaam ta} & sexl & ca & teeme. \\
\hline & & IR.ID-buy & Aux.SN & \\
\hline
\end{tabular}
'Dijo que lo/los comprará más tarde.' S/he \(e_{i}\) said that \(s / h e_{i}\) will buy it/them later. RMH_11-28p-07_55
\begin{tabular}{rllllll} 
a. María & quih & poyaam & ta & \(\underline{\text { isexl }}\) & \(\underline{\text { ha, }}\) & teeme. \\
& & the.FL & IR.Dp-later & DS & 3:3-Ir.ID-buy & AUX
\end{tabular}
b. Poyaam ta María quih isexl ha, teeme.
c. Poyaam ta isexl ha, teeme, María quih.
d. * Poyaam ta isexl ha, María quih teeme.
'María dijo que lo/los comprará más tarde.'
Maria said that she will buy it/them later. (a) RMH_11-28p-07_56 (b) RMH_11-28p-07_57 (c) RMH_11-28p-07_59

\footnotetext{
\({ }^{3}\) When it follows a consonant, it is phonetically a although it is still written as ha.
}
(24) Poyaam ta, isexl ha, teete, teeme. Ir.Dp-later DS 3:3-Ir.Id-buy Aux Rl-say Px-say
'Dijo que dijo que lo/los comprará más tarde.'
S/he said that s/he said that s/he will buy it/them later. RMH_11-28p-07_58
a. Poyaam ta, Juan quih isexl ha, teeme, María quih.
Ir.Dp-later DS the.Fl 3:3-Ir.Id-buy Aux Px-say the.Fl
b. * María quih poyaam ta Juan quih isexl ha, teeme.
'María dijo que Juan lo/los comprará más tarde.'
Maria said that John will buy it/them later. RмH_11-28p-07_60
(26) Hita quih somcapjoee ha, teeme.

1P-mother the.Fl Ir.Id-N-US-gossip Aux Px-say
'Mi madre dijo que uno no debe chismear.'
My mother said that one should not gossip. (Ds2005, capjoé, improved) RMH_11-28p-07_62
(27) Consacaaixaj ha, teemyo.

3IO-2SGS-Ir.Id-cause.hard Aux Px-say-Pl
'Dicen que recibas sus saludos.'
They say that you should receive their greetings. (DS2005, cacáaixai) RMH_11-28p-07_63long ee fix
(28) ... ihpsiij ha, tete.

1SGS.In-Ir.Id-UO-fetch.water Aux RL-say
'.. , dijo que le deba.. conseguir agua.'
..., he said that I should ... fetch water. (DS2005, catoilec) RMH_11-28p-07_64
(29) Cmiique zo cöiscmaqueexot ha, teeye.
person a 3IO-3:3-Ir.ID-N-cause.listen Aux Dt-say
'Dijo que no dejaría a otra persona escucharlo.'
He said that he wouldn't let an other person listen. (DS2005, cöcaqueexot, improved) RMH_11-288-07_65
(30) Ihpsiifp ha, heye.

1SGS.In-Ir.Id-arrive Aux 1SGS-Dt-say
'Dije que voy a llegar.'
I said that I would arrive. RMH_11-88p-07_66

\subsection*{20.2.1.3 Deverbal nouns}

The irrealis deverbal nouns (§14.5) also require an auxiliary, and the auxiliary ha is used in many situations with these. \({ }^{4}\)

\footnotetext{
\({ }^{4}\) It may be the presence of \(\mathbf{x a h}\) in the following examples that causes ha to not appear.
(i) \(\begin{array}{ccc}{[\text { Isiha }} & \text { xah } & \text { quih }] \\ \text { 3P-IR.ID-fast } & - & \text { haa } \\ \text { the.FL } & \text { yoohca. } \\ \text { there } & \text { DT-be.located }\end{array}\) 'Aparentemente va a ser rápido.' / Apparently it is going to be very fast. RMH_08-24-07_112b
}

\section*{Irrealis complement clauses}

The proposition/oblique-oriented deverbal noun in the irrealis mood occurs in a determiner phrase that is the argument of another verb. These deverbal nouns all show person of subject via possessor prefixes. These irrealis mood phrases are bracketed in the examples below.
\(\left[\begin{array}{llllllll}\mathbf{H e} & \text { ziix } & \text { iti } & \text { hoyacj } & \text { zo } & \text { cöhisjeaatim } & \text { ha } & \text { z }\end{array}\right]\)
\begin{tabular}{lll} 
iti & cöima & ha. \\
3P-on & 3IO-SN-N-be & DCL
\end{tabular}
'Nunca pegaré a mi hermano.'
I will never hit my brother. (DS2005, coha) RMH_11-28p-07_67
[ Isaziim ha quih ] cöiyaazquim.
3P-Ir.Id-pleasant Aux the.Fl 3IO-3:3-Dt-surpass
'Va a ser muy hermoso/a.'
It will be prettier. (DS2005, caazquim) RMH_08-24-07_112a(33) Ipca \({ }^{\circ}\) quih miixaj yax, [ issamla ha quih ] cöimaazquim.
rain the.Fl Px-strong because 3P-Ir.ID-lightning Aux the.Fl 3IO-3:3-Px-surpass 'A causa de la lluvia fuerte, va a haber mucho relámpago.' (DS2005, caazquim, improvedtranslation) Because of the heavy rainstorm, it looks like there is going to be lots of lightning.
\begin{tabular}{llllll} 
Pedro quih contìpa & ta, & canoaa zo cöisaai & ha & zo \(]\) \\
the.FL & 3IO-AW-Ir.DP-move & DS & boat & a & 3IO-3P-Ir.ID-make
\end{tabular}
the.Fl 3IO-Aw-Ir.Dp-move DS boat a 3IO-3P-Ir.Id-make Aux a
\(\begin{array}{ll}\text { htcmaa } & \text { ho. } \\ \text { 1SGS.TR-RL-N-know } & \text { DcL }\end{array}\)
'No sé cuando Pedro va a hacer una panga.'
I don't know when Pedro's going to make a boat. RMH_11-28p-07_69
Contìpa ta, [ hisiifp ha zo ] htcmaa ho.

3IO-Aw-Ir.Dp-move DS 1P-Ir.Id-arrive Aux a 1SGS.Tr-Rl-N-know Dcl
'No sé cuando voy a llegar.'
I don't know when I'm going to come. RMH_11-28p-07_70
... [ \({ }^{\circ}\) hacx cöisahmiihit \({ }^{\circ}\) ha z ] iti imahca ha,... apart 3IO-3P-Ir.ID-Pv-cause.die Aux a 3P-on SN-N-be.located Dcl
'... no había razón para que sea matado, ...'
... there was no reason for him to be killed, ... (DS2005, hapácta) RMH_11-28p-07_71
(ii) [ Ihmaa xah pac isiizcam xah quih] haa yoohca. other - some 3P-IR.ID-arrive.PL - the.FL there DT-be.located 'Aparentemente otros más van a llegar.' / Apparently others are going to arrive. RMH_08-24-07_112c

\section*{Relative clauses}

A subject relative clause headed by a (subject-oriented) irrealis deverbal noun (§14.5) - a stripped irrealis in that it does not bear subject inflection (§17.1.2.1) - requires the auxiliary ca (see §20.2.2).
(37) Zixcám spahit ca com, izó hant ano coom -ya?
fish Ir.Id-Pv-eat Aux.SN the.Hz which? place 3P.in SN-lie QM
‘¿Dónde está el pescado que se va a comer?’
Where is the fish that will be eaten? RMH_11-28p-07_72
(38) Ctam soos ca quih, ¿háqui tiih?
man Ir.ID-sing AuX.SN the.Fl which.one? Rl-be.Fl
‘¿Dónde está el hombre que va a cantar?’
Where is the man who is going to sing? RNH_11-28p-07_73
(39) Ziix cöspooin ca zo haquix imiih iha. thing 3IO-Ir.Id-close AUX.SN a there SN-N-be.Fl DCL
'No hay nadie que lo/la cerrará.'
There isn't anyone who will close it. RMH_11-88p-07_111
Ziix ma ssacj ca zo haquix imiih iha.
thing 2SGDO Ir.ID-carry.on.back Aux.SN a there SN-N-be.Fl Dcl
'No hay nadie que te llevará.'
There isn't anyone who will carry you. RMH_11-28p-07_118
..., \({ }^{\circ}\) ziix quiisax \({ }^{\circ}\) sexl ca zo htemaa ho. person Ir.Id-buy Aux.SN a 1SGS.Tr-RL-N-know DCL
'..., no conozco a nadie que lo compre.'
..., I don't know anyone who will buy it. (DS2005, quitalháa) RRR again
..., cmaam quisiil \({ }^{\circ}\) quih cössaxazim ca ticop hin yooxpx. woman child the.Fl 3IO-Ir.Id-hit-Impf Aux.SN Md-Vt 1SGDO Dt-be.mad.at
‘..., la mujer que iba a pegar el niño se enojó conmigo' RMH_11-28p-07_114
..., the woman who was going to hit the child got mad at me. (DS2005, cahojoz)
Masacooxat \(\underline{\text { ca }}\) quih yoofp.
2SGDO Ir.Id-help.care.for.baby Aux.SN the.Fl Dt-arrive
'El/la que te ayudará a cuidar el bebé ha llegado.'
The one who will help you care for the baby has arrived. RMH_11-28p-07_115
(44) Cmaam soos ca cop he hoyacj iha.
woman Ir.Id-sing Aux.SN the.Vt 1Pro 1P-ON-call.sibling DCL
'La mujer que cantará es mi hermana.'
The woman who will sing is my sister. RMH_11-28p-07_116
(45) Canoaa siifp ii ca com he hyaa \({ }^{\circ}\) ha. boat Ir.Id-arrive first Aux.SN the.Hz 1Pro mine Dcl 'La panga que llegará primero es mía.'
The boat that will arrive first is mine. RMH_11-28p-07_117
A direct object relative clause headed by an inflected irrealis form (§14.5) requires the auxiliary ha.
(46) imám quih \({ }^{\circ}\) hant cohsaheectim \({ }^{\circ}\) ha coi

3P-fruit the.FL land 3IO-1SGS.Tr-Ir.ID-? Aux the.PL
'la fruta que voy a transportar'
the fruit that I am going to transport. (DS2005, cöcahéectim) RMH_10-16-07_06
\({ }^{\circ}\) ziix ccam \({ }^{\circ}\) quih ísiicö ha com
animal the.Fl 3:3-Ir.Id-kill Aux the.Hz
'el animal que iba a matar'
the animal that he was going to kill (DS2005, inoosj) RMH_11-28p-07_74
(48) eenim ihsexl ha cop
knife 1SgS.Tr-Ir.Id-buy Aux the.Vt
'el cuchillo que yo iba a comprar'
the knife that I was going to buy (DS2005, cateélot) RMH_11-28p-07_75
(49) hant hasaait ha tintica
land 1PlS-Ir.Id-travel.Pl Aux Md-Aw
'el camino en que viajaremos'
the road that we are going to travel on (DS2005, ha) RMH_11-28p-07_76
Other irrealis relative clauses take a proposition/oblique-oriented irrealis deverbal noun (§14.5) that has the subject expressed as possessor.
ziix misoqueepe ha zo
thing 2P-Ir.Id-comfortable Aux a
'algo con que estarás cómodo/a.'
something with which you will be comfortable! (DS2005, coquéepe) RMH_11-28p-07_77
(51) zixquisiil \({ }^{\circ}\) quij hasítj \({ }^{\circ}\) iti isom ha zo
child the.Cm cradleboard 3P-on 3P-Ir.Id-lie Aux a
'una cuna en que el/la bebé puede estar'
a cradleboard for the baby to lie on. (DS2005, csiti) RMH_11-28p-07_78
\(\begin{array}{lllll}\text { hant quih iti } & \text { isaticpan } & \text { ha } \\ \text { land tac }\end{array}\)
'el lugar donde trabajaría(n)'
the place where s/he/they would work. (DS2005, cöcaix) RMH_11-28p-07_79

\subsection*{20.2.2 Auxiliary ca (and variants quee and que)}

\subsection*{20.2.2.1 Irrealis verbs in independent clauses}

The auxiliary ca subcategorizes for a stripped irrealis complement - an irrealis form without subject person inflection. A modal must follow the auxiliary in order to complete the clause when it is not embedded (see §20.5). The choice of modal affects the exact form of the auxiliary: either unstressed ca or stressed quee.
(53) Auxiliary with basic modals (§20.5)
a. Aux.SN-DCL
ca-ha
(Declarative mood)
b. Aux.SN-QM
quee \({ }^{5}\)-ya
(Interrogative mood)

Auxiliary with special declarative modal (\$20.7)
c. Aux.SN DCL quee hi (Declarative mood)

Auxiliary followed by other elements (\$20.4.1, §20.6)
\begin{tabular}{llll} 
d. & Aux.SN perhaps & ca poho & (Declarative mood) \\
e. & Aux.SN PAST/Future & ca iihi, ca siihi & (Declarative mood)
\end{tabular}

Unlike the irrealis clauses formed with the auxiliary ha (§20.2.1.1), those with ca do not indicate anything relating to one's will. They are just "matter-of-fact" irrealis clauses.

\section*{Examples with basic declarative modal}
Siifp \(\quad\) caha.
IR.ID-arrive \(\quad\) AUX.SN-DCL
'Llegará.'
S/he/it will arrive. RMH_11-28p-07_80
\begin{tabular}{ll} 
He siifp & caha. \\
1PRO IR.ID-arrive & AUX.SN -DCL \\
'Llegaré.' \\
I will & arrive. RMH_11-28p-07_81
\end{tabular}
(57) He masiiho caha.
1Pro 2SGDO Ir.Id-see Aux.SN-Dcl 'Te veré.'
I will see you. RMH_11-28p-07_83
(58) Tiix siiho caha.

DDS Ir.Id-see Aux.SN -Dcl
'Ése/a lo(s)/la(s) verá.'
S/he will see him/her/it. RMH_11-88p-07_84

\footnotetext{
\({ }^{5}\) Because of its similarity to the intransitive verb say (the subject-oriented deverbal noun form of which is quee), and because verbs of saying are used as auxiliaries in some Yuman languages (see Langdon 1970:167), M. Moser (1978:XX) suggests that this auxiliary in Seri may also have this etymology. The account given in this grammar sees it as more closely related to ca.
}

\section*{Examples with basic question modal}
¿Me siifp quee-ya?
2Pro Ir.Id-arrive Aux.SN-QM
'Vas a llegar?'
Will you arrive? RMH_11-28p-07_85
(60)
¿Juan quih zímjöc siifp quee-ya?
the.Fl when? Ir.Id-arrive Aux.SN-QM
‘¿Cuándo llegará Juan?’
When is Juan coming? RMH_11-28p-07_86
(61) ¿Cmaax me moosni quih oo smaai quee-ya?
now 2Pro turtle the.Fl DL Ir.ID-N-make Aux.SN-QM
‘¿No vas a cazar caguama ahora?’
Aren't you going turtle hunting now? RMH_11-288-07_87

\section*{Examples with special declarative modal}
(62) He hap inaail he siixoz quee hi.

1Pro mule.deer 3P-skin 1Pro Ir.Id-scrape Aux.SN Dcl
'Voy a raspar una piel de venado.'
I am going to scrape a deer skin. RMH_11-28p-07_88
(63) He saanpx quee hi.

1Pro Ir.ID-return.home AUX.SN DCL
'Regresaré a casa.'
I'm going home. RMH_11-28p-07_89

\section*{Examples with poho}
(64) Siitax ca poho.

Ir.Id-go Aux.SN Doubt
'Tal vez irá.'
Maybe s/he/it will go. (DS2005, poho) RMH_11-28p-07_90
Examples with siihi and iihi
(65) Soos ca iihi

Ir.Id-sing Aux.SN Past
'Iba a cantar.' RMH_11-28p-07_91
S/he was going to sing.
(66) Soos ca siihi.

Ir.ID-sing Aux.SN Future
'A ver si va a cantar.' RMH_11-28p-07_92
\(I\) wonder if s/he's going to sing.
¿Zímjöc siifp ca siihi?
when? Ir.Id-arrive Aux.SN Future
‘¿Cuando será que va a llegar?’
When will s/he/it arrive? RMH_11-28p-07_93

\subsection*{20.2.2.2 Embedded irrealis clauses}

A stripped irrealis future clause can appear as an indirect quotation with the auxiliary ca without any modal.
(68) Siifp \(\underline{\text { ca, teeme. }}\)

Ir.Id-arrive Aux.SN Px-say
'Dijo/dice que llegará.'
S/he said/says that s/he/it will arrive. RMH_11-28p-07_94
(69) Tiix sahoocj \(\underline{\text { ca, teeme. }}\)

DDS Ir.Id-make.two Aux.SN Px-say
'Dice que va a tener gemelos.'
She says that she is going to have twins. (DS2005, cahooci) RMH_11-28p-07_95
(70) ... hizi saaipotim ca, teeme.

1PlDO Ir.Id-pay Aux.SN Px-say
'Dice que nos pagará.'
S/he said/says that she will pay us. (DS2005, cyaxi) RMH_11-28p-07_96
(71) Siifp
ca, heye
xo yomafp.
Ir.ID-arrive Aux.SN 1SGS-Dt-say but Dt-N-arrive
'Dije que ella llegaría pero no llegó.'
I said that s/he would arrive. RMH_11-28p-07_97
(72) Smaapxalcoj ca, teeyo.

Ir.Id-N-move-Pl Aux.SN DT-say-Pl
'Dicen que no se van a mudar.'
They said that they are not going to move away. (DS2005, caapxim) RMH_11-28p-07_98
He \({ }^{\circ}\) ziix hamozhamqueet \({ }^{\circ} z\) iti cöspacta ca,
1 Pro sadness a 3P-on 3IO-Ir.Id-be.in.appearance Aux.SN
mecyo.
Px-US-say-PL
'Dicen que voy a tener mucha tristeza.'
They say that I am going to have a lot of sadness. (DS2005, ziix hamoz hamquéet) RMH_11-28p-07_99
(74) ... \({ }^{\circ}\) hacx smiih \(^{\circ}\) ca, xah tamoz .
apart Ir.ID-not.be.FlAUX.SN - Rl-think UT
'.. pensó que iba a morir.'
... s/he thought s/he was going to die. (DS2005, ccapzx) RMH_11-28p-07_100
(75) He \({ }^{\circ}\) hacx smiih \({ }^{\circ}\) ca, xah hpyoomoz.

1Pro apart Ir.Id- not.be.Fl Aux.SN - 1SgS.In-Dt-think
'Pensé que yo iba a morir.'
I thought I was going to die. RMH_11-28p-07_101
(76) \({ }^{\circ}\) Hacx smiih \({ }^{\circ}\) ca xah hpyoomoz.
apart Ir.Id- not.be.Fl Aux.SN - 1SGS.In-Dt-think
'Pensé que ella/él iba a morir.'
I thought that s/he was going to die. RMH_11-28p-07_102
(77) Hita he \({ }^{\circ}\) hacx smiih \({ }^{\circ}\) ca xah yoomoz.

1P-mother 1Pro apart Ir.Id- not.be.Fl Aux.SN - Dt-think
'Mi madre pensó que yo iba a morir.'
My mother thought I was going to die. (DS2005, cqueemi) RMH_11-28p-07_103

\subsection*{20.2.2.3 Irrealis complement clauses}

The subject-oriented irrealis form followed by ca may be a subject complement or adjunct of another verb. In this usage, there is no article present - perhaps to distinguish these clearly from subject relative clauses.
(78) Cmaax [ imám smam ca ] toc cöyoohca.
now 3P-fruit IR.ID-ripe Aux.SN there 3IO-Dt-be.located
'Pronto su fruta estará madura.'
Its fruit will be ripe soon. (DS2005, quiyoz) RMH_11-28p-07_104
..., [ he cmaax socacj \(\underline{\text { ca }}\) ] hiz cohpmiij.
1Pro now Ir.Id-UO-chip Aux.SN here 3IO-1SGS.In-Px-sit
'..., ahora voy a hacer una figura.'
..., now I am going to carve (an ironwood figure). (DS2005, ocoáci) RMH_11-28p-07_105
(80) [ Xepe com siixi ca ] toc comom. sea the.Hz Ir.ID-end Aux.SN there 3IO-Px-lie
'La marea estará baja.'
The tide will be low. (DS2005, quixi) RMH_11-28p-07_106
(81) Poofp \(\mathbf{x}\), [saticpan ca] haquix miih.

Ir.Dp-arrive UT Ir.Id-work Aux.SN there Px-be.Fl
'Cuando viene, trabajará.'
When she comes, she is going to work. (DS2005, caticpan) RMH_11-28p-07_107
(82) [ He ox mazi seaam ca ] hiz cohmamat.

1Pro thus 2PlDO Ir.Id-tell-Pl Aux.SN here 3IO-1PlS-Twd-Px-move-Pl
'Hemos venido para decirles eso.'
We have come to tell you that. RMH_11-288-07_108
This auxiliary has the allomorph que when it occurs before any form of the verb \(\sqrt{ }\) mis resemble. \({ }^{6}\)

\footnotetext{
\({ }^{6}\) This variant was not well documented until fairly recently.
}
(83) [Saapl que ] ipomís ta \(\mathbf{x}\), insicápota ha. Ir.ID-cold Aux.SN 3:3-Ir.Dp-resemble DS UT 2SGS-Ir.Id-HAVe-jacket Aux-DcL 'Si parece que va a hacer frío, debes ponerte una chaqueta.' Rмн_11-28p-07_109 If it seems like it is going to be cold weather, you should put on a jacket. (DS2005, que)
```

Haxz heeque [saacoj que] cmis cap

``` dog juvenile Ir.Id-big Aux.SN SN-Tr-resemble the.VT
ihsexl aha.

1SGS.Tr-Ir.Id-buy Aux-Dcl
'Compraré el perrito que parece que va a crecer.'
I will buy the puppy that looks like it is going to grow big. (DS2005, que) RMH_11-288-07_110

\subsection*{20.3 Auxiliaries with verbal output}

The auxiliaries discussed in this section affect the interpretation but not the category of the word that they follow.

\subsection*{20.3.1 Auxiliaries pi and ta}

The (unstressed) auxiliaries pi (Aux.Ir) and ta (Aux.Rl) subcategorize for inflected independent irrealis complements; they do not affect the argument structure of the clause. Compare the following examples.


The forms of these auxiliaries parallel the medial irrealis (po-, §17.1.1.1) and medial realis ( \(\mathbf{t}\)-, §17.1.1.5) forms in the language, and they are analogous in their function. A clause with them is a dependent clause and is marked for Different Subject (§3.6) or not, as appropriate.

In some cases a clause embedded under pi might be translated if it will be the case that ..., and one embedded under ta if it was the case that ..., although such literal translations are not
usually the most appropriate. \({ }^{7}\) Also see the use of these auxiliaries in purpose clauses (§3.4.2).

\section*{Examples with pi}
(86) Hascama scaap pi x, ...
in.balsa Ir.ID-US-stand AUX.IR UT
'Si uno va a cazar caguama, ...'
If one goes hunting for sea turtle, ... RMH_11-28p-07_119
Ziix zo nsiihit pi \(x\), insoneaax aha. \({ }^{8}\)
thing a 2SGS-Ir.Id-eat Aux.Ir UT 2SGS-Ir.Id-wash.hands Aux-DCL
'Si va a comer algo, lávate las manos (antes de comer).'
If you are going to eat something, wash your hands (first). RMH_05-20-08_27
(88) Juan quih siifp pi ta \(x\), he mos siifp caha.
the.Fl Ir.ID-arrive Aux.Ir DS UT 1Pro also Ir.ID-arrive Aux-Dcl
'Si llegará Juan, yo también llegaré.'
If Juan will be arriving, I will also arrive. RMH_11-28p-07_120
Ziix zo nsiihit pi ta \(x\), ma hsiiix aha.
thing a 2SGS-Ir.ID-eat Aux.Ir DS UT 2SGDO 1SGS.Tr-Ir.Id-go.away.from Aux-DcL
'Si vas a comer algo, me apartaré de ti.'
If you are going to eat something, I'll leave you. RMH_11-28p-07_121
Insahipot pi ta \(x\), xaa nsiifp aha.

2SGS-Ir.Id-Pv-pay Aux.IrDS UT soon 2SGS-Ir.Id-arrive Aux-Dcl
'Si te van a pagar, debes llegar pronto.'
If you are going to be paid, you should arrive early. RMH_11-288-07_122

\footnotetext{
\({ }^{7}\) The word peetx is recorded in the 2005 dictionary as a variant of pix. This word conflates the auxiliary pi and the archaic conjunction tx. Both the word tx and peetx (or pee tx, as it might be written) are not used today. The word pee also appears as a variant of \(\mathbf{p i}\) in the following example, apparently. This has not been studied in detail.
\begin{tabular}{llllll} 
(iii) & ¡Ziix zo nsiihit & pi/pee ta & oo sahii & tee! \\
thing a & 2SGS-IR.ID-eat & AUX.IR & AUX.RL DL IR.ID-PV-feel RHET
\end{tabular}
\({ }^{8}\) Compare this with the following example that has the simple dependent irrealis in the protasis.

\section*{(iv) Ziix zo mpoohit \(x\), insoneaax aha.}
thing a 2SGS-Ir.Dp-eat UT 2SGS-IR.ID-wash.hands AUX-DCL RMH_05-20-08_26
'Si comes algo, lávate las manos (después). / If you eat something, wash your hands (afterwards).
}

\section*{Examples with ta}
(91) Soohitim ta ma, ctam ihmaa quih yoofp. Ir.Id-UO-eat-ImpF Aux.Rl DS man other the.Fl Dt-arrive 'Cuando estaba por comer, el otro hombre llegó.'
When s/he was going to eat, the other man arrived. RMH_11-28p-07_123
(92) Ihpsoos ta ma, naapxa zo hant mooit.

1SGS.In-Ir.Id-sing Aux.Rl DS turkey.vulture a land Px-arrive
'Cuando yo estaba por cantar, un zopilote aterrizó.'
When I was about to sing, a turkey vulture landed. RMH_05-20.08_23
The clause with the auxiliary may be embedded as an indirect quote.
(93) a. María quih siifp xah ta, hemyo.
the.Fl Ir.Id-arrive - Aux.Rl 1PlS-Px-say-Pl
b. Siifp xah ta, hemyo, María quih.
'Dijimos que María vendrá.'
We said that María will/would come. RMH_11-28p-07_125
(94) Siifp ta, teepe áa, siifp aha. Ir.Id-arrive Aux.RL Ir.ID-say really Ir.ID-arrive Aux-DCL 'Si de veras dice que vendrá, vendrá.'
If s/he really says s/he will come, s/he will come. RMH_11-28p-07_124
Hasocoozx xah ta, hetyo, ...
1PlS-Ir.Id-UO- steal-Pl - Aux.Rl 1PLS-Rl-say-Pl
'Dijimos que robaríamos, ...'
We said that we would rob, ... RMH_11-28p-07_126
(96) Him caazi \({ }^{\circ}\) quij ihpsaticpan ta him miih.

1SGDO SN-Tr-carry the.Cm 1SGS.In-Ir.Id-work Aux.Rl 1SGDO Px-say
'Mi padre me dijo que trabajara.'
My father told me to work. RMH_11-28p-07_127

\footnotetext{
a. Juan quih \({ }^{\circ}\) hant pofii ta \(^{\circ}\) hasóosi ha, teeme. the.Fl tomorrow 1PlS-Ir.Id-sing.Pl Aux Px-say
b. Hant pofii ta hasoosi ha, teeme, Juan quih.
'Juan dice que cantaremos mañana.'
Juan is saying that we will sing tomorrow. (a) RMH_11-28p-07_128 (b) RMH_11-28p-07_129
}
(98) \({ }^{\circ}\) Hant pofii ta \({ }^{\circ}\) hasoosi ta him miih, Juan quih. tomorrow 1PlS-Ir.Id-sing.Pl Aux.Rl 1SGDO Px-say the.Fl 'Juan me dijo que cantaremos mañana.'
Juan told me that we will sing tomorrow. RMH_11-288-07_130

\subsection*{20.3.2 Auxiliary ma}

The unstressed word ma is apparently an auxiliary verb in examples such as the following. (It could easily be confused with DS marking.)
(99) ... quipac cöiixaj hac cöspaa ta ma. US-3P-back 3IO-3P-PON-strong the.Lc 3IO-Ir.Id-Pv-know Aux.Rl Aux.Px
'... la superioridad de su fuerza se reconocería.'
... the superiority of his strength would be recognized. Viento_Norte 5

\subsection*{20.4 Words that replace auxiliary ha and modal after irrealis forms}

Four words appear after irrealis forms in lieu of the auxiliary ha.

\subsection*{20.4.1 Uncertainty poho}

The unstressed auxiliary poho indicates doubt on the part of the speaker.
(100) Hácataj quih anxö isiicötoj poho s. shark-PL the.Fl Intns 3:3-Ir.Id-kill-Pl Doubt of.course
'Probablemente matarán muchos tiburones.'
Probably they will kill many sharks. RMH_11-28p-07_133
(101) Ihpsij poho tx, ihpscmaaij poho.

1SGS.In-Ir.Id-UO.fetch.water Doubt or 1SGS.In-Ir.ID-N-UO.fetch.water Doubt 'Tal vez traerá agua. Tal vez no.'
Maybe I will fetch water. Maybe I won't fetch water. RMH_11-28p-07_134

\subsection*{20.4.2 Certainty i}

The unstressed auxiliary \(\mathbf{i}\) emphasizes the certainty of the event.

Ihpsiim i.
1SgS.In-Ir.ID-sleep Crt
'Voy a dormir.'
I'm going to sleep. RMH_11-28p-07_135
(103) Ihsiihit \(\underline{i}\) s.

1SGS.Tr-Ir.Id-eat Crt of.course
'Tendré que comerlo.'
I'll just have to eat it. RMH_11-28p-07_137
(104) Imaahit iha yax, tom \(z\) isconyaa i.

SN-N-fish DCL because money a 3:3-Ir.Id-N-own Crt
'Como no va a la pesca, no tendrá dinero.'
Since he doesn't go fishing, he won't have any money. RMH_11-28p-07_136

\subsection*{20.4.3 Emphatic xo}

The auxiliary xo gives a sense of emphasis. \({ }^{9}\)
\begin{tabular}{rlll} 
(105) & ¡Minl & quih & szatx \\
& 2P-finger-PL & the.FL & IR.ID-have.glochids \\
& ‘Tus dedos estarán llenos de alguates!' \\
& Your fingers will get tiny thorns in them! \\
& RMH_11-28p-07_138
\end{tabular}
(106) ¡Ihpscmaapxtim \(\underline{\text { x0! }}\)

1SGS.In-Ir.Id-N-move Emph
‘¡No me voy a mudar!’
I'm not going to move away! RMH_11-28p-07_139

\subsection*{20.4.4 Rhetorical modal tee}

Independent irrealis clauses formed with si- (§17.1.1.3) may be followed by the word tee to express sarcasm or disbelief. While this word perhaps may have an etymology relating it to a verb of saying (as suggested by its form), it is taken here simply as a rhetorical modal. The construction has a fairly distinctive intonation contour with low tone on the word tee. This intonation is indicated with the punctuation marks ?! but this is not meant to claim that there is interrogative morphology associated with this construction.
```

(107) ¿¿Tiix àpa shaa tee?!
DDS ? IR.ID-EQ RHET
‘¡No puede ser él/ella!'
It can't be him/her! RMH_08-04-07_249a
(108) i¿Taax àpa shaa tee?!
DDP ? IR.ID-EQ RHET
'iNo pueden ser ellos/ellas!'
It can't be them! RMH_08-04-07_249b

```

Like what happens in some negative clauses (see the beginning of chapter 8 and especially §21.1.3), a verb in this construction induces the use of the indefinite article zo with a noun in the clause even if non-referential, as in the following example.
(109)
¡¿Zó mpooh, hax zo nsiisi tee?!
how? 2SGS-Ir.Dp-do water a 2SGS-Ir.Id-drink RHET
‘¿Cómo vas a conseguir agua para tomar!’
How on earth would you get water to drink?! (DS2005, hamát) RMH_08-24-07_76d

\footnotetext{
\({ }^{9}\) This morpheme is obviously phonetically similar to the Emphatic Realis verbal prefix \(\mathbf{x o}\) - (§17.1.1.8).
}

\subsection*{20.5 Basic declarative and interrogative modals}

Two enclitic modals are extremely common: ha Declarative and -ya Interrogative. \({ }^{10}\) The enclitic ha has the allomorph iha after a consonant. \({ }^{11}\) The vowel \(\mathbf{i}\) is appropriately taken as being epenthetic. \({ }^{12}\) In both cases the final \(\mathbf{a}\) is sometimes omitted in the speech of some people, even in rather careful speech; this is apparently a relatively recent innovation. When the final a is omitted from the allomorph iha, the glottal stop may be quite attenuated and so one hears primarily the (epenthetic) vowel i. The discussion below uses only the conservative or careful forms ha and iha.

Both of these modals may follow a nominal to form a simple sentence (see §10.1).
(110) Hast caacoj iha.
(111) Haso ha.
stone SN-big DCL
'Es una piedra grande.'
net DCL
'Es una red.'
It is a net. RMH_11-28p-07_141
(112) Tzih iha.
(113) Hai ha.
puffer DcL
'Es un botete tamborín.'
It's a bullseye puffer. RMH_11-88p-07_142
air DCL
'Es aire.'
It is wind/air. RMH_11-28p-07_143
¿Hast -ya?
(115) ¿Haso -ya?
stone QM
‘¿Es una piedra?
Is it a stone? RMH_11-28p-07_144
net QM
‘¿Es una red?'
Is it a net? RMH_11-28p-07_145

Each of them may also follow a deverbal noun (see §10.4) or a couple of adjectives that arguably are verbs with defective paradigms (see §23.2).
(116) Cpanzx iha.

SN-run DcL
'Está corriendo.'
(117) Tiix caai ha.

DDS SN-Tr-make DCL
'Está haciéndolo/a.'
S/he is making it. RMH_11-288-07_147

\footnotetext{
\({ }^{10}\) The latter is written as a suffix in the practical orthography, as decided by the committee for the 2005 dictionary. The distribution of -ya is not entirely parallel with that of the declarative modal ha since \(-\mathbf{y a}\) is also used after question words (see chapter 6).
\({ }^{11}\) The consonant may be a true consonant, an approximant (y) or a glottal stop (h).
\({ }^{12}\) Alternatively, the \(\mathbf{i}\) could be underlying and that it is deleted following a preceding vowel. Or it could be that neither ha or iha is derived from the other, of course. Regardless of the analysis, this modal is different from the auxiliary ha ( \(\$ 20.2 .1\) ) that occurs in irrealis constructions, which does not take an epenthetic vowel at all.
}
\begin{tabular}{ll} 
(118) & \begin{tabular}{l} 
Tazo ha. \\
one DCL
\end{tabular} \\
& 'Es uno.' \\
& It is one. RMH_11-28p-07_148
\end{tabular}
(119) Heeque ha.
juvenile DCL
'Es joven / pequeño/a.'
It is small/young. RMH_11-28p-07_149
```

¿Tiix caai -ya?

```

DDS SN-Tr-make QM
‘¿Está haciéndolo/a?'
Is s/he making it? RMH_05-20-08_29
¿Heeque -ya? juvenile QM
‘¿Es joven / pequeño/a?’
Is it small/young? RMH_11-28p-07_151

The modals are also used after the auxiliaries that occur with independent irrealis verbs; see \(\S 20.2 .1 .1\) for details of usage. These combinations, which have been written as single words in the orthography, are given here with forms of the verb \(\sqrt{\operatorname{atax}} g o\) to illustrate them. (The words caha and aha are unstressed but the words queeya and haaya are stressed.)
\begin{tabular}{|c|c|c|c|c|c|}
\hline (124) & \multirow{4}{*}{Deverbal} & \multicolumn{2}{|l|}{Declarative} & \multicolumn{2}{|l|}{Interrogative} \\
\hline & & He siitax & caha. & \({ }_{\text {¢ Me }}\) Me siitax & quee -ya? \\
\hline & & 1Pro Ir.Id-go & Aux.SN-Dcl & 2Pro Ir.Id-go & Aux.SN QM \\
\hline & & 'Iré.' & & ‘¿Irás?' & \\
\hline & \multirow{5}{*}{Finite} & \multicolumn{2}{|l|}{I will go. RMH_11-28p-07_153} & \multicolumn{2}{|l|}{Will you go? RMH_11-288-07_154} \\
\hline & & Ihpsiitax & aha. & ¢Insiitax & haa -ya? \\
\hline & & 1SGS.In-Ir.Id-go & Aux-Dcl & 2SGS-Ir.ID-go & o Aux QM \\
\hline & & 'Iré.' & & ‘¿Irás?' & \\
\hline & & I will go. RMH_11-2 & 288-07_155 & Will you go? & RMH_11-28p-07_156 \\
\hline
\end{tabular}

\subsection*{20.6 Tensed modals iihi and siihi}

The declarative modal iihi generally indicates past time, while siihi indicates future. These modals follow nominals, including deverbal nouns. They are glossed Past and Future, respectively. \({ }^{13}\) (For more examples see \(\S 10.2\).)
(125) He "jefe" iihi xo ziix chaa zo hin temaaj iho.

1Pro chief Past but thing SN-EQ a 1SgDO Rl-N-know-Pl Dcl
'Aunque era jefe, ahora no me reconocen.'
Although I was chief, they don't know who I am. RMH_11-28p-07_157

\footnotetext{
\({ }^{13}\) The use of iihi is a bit more complex. One consultant pointed out that it may be used in the first time introduction of a person to someone; this is not past tense. (After the first introduction it would not be used.) And another consultant informed me that it indicated real certainty and in that usage did not imply past time.
}
(126) He imoohitim iihi.

1Pro SN-N-UO-eat Past
'No he comido.'
I haven't eaten. RMH_11-288-07_158
(127) He \({ }^{\circ}\) ziix quiisax \({ }^{\circ}\) hap quícotim isoj iihi.

1Pro person mule.deer SN-kill-ImpF 3P-self Past
'Yo era un experto cazador de venado bura.'
I used to be a expert mule deer hunter. (Adapted from an overheard claim) LHC_2-06-07_166b
(128) Lauro quih mos hizac oo iti \({ }^{\circ}\) hapx caap \({ }^{\circ}\) ihi.
the.Fl also Px-LC DL 3P-on born PAST
'Lauro también nació aquí.'
Lauro also was born here. RMH_11-28p-07_160
(129) Haxz ticom quictamo siihi.
dog Md-Hz SN-ferocious Future
'Me pregunto si ese perro es bravo.'
I wonder if that dog is ferocious. (DS2005, siihi) LHc_2-06607_206
(130) Hast coopol ticom, izó hapai siihi? mountain SN-black Md-Hz how SN-Pv-tell Future
‘¿Cómo se llama ese cerro negro? me pregunto.'
What could that black mountain be called, I wonder. (DS2005, siihi) XMH_08-15-07_30b
For the use of these modals with irrealis deverbal nouns, see §20.2.1.1.

\subsection*{20.7 Special declarative modals hi and ho}

The declarative modal hi (with the allomorph ihi after a consonant) has a very different distribution from the basic declarative modal ha. It does not occur with nouns or deverbal nouns.
(131)
* Hast ihi.
('Es una piedra.')
(It is a rock.)
(132) * Cpanzx ihi.
('Está corriendo.')
(S/he/it is running.)
This modal is used after the (stressed) auxiliary that occurs with irrealis verbs; the forms are given below.
\begin{tabular}{llll} 
a. Deverbal & He siitax quee hi. \\
& 1PRO IR.ID-go AUX.SN DCL \\
& 'Iré.' & & \\
& I will go. (with some doubt) & RMH_11-28p-07_161
\end{tabular}
\begin{tabular}{ll} 
b. Finite & Ihpsiitax haa hi. \\
& 1SGS.IN-Ir.Id-go Aux DCL \\
& 'Iré.' \\
& I will go. RMH_11-28p-07_162
\end{tabular}

This modal is also used after a verb in the neutral realis ( \(\mathbf{t}\)-) form (§17.1.1.5) to make the verb function as the head of an independent clause.
(134) Tmaaiscan ihi.

RL-N-hard DCL
'No es duro/a.'
It's not hard. RMH_11-28p-07_163
(135) Tisj ihi.

RL-timid DCL
'Es tímido/a.'
S/he's timid. RMH_11-28p-07_164
(136) Icoohit ihtamzo hi.

Inf.IN-UO-eat 1 SGS.Tr-Rl-want DcL
'Quiero comer.'
I want to eat. RMH_11-28p-07_165
Likewise, the modal ho (with allomorph iho after consonants) does not occur with nouns.
(137) * Hast iho.
('Es una piedra.')
(It is a rock.)
(138) * Cpanzx iho.
('Está corriendo.')
(S/he/it is running.)

Nor does it occur with irrealis forms of any sort.
(139) * Smatax caho. / * Smatax aho.
('No irá.') (S/he will not go.)
This modal is used in two contexts. First, it is used with negative neutral realis verbs (§17.1.1.5) used in non-interrogative independent clauses.

Zixcám zo poxtamt ta, tompaho ho.
fish a Ir.Dp-abundant DS RL-N-Pv-see Dcl
'No se vieron muchos peces.'
Not many fish were seen. RMH_09-28-07_157d
(141) Icoohit ihtemamzo ho.

Inf.In-UO-eat 1SgS.Tr-Rl-N-want Dcl
'No quiero comerlo.'
I don't want to eat it. (DS2005, ho) RMH_11-28p-07_166
Second, it is used with dependent irrealis verbs, whether negative or affirmative, in main clauses to express doubt about whether something happened.
(142) Juan quih paahit iho \(x\), pomaahit iho \(x\). the.Fl Ir.Dp-fish DCL or Ir.Dp-N-fish Dcl or
'Tal vez Juan fue a la pesca, o tal vez no fue a la pesca.'
Maybe Juan went fishing, or maybe he didn't go fishing. RMH_11-28p-07_167
(143) Poopea ho \(x\), pomapea ho \(x\).

Ir.Dp-rain Dcl or Ir.Dp-N-rain Dcl or
'Tal vez llovió o tal vez no llovió.'
Maybe it rained, or maybe it didn't rain. RMH_11-28p-07_168

\section*{21. Determiners}

This chapter examines the class of determiners that may head determiner phrases (see §8.1). Such determiners include indefinite articles (§21.1), definite articles (§21.2), and demonstrative adjectives (§21.3). \({ }^{1}\) The indefinite articles are also used as pronouns; that is, they may occur without a complement at all (see §4.3.1) or may head a partitive expression (§8.5). Likewise, the demonstrative adjectives may also be used as pronouns (§4.3.2). A demonstrative pronoun may also occur in construction with a nominal phrase; this might be mistaken for a simple determiner phrase; see §16.2.4.

\subsection*{21.1 Indefinite articles}

The indefinite articles are zo \(a\), an and pac (some). The article zo generally occurs with singular count nouns (but see \(\S 21.1 .8\) below). The article pac is used with plural count nouns and also with mass nouns. \({ }^{2}\)

While the etymology of the word pac is unknown, the word zo is undoubtedly a shortened form of the word tazo one (see §23.1), which is itself presumably etymologically related to the root \(\sqrt{ } \mathbf{a z o j}\) alone.

The vowel of the article zo is obligatorily dropped when the following word begins with a vowel; the \(\mathbf{z}\) syllabifies with that word. This (wrong-way) cliticization of the article is not represented in the current orthography. \({ }^{3}\) Both \(\mathbf{z o}\) and \(\mathbf{z}\) are written as separate words.


\footnotetext{
\({ }^{1}\) Pronouns may also be analyzed as determiners that typically do not take complements; see chapter 16.
\({ }^{2}\) It is actually a bit imprecise to use the word "noun" here since in many cases there is no overt noun at all in the phrase. The nominal itself, and not the head word, is relevant.
\({ }^{3}\) The allomorphy is a helpful way to distinguish between epenthetic vowels (actually prothetic vowels) and underlying vowels (see §27.1.1). The \(\mathbf{o}\) prescinds the insertion of an epenthetic vowel that may otherwise be necessary.
Some speakers also use the short form of the article before \(\mathbf{h}\) (glottal stop) followed by vowel in some situations that have not been studied adequately. Indefinite nominal phrases are not pronounced in isolation nor do they occur clause- or sentence-finally. The dropping of the \(\mathbf{0}\) of \(\mathbf{z o}\) is obligatory, although in interrupted speech one might find it.
}
(3)
Ziix \(\quad \underline{\mathbf{z}} \quad\) iyoohit.
thing a \(\quad\) 3:3-DT-eat
'Comió algo.'
S/he ate something. RMH_08-24-07_71b
(4) \(\quad\) Ziix \(\underline{z}\) ihaahit intamzo?
thing a Inf.Tr-eat 2SGS-RL-want
‘¿Quieres comer algo?' Rмн_05-20-08_31
Do you want to eat something?

A determiner phrase with an indefinite article may be one of three major types: (i) a referential nominal with a specific indefinite interpretation (that is, expressing quantitative indefiniteness) (§21.1.1); (ii) a nonreferential nominal with a nonspecific indefinite interpretation (that is, expressing non-quantitative indefiniteness) (§21.1.2); and (c) a nonreferential nominal used predicatively in the copular construction (§21.1.4).

\subsection*{21.1.1 Specific indefinite interpretation: quantitative indefiniteness}

The singular indefinite article is used most commonly with singular count nouns (see §13.1.3) to indicate quantitative indefiniteness. The puma's head mentioned in example (5) is a specific one in the story from which it is taken.
(5) Xazoj ilit zo toc cöyiij tax, ...
puma 3P-head a there 3IO-Dt-sit Sbrd
'Hay una cabeza de puma allí, ...'
There's a puma's head there ... (Conejo_Puma_11.3)
(6) Cmaam zo yoofp. María mpah. woman a Dt-arrive Px-Pv-say/call
'Llegó una mujer. Se llama María.'
A woman arrived. Her name is María. RMH_08-24-07_71f
(7) Cocsar ctam zo toc cötap ma, hmiiho. non-Indian.Mexican male a there 3IO-RL-stand DS 1SGS.Tr-Px-see Pedro González yopáh.
DT-PV-say RMH_5-20-08_32
'Un hombre hispanohablante estaba allí y lo vi. Se llamaba Pedro González.' A Spanish-speaking man was there, I saw him. His name was Pedro González.
```

... xazoj tintica hant z itaao, ...
puma Md-Aw place a 3:3-Rl-pass.by
'... Puma estaba pasando un lugar, ...'
...Puma was passing a place ... (Conjo_Puma_2.2) RRRecording

```

While these phrases may also be taken non-referentially (as shown in the next section), and hence there is often ambiguity between the two readings, the specificity of the indefinite nominal may be signaled in some cases by other means. Compare the following two examples, the first one being referential and the second being ambiguous for referentiality.
(9) He \({ }^{\circ}\) icaaspoi áa \({ }^{\circ}\) hax cooil \(00 \quad\) zo ccaa ha. 1Pro pencil IntNs SN-blue/green DL a SN-Tr-look.for DCL
'Estoy buscando un cierto lápiz azul.'
I'm looking for a specific blue pencil. RRR QQQ check again
 1Pro pencil SN-blue/green a SN-Tr-look.for DCL
'Estoy buscando un lápiz azul (puede se cualquier o uno en particular).'
I'm looking for a blue pencil (could be just any one or a particular one). RRR
The plural article is used with plural count nouns to indicate an indefinite number of entities, and with mass nouns to indicate an indefinite quantity.
(11) Comcaac pac yoozcam.
person/Seri.Pl some DT-arrive.Pl
‘Llegaron algunos seris.'
Some Seris arrived. RMH_08-24-07_71d
(12) ..., hax pac toc cötap ma, ... water some there 3IO-RL-stand DS
‘... había agua allí, ...'
... there was some water there, ... (Mt 27:24) RMH_08-24-07_71e

\subsection*{21.1.2 Non-specific indefinite interpretation: non-quantitative indefiniteness}

The nominal with the indefinite article in (13) is non-specific and non-referential in at least some situations.
(13) Caamiz z ihexl ihmiimzo.
shirt a Inf.Tr-buy 1SGS.Tr-Px-want
'Quiero comprar una camisa.'
I want to buy a shirt. RMH_08-24-07_72a
(14) Pamtj zo htcmaho, mule.deer.tendon a 1SGS.Tr-RL-N-see
haacni hyaa \({ }^{\circ}\) com ihtcmahizj iho.
Abs.bow mine the.Hz 1SGS.Tr-Rl-N-string Dcl
'No puedo encordar mi arco ahora porque no pude encontrar un tendón de venado bura.' RMH_08-24-07_72b
I can't string my bow because I couldn't find a mule deer tendon. (DS2005, pamt)

\begin{tabular}{lllllll} 
Ziix \(\quad\) ipxasi & cmiipla zo & \begin{tabular}{l} 
hpoohit
\end{tabular} & ta & \(\mathbf{x}\), & \({ }^{\circ}\) hiiqui saa \({ }^{\circ} \quad\) ha. \(^{5}\) \\
\hline thing \(3 P-f l e s h ~\) & SN-bad a & 1SGS.TR-IR.DP-eat & DS & UT & it.will.harm.me AUX-DCL \\
'Si como carne podrida me hará daño.'
\end{tabular}

\subsection*{21.1.3 Negative clauses}

There is a strong tendency for an indefinite article to be used with an argument or a relevant adjunct of a negative clause when the negation is being emphasized.
\begin{tabular}{lllllll}
\(\ldots\) & xo & ziix & yasiijim & áa & z & ipacta \\
but thing & 3P-PON-do true & a & 3P-PON-be.in.appearance & \(\underline{\text { zo }}\) \\
&
\end{tabular}
tompaa ho.

RL-N-Pv-know DCL
‘... pero no se sabe lo que estaba haciendo.'
... but it is not known what she was doing. (Gigante_Comelon 10)
Cói isiitaxim ipi \(\quad \underline{\mathbf{z}}^{\circ}{ }^{\circ}\) an imoofin \({ }^{\circ}\) iha.
still 3P-Ir.Id-go-ImPF InTNS a not.arriving.at DCL
'No había alcanzado a andar todavía.
He was not old enough to walk yet. (More literally, He had not arrived at the age of
walking yet.) (Gigante_Comelon 61)
\begin{tabular}{lllllllll}
\({ }^{\circ}\) Zaxt quisil \\
child & áa & hant & quih & iti & quiij & zo & yacp & Z \\
true & land & the.FL & 3P-on & SN-sit & a & 3P-PON-grow & a \\
itcommís, & yoque. & & & & & \\
3:3-RL-N-resemble & DT-US-say
\end{tabular}
'Su crecimiento no era como un niño verdadero.'
His growth was not like that of a real child. (Gigante_Comelon 85)

\subsection*{21.1.4 Predicate nominal in copular construction}

A nominal with an indefinite article may be the predicate nominal in a copular construction (see

\footnotetext{
\({ }^{4}\) The expression without the determiner here is the more common way to say this. The indefinite plural article pac some may also be used here with a similar reading. If a definite article is used, however, only a specific reading is possible.
\({ }^{5}\) The indefinite plural article pac some may also be used here with a similar reading. If a definite article is used, however, only a specific reading is possible.
}
§10.3 for more details).
```

(20) Tiix cmiique ha xo cmiique áa $z$ imhaa ha.
DDS person/Seri DCL but person/Seri true a SN-N-EQ DCL
'Era una persona, pero no era una verdadera persona.'
He was a person, but he wasn't a real person. (Hipocampo_ 24)
(21) María quij ziix zo shaa caha.
the.Cm thing a Ir.Id-EQ Aux.SN-Dcl
'María será una oficial.'
María will be an official/officer. ${ }^{6}$ RMH_09-28-07_162d

```

\subsection*{21.1.5 No generic sense}

The singular indefinite article is not typically used in nominals with a generic sense. (The singular definite article quih with a singular nominal may have this interpretation, however; see §8.1.2.)

> * Xeecoj zo \({ }^{\circ}\) ziix ccam \({ }^{\circ}\) cacaatol iha. wolf a animal SN-dangerous DCL ('Un lobo es un animal peligroso.') ( \(A\) wolf is a dangerous animal.)
(264) * Cmozime zo ziix quih cöipátajquim hac, SN-drunk a thing the.FL 3IO-3P-PON-Pv-insult the.LC
taax cacaatol iha.

DDP SN-dangerous DCL
('Es peligroso decir cosas ofensivas a un borracho.')
(It is dangerous to say offensive things to a drunk man.)

\subsection*{21.1.6 Quantitative indefiniteness and count nouns}

The singular article can be nearly paraphrased with tazo one when used with count nouns, and the plural article can be replaced by some expression of plural quantity. \({ }^{7}\) In both cases, however, the use of these alternative expressions are more explicit or emphatic about the number.
(23) Cmiique tazo yoofp.
person/Seri one Dt-arrive
'Un seri llegó.'
(24) Comcaac quipxa yoozcam. person/Seri.PL SN-few DT-arrive.PL

ONE Seri person arrived. RMH_08-24-07_73a
'Pocos seris llegaron'
Few Seris arrived. RмH_08-24-07_73b

The indefinite articles do not co-occur with the quantifier expressions in the typical

\footnotetext{
\({ }^{6}\) The expression for officer/official, person of authority is ziix zo chaa (thing a SN-EQ) who is a thing.
\({ }^{7}\) These expressions of quantity are not determiners, however. They co-occur with definite articles in many situations.
}
situations.
* moosni tazo zo
turtle one a
('una caguama') (one turtle)
(26)
* háxaca coocj pac
ABS-pet-Pl SN-two some
('dos perros') (two dogs)

The plural indefinite article co-occurs with a quantified nominal in the following examples, however, although these have not been systematically studied.

```

... }\mp@subsup{}{}{\circ}xiica quiistox\mp@subsup{}{}{\circ}\mathrm{ catxo pac toc cömotat
people SN-many some there 3IO-TwD-move-Pl
`... muchas personas venían, ...'
... lots of people were coming, ... }\mp@subsup{}{}{8}\mathrm{ (Mk. 6:31) RMH__08-24-07_73C

```

Moreover, tazo one does co-occur with zo \(a\), an in the some marked contexts described in §21.1.8 below.

The indefinite nominals may be the antecedents of a pronoun (even if phonetically null) in a following clause, as in (29) and (30).
\begin{tabular}{lllll} 
Moosni & zo & hataht, & seehe & cöhatemaaj ma, \\
sea.turtle & a & 1PLS-RL-see-PL & to.do.(it) & 3IO-1PLS-RL-N-know-PL DS
\end{tabular}

\section*{Pedro quih hizi yaaicot. the.FL 1PLDO Dt-help.kill RMH_08-24-07_73d}
'Vimos una caguama y no la pudimos matar, entonces Pedro nos ayudó a matarla.' We saw a turtle and we couldn't kill it, so Pedro helped us kill it. (DS2005, caaioot)

‘ \(\ldots\). una anciana estaba allí, y les dijo, ... : ...'
... an old woman was there, and she told them, ... : ... (Dos_Hermanos_64)
When pac occurs with a count noun, the noun is usually in an explicitly plural form, illustrated by most of the following examples, although it is very occasionally in the singular form,

\footnotetext{
\({ }^{8}\) Grammatical variations on this phrase here include: xiica quih quiistox quih catxo, taax and xiica quih quiistox catxo pac.
}
as in (36) below. \({ }^{9}\) In all these examples, a number expression such as capxa (SN-three) three could replace the plural indefinite article.

'Yo iba a comprar algunas inyecciones, pero no sabía el nombre de ella, ...'
I was going to buy some injections, but I didn't know the name of it ... (DS2005, an icoáah)
(32) \({ }^{\circ}\) Eentz quiixlc coozalc \({ }^{\circ}\) \(\qquad\) \({ }^{\circ}\) cmaa quiih \({ }^{\circ}\) _pac ihtexl, ... metal-PL SN-inflated-PL SN-square-PL new some 1SGS.Tr-RL-buy
'Compré algunas latas cuadradas de veinte litros nuevas, ...'
I bought some new five-gallon cans, ... (DS2005, caaip) RMH_08-24-07_73f
(33) Comcaac pac ihtaho, ... person/Seri.Pl some 1SGS.Tr-Rl-see
'Vi a algunas personas seris, ..
I saw some (Seri) people, ... (DS2005, capicicim) RMH_08-24-07_73g


\footnotetext{
\({ }^{9}\) Some examples of apparent lack of plural marking on the noun are apparently due to the fact that the plural form has fallen into disuse. Such is the probably the case for hapxa cottontail rabbit, which has a plural form hapxalc listed in the dictionary.
(i) ... hapxa pac áno toii, ... cottontail some 3P.in RL-be.FL.PL
'algunos conejos cola de algodón estaban en ella ...'
... some cottontail rabbits were in it ... (Conjo_Puma 04)
}
(36) ... zaaj_pac toc cötahca ma,... cave some there 3IO-RL-be.located DS
‘... había algunas cuevas allí, ...'
...there were some caves there, ... (Conejo_Puma_04) (cf. zaalca caves)
Other examples of pac with a singular count noun for which exists an explicit plural form are: caatc pac some grasshoppers (cf. caatjc grasshoppers), hast pac some stones (cf. hasatoj stones), ziix coaafp pac some mullets (cf. xiica coáafp mullets), and haaxat iyat pac some creosote branches (cf. íyataj its tips). These cases may be limited to small items or items viewed in groups; the facts have not been systematically studied, however.

\subsection*{21.1.7 Quantitative indefiniteness and mass nouns}

Both of the indefinite articles may also be used with mass nouns to indicate an indefinite quantity. \({ }^{10}\) The singular article may in such contexts indicate a portion, especially if the noun refers to something that is easily divided into units (hunks or pieces, for example). The nominal may either be specific and referential or non-specific.
(37) Hap ipxasi zo htasni,... mule.deer 3P-flesh a 1SGS.Tr-Rl-roast
'Asé un pedazo de carne de venado bura'
I roasted a piece of mule deer meet, ... RмН_08-24-07_75a
Zixquisiil \({ }^{\circ}\) ctam quih panaal zo cötaahjöim, ...
child male the.FL honey a 3IO-RL-choke
'El niño se atragantó comiendo un panal, ...'
The boy was choking on a honeycomb, ... (DS2005, hanso) RMH_08-24-07_76a
(39) iHax pac he haas!
water some 1IO Im-cause.drink
‘¡Dame agua para tomar!’
Give me some water to drink! RMH_08-24-07_75c
(40) iTom pac hino camjc!
money some 1P-in Im-bring
‘ i Traenos dinero!’
Bring us some money! (DS2005, ano) RMH_08-24-07_75d
Examples of the plural article pac with mass nouns include xiica hapahit pac (thing-Pl SN-

\footnotetext{
\({ }^{10}\) Indefinite nominals may also occur without any article.
(ii) ¿Hax cöhaas! water 3IO-IM-cause.drink
‘¡Dale agua para tomar!’ / Give her/him water to drink! (DS2005, cöcaas) RMH_08-24-07_74b
}

Pv-eat some) some food, \({ }^{\circ}\) hocö ine \({ }^{\circ}\) pac (pine 3P-mucus some) some tar, xapoo ipxasi pac (sea.lion 3P-flesh some) some sea lion meat, hesen pac some ironwood, hantíp pac some salt, haquejöc pac some firewood, xiica an icaai pac (thing.Pl 3P.in 3P-PON-US-make) some sugar, panaal yamaax pac (honeybee \({ }^{11}\) 3P-ON-make.alcoholic.beverage) some honey, hasaaiti pac some lubricating oil, csipx pac some glue, hat ix pac (limberbush 3P-resin) some limberbush sap.

While the singular indefinite article is not typically used with mass nouns except to indicate a countable unit of that item, there are contexts in which it does occur with mass nouns with different semantics. See the following section.

\subsection*{21.1.8 Non-quantitative indefiniteness in marked contexts}

The singular article may indicate non-quantitative indefiniteness with mass nouns and count nouns in some marked contexts, especially in negative clauses and rhetorical questions where this is quite common. The nominal is non-specific and non-referential in many of these cases.


The following example shows that this use of the indefinite article in negative clauses even may extends to noun phrases that are understood as definite or even referential, although the expression is taken as "stronger" than the standard one with the definite article.

\footnotetext{
\({ }^{11}\) The loanword panaal is used both for honeybee and for honey as well as honeycomb.
}
```

¡Pedro zo hxomaho!
a 1SGS.Tr-Em-N-see

```
‘¡No he visto a Pedro!’
I haven't seen Pedro! rмн_-5-20-08_42

The indefinite article may co-occur with the adjective tazo one under the same conditions of negation.
(46) Ziix tazo \(\underline{z}\) imhaa ha. Xiica quih anxö quiinim iha. thing one a SN-N-EQ DCL thing.Pl the.Fl IntNS SN-Tr-mix.with Dcl
'No es una sola cosa. Tienes muchas cosas mezcladas con ella.'
It's not just one thing. It has lots of things mixed in it. RMH_08-24-07_77

\subsection*{21.2 Definite articles}

The definite articles are given in Table 21.1. All of the singular definite articles are generally used only with singular noun phrases; in some special situations, discussed below, they may be used with plural noun phrases. Similarly, the plural (or mass) article coi and the more rarely used forms like coyolca are primarily used with plural nouns and mass nouns. The use of these articles is described in more detail in the following sections; also see \(\S 13.3\) for the development of noun classes that relates to them. \({ }^{12}\)

In addition to these positional articles, the demonstrative tintica and its plural form tanticat, which are based on locatives combined with motion verbs also seem to have a usage that is less deictic and more like that of an article (showing primarily definiteness); see §21.3.

The article quih may occur internally to a determiner phrase by virtue of the structure of the posited for internally-headed relative clauses; see \(\S 8.4\) and especially \(\S X X\). Other articles occur
\begin{tabular}{lll}
\hline & Table 21.1: Definite articles \\
& Singular & Plural and mass \\
Horizontal & com & coi, coitoj (rare) \\
Compact & quij & coi, coxalca (rare) \\
Vertical & cop / cap & coi, coyolca (rare) \\
Soft, default, out of view & quih & coi, quihtoj (rare) \\
Location & hac & - \\
\hline
\end{tabular}
only at the end of the entire determiner phrase.

\footnotetext{
\({ }^{12}\) This chapter draws on material presented in chapter 7 of Marlett (1981b) and also M. Moser \& Marlett (1994a).
}

The definite articles are very obviously historically related to subject-oriented deverbal nouns of verbs with cognate meaning: quih from qu-iih \({ }^{13}\) SN-be.Fl be [flexible thing], cap (and its innovated form cop) from c-aap SN -stand be standing, quij from qu-iij SN -sit be sitting, com from c-oom SN-lie be lying down, hac from c-aahca SN-be.located be located, \({ }^{14}\) and coi from coii SN-be.Fl.Pl or SN-stand.Pl be [flexible things] or stand (plural). The variation on the 'vertical' article cap that some speakers prefer - cop - may be due to paradigmatic influence from the article com. These articles are all appropriate when the referent of the nominal is not in motion. When motion is involved, and in some other situations as well, a demonstrative adjective (perhaps used without deictic force) that indicates location and motion is almost always used; see §21.3.

Noun classes are beginning to emerge as a result of some specialized uses of the definite articles. See §13.3.

The definite article co-occurs with indicators of possession.


The definite articles also very commonly occur with names of all types (see chapter 15).

\subsection*{21.2.1 The article com (Hz)}

The article com prototypically correlates with long, horizontally-positioned objects. This may be any animate or inanimate object that is in this position and which has this profile. Phrases describing sleeping, sick, or dead animals or people therefore usually occur with this article.


\footnotetext{
\({ }^{13}\) This verb has the extended meaning of reside now as well.
\({ }^{14}\) This etymological source was pointed out to me by Carolyn O'Meara. The subject-oriented deverbal noun caahca is irregular, however, in having a long vowel since the root and all other forms of this verb have a short vowel.
}

'El gato se despertó ...'
The cat woke up, ... (DS2005, cacsx) RMH_11-28p-07_170
\({ }^{\circ}\) Ox tpacta ma \({ }^{\circ}\), José com totj, ... then the.Hz RL-get.up.from.lying.down
‘Entonces José se levantó, ...'
Then Joseph got up, ... (M+2:21) RMH_11-28p-07_171
\(\left.\begin{array}{llllll}\text { Hap } & \text { com } & \text { tooxi } & \text { ma } & \mathbf{x}, & \ldots \\ \text { mule.deer } & \text { the.HZ } & \text { RL-die } & \text { DS } & \text { UT }\end{array}\right]\)

This article is also used for certain objects or animals that typically have this profile, when they are not in some other orientation: lizards, snakes, fish, sticks, ropes, etc. Some particular items: canoaa small boat, csaai hairbrush, \({ }^{\circ}\) eenim cosi \({ }^{\circ}\) needle, \({ }^{\circ}\) hehe zamij \({ }^{\circ}\) storage box, zixcám fish, hacaaiz spear (Abs.), icaaspoj \({ }^{\circ}\) pencil, \({ }^{\circ}\) hehe iti icoohitim \({ }^{\circ}\) table, cocazni \({ }^{\circ}\) rattlesnake, haxoj shore, \({ }^{\circ}\) ziix hapx coom \(^{\circ}\) whale, heenj \({ }^{\circ}\) stringed instrument, haaho road, \({ }^{\circ}\) hant hazaain \({ }^{\circ}\) fence, ixaai its roots, haxaaza \({ }^{\circ}\) arrow, itaamt his/her sandal, yaap his/her neck, \({ }^{\circ} \mathbf{i t j}\) iixquim \({ }^{\circ}\) his/her belt, hasoj river, ipl his/her tongue, \({ }^{\circ}\) hehe icám \({ }^{\circ}\) caterpillar. Reference to a sleeping bat (in hanging position) uses the article com.

The article com is also used for objects that are perceived as occupying a greater plane-like area, regardless of its orientation, such as xepe sea, hant land, \({ }^{\circ}\) hehe án \({ }^{\circ}\) countryside, caail \({ }^{\circ}\) dry lake bed, hamiime sky, inaail his/her skin, haaco iize (ABs.house 3P-front) wall of a house.

When used with hast stone, rock, mountain, the article com may mean a group of mountains, a long low-profiled mountain, or a long rock.
Hast com ano hptiihtim, ...
mountain the.Hz 3P.in 1SGS.In-RL-be.FL-IMPF
'Mientras andaba en los cerros, ...'
I was going in the mountains, ... (DS2005, caahca) RMH_11-28p-07_173

When used with ziix is cquihjö bean (in its singular form, thing 3P-fruit SN-red), the article com refers to a crop of beans.
(56) \({ }^{\circ}\) ziix is cquihjöo \({ }^{\circ}\) hapéc com
thing 3P-fruit SN-red SN-Pv-plant the.Hz
'los frijoles que fueron sembrados'
the beans that were planted (DS2005, cyaxi) RMH_11-28p-07_174

When used with the article com, the noun hehe (basically plant) means a branch, stick or board.

A group of objects (animals, people, plants, etc) - as plural nouns - may also be presented with this article even though as singular items they are presented with other articles.
(57) ... hehet com imocaj com ano tiihtim \(\mathbf{x}\), ... plant-Pl the.Hz 3P-place.under-Pl the.Hz 3P.in Rl-be.Fl-ImpF UT
'.. anda muy rápidamente debajo de los arbustos ...'
... it goes under the bushes ... (DS2005, acáam ccaa) RMH_11-28p-07_175
(58) \({ }^{\circ}\) xiica ccamotam \({ }^{\circ}{ }^{\circ}\) hehe án \({ }^{\circ}\) com ano coom com animals countryside the.Hz 3P.in SN-lie the.Hz
'los animales en el monte'
the animals in the desert (DS2005, catol) RMH_11-28p-07_176
(59) \({ }^{\circ}\) xiica quih quiistox \({ }^{\circ}\) ihmaa com people other the. Hz
'otras personas' RMH_11-28p-07_180 \(\rightarrow\)
other people (DS2005, caziix) RMH_11-28p-07_177
(60) \({ }^{\circ}\) hantx mocat \({ }^{\circ}\) com, taax ... ancestors the.Hz DDP 'los antepasados, ellos ...' the ancestors, they ... (DS2005, quipcou)
(61) \(\quad \ldots{ }^{\circ}\) xiica quih quiistox \({ }^{\circ}\) com ipooht, ... people the.Hz 3:3-Ir.Dp-see-Pl
‘... la gente lo vio, ...'
... the people saw it ... (Matt. 5:16) RMH_11-28p-07_182
\begin{tabular}{|c|c|c|}
\hline \({ }^{\circ}\) azlc canl \({ }^{\circ}\) com & (63) & hoocala com \\
\hline stars the. Hz & & cloud(s) the.Hz \\
\hline 'las estrellas' & & 'las nubes' \\
\hline the stars (DS2005, czaahox) RMH_11-280-07_178 & & the clouds (DS2005, cocajö) RMH_11-288-07_179 \\
\hline
\end{tabular}
(64) ... ziicalc ihmaa com \({ }^{\text {iiqui cöihiin }}{ }^{\circ}\)
hac
bird-PL other the.Hz compared.to.it/her/him/them the.LC
' ... comparado a las otras aves'
... compared to other birds (DS2005, capatása) RMH_11-28p-07_181
Nouns referring to soul, life or spirit all use the article com, even in idioms (see chapter 7).
\begin{tabular}{lll} 
a. iisax com & (used in various idioms of emotion) \\
b. ihiisax com & his/her/its breath, his/her soul \\
c. iquiisax com & one's life, one's spirit
\end{tabular}

\subsection*{21.2.2 The article quij (Cm)}

The article quij prototypically correlates with compact objects. The object may be any animate or inanimate object with this profile. Phrases describing land mammals, including people, use this article when they are actually perceived or depicted as sitting.

Birds and insects (unless they are long, or depicted as flying, or dead) are usually presented with quij: xcoomoj \(f l y\), conteetxyat stinkbug, caamjö \({ }^{\circ}\) screech-owl, cset frigatebird, etc.

It seems to be the case that if something can't be knocked over, or made to fall (in which case it would take cop, \(\S 21.2 .3\) ), is not long (in which case it would take com, §21.2.1), is not flexible (in which case it would take quih, §21.2.4), and is stationary, then quij is the appropriate article. Round objects are therefore typically presented with quij. Nouns typically occurring with quij include: zaah sun, iizax moon, ilít his/her/its head, \({ }^{\circ} \mathbf{z i i x}\) an icoos \({ }^{\circ}\) tape recorder, iionam his/her hat, hamazaj clay pot (Abs.), \({ }^{\circ}\) ziix hapámyam \({ }^{\circ}\) pill/tablet, trooqui vehicle, \({ }^{\circ}\) hehe hascám \({ }^{\circ}\) ship. Established cities use this article: Hezitmisoj Hermosillo. Nouns and names referring to people and deities typically use this article almost by default. The noun for party, pyeest, uses this article.

\subsection*{21.2.3 The article cop (Vt)}

The article cop prototypically correlates with objects in a vertical position. Some speakers prefer the form cap, which is closer to the etymological source. The object may be any animate or inanimate object with this profile. Land mammals, including people, are described this way when they are actually perceived or depicted as standing.
```

(66) Xazoj cop ox tee, ...
puma the. Vt thus Rl-say
Puma said, ... (Conjo_Puma_6)

```

This article is also used typically for certain objects that typically have this profile when they are not in some other orientation. Some particular items: haaco house, \(\sqrt{ }\) Vnol finger, haas mezquite tree. When used with the article cop, the noun hehe (basically plant) means tree. The noun hast stone, rock with the article quij, means mountain (of a certain profile) when it is accompanied by cop.

The article cop is also used nouns describing liquids in containers and certain hanging items (such as curtains). At first this may seem odd, but like standing objects, they "fall" when they are not supported. Examples: hasaaiti gasoline, \({ }^{\circ}\) hasaaiti coozlil \({ }^{\circ}\) lubricating oil, \({ }^{\circ}\) ziix cooha \({ }^{\circ}\) imt cow's milk, \({ }^{\circ}\) yahemej áa \(^{\circ}\) sail. This article is used with certain objects that contain liquids or food, such as hasaj flat basket, hateya bottle, xtiip giant Panamic cockle, (eenm) hanzajipj bowl, plate, and eenm hanzajipj quiipa frying pan. (Some containers, including taasa cup (a loanword) and hamcanoiin pan used the article quij, however.) And the article cop is also used with gases, including hai wind, air (unless described explicitly as moving).
(67) Hax cop anxö spasi (a)ha.
water the.VT Intns Ir.ID-Pv-drink Aux-Dcl
'Uno debe tomar mucha agua.'
One should drink lots of water. RMH_-5-20-08_43
The article cop is also used with nouns when they are used in a more abstract sense, such as time of day.
with other article
\begin{tabular}{llll} 
zaah quij & the sun & zaah cop & the day \\
iizax quij & the moon & iizax cop & the month \\
hant com & the land & hant cop & the year
\end{tabular}

This article is used with nominalizations of verbs referring to meteorological events and also some other nominalizations.
\begin{tabular}{llll} 
ihaapl cop & the cold weather & \(c f . \sqrt{ }\) aapl & be cold \\
ihamoc cop & the night & \(c f . \sqrt{ }\) hamoc & be night \\
ihipon cop & his/her/its voice & \(c f . \sqrt{ }\) ipon & make vocal sound
\end{tabular}

The noun for rain, ipca, is an irregular formation (distinct from the nominalization iipca (3P-PON-rain) its raining; \({ }^{15}\) it also uses the article cop.

A knife or knife-like object always uses the article cop for reasons that are not clear.

\subsection*{21.2.4 The article quih (FI)}

The article quih has a wider distribution than the other articles. It is the appropriate article for things perceived as flexible: hapaspoj \({ }^{\circ}\) paper, hataai \({ }^{\circ}\) cloth, poosj fishing line, \({ }^{\circ}\) eenm hacoaazj \({ }^{\circ}\) chain, ilit his/her hair, \({ }^{16}\) hacalca clothing, personal items (Abs.). This usage fits most directly with its etymological source, the verb \(\sqrt{\text { iih }}\) be [flexible item].
(70) Poosj quih cozazni ha.
fishing.line the.FL SN-tangled DCL
'La piola está enredada.'
The fishing line is tangled up. (on the ground) RRR
If an item is in view or if one knows what position it is in, then usually one should use the appropriate positional article with the nominal referring to that item. But sometimes, of course, the item is not in sight and one cannot appropriately indicate its physical orientation. It is in this situation that the article quih is also typically used, although the conditions for its use are not as

\footnotetext{
\({ }^{15}\) This is a correction from what is found in the 2005 dictionary.
\({ }^{16}\) See the article quij above for the meaning head with this noun.
}
mechanical as it might sound. It is probably incorrect to say outright that quih is the "unspecified position" article, but it comes close to being that. It seems that if one knows the position of the item, it is stylistically preferred to use the appropriate article. Quih also seems to be the article appropriate for nominals that are less in focus in the sentence. For one of these reasons, therefore, the article quih occurs at the end of the nominal in the following example.
```

(71) Xazlc quih ctamcö quih caacöl quih htácotim, ...
puma-Pl the.Fl male-Pl the.Fl SN-big-Pl the.Fl 1SGS.Tr-RL- kill-ImpF
'He matado pumas MACHOS GRANDES, ...'
I have killed BIG MALE PUMAS, ... (Conejo_Puma_9) RMH_08-21-07_77f

```

But obviously the article quih occurs three times in this nominal. This illustrates a third major usage of quih, which is related to the head-internal structure of relative clauses in the language. It is the only article that may appear in this context while the final determiner of the nominal must be chosen based on the criteria mentioned in the previous sections. See \(\S 8.4\) for discussion.

See also the use of quih with certain clauses headed by deverbal nouns (§12.2.1).
The article quih is has more phonetic variation than the other articles. When it is used phrase-medially, it is a very weakly articulated [k]; the use of the full written form quih for this situation is, in fact, a learned convention. When quih occurs utterance-finally, as is possible when a determiner phrase is right-dislocated, it is also pronounced quite weakly, as \([\mathrm{k}]\) or perhaps [k?]. When it precedes a vowel-initial word, or a word beginning with a glottal stop followed by a vowel, this article is pronounced [k?] and it is pronounced with that following word; it is a good example of "wrong-way" cliticization. \({ }^{17}\) Only if the following word begins with a consonant (even glottal stop if that glottal stop is followed by a consonant) does this article have its full pronunciation [ki?]. \({ }^{18}\)

\subsection*{21.2.5 The article hac (Lc)}

The article hac is used with nominals that denote a location, which may be a named camp (but not an established settlement with permanent buildings).

\footnotetext{
\({ }^{17}\) The writing convention that Edward Moser developed in the 1950 s wrote this article as ch and as a prefix to the word that followed it.
\({ }^{18}\) These facts, taken with the generalizations about the epenthesis of \(\mathbf{i}\) (see \(\S 27.1 .1\) ) may indicate, as argued in Marlett 1981 b (chapter 7) that the underlying form of the article is actually \(/ \mathrm{k} ~ \mathrm{P} / \mathrm{in}\) modern Seri and that the \(\mathbf{i}\) is epenthetic in all instances of this word.
}
(72) Ctam hipcom isliicot hac
male Px-Hz 3P-back the.Lc
'la espalda de este macho'
this male (rabbit) 's back (Conejo_Puma_6.2)
(73) ipot iicp hac

3P-bottom 3P-place.next.to the.LC
'un lugar muy por detrás'
way in the back (Conejo_Puma_17)
(74) Cyazim hapáh hac comcaac quih ano toii ma, ...

SN-Pv-say the.Lc person/Seri.Pl the.Fl 3P.in Rl-be.Fl.Pl DS
'La gente estaba en el campamento llamado Cyazim, ...'
The people were at the camp called Cyazim, .... (gigante comelon_323)
The article occurs with some abstract elements based on deverbal nouns.
cocsar iitom \(\quad \underline{\text { hac }}\)
Mexican 3P-PON-speak the.LC
'español (la lengua española)'
Spanish (language)
(76) Cöihípon hac ziix z immís iha.

3IO-3P-PON-HAVE-voice the.LC thing a SN-Tr-N-resemble DCL
'La manera en que usaba su voz era muy extraña.'
The way in which he used his voice was very strange. (Gigante_Comelon_341)
Hantx cömiiha hac, ...
at.base 3IO-Twd-3P-PON-move the.LC
'En los tiempos antiguos, ...'
In the old days, ... (litro 7) RMH_5-20-08_44
This article is the one used when referring to a name.
(78) Pedro quij cmaam yaazi \({ }^{\circ}\) íi zo toc cötiij ma, the.CM woman his.child first a there 3:3-RL-sit DS

Juana hac cöimatáasitot. the.LC 3IO-3:3-Px-give.name
'Pedro dio el nombre Juana a su primera hija.'
Pedro named his first daughter Juana. RMH_07-11-07_17e

\footnotetext{
\({ }^{\circ}\) Ziix imiipla haa coom \({ }^{\circ}\) itaasi hac ziix hapeexem iha. deceased.person 3P-name the.Lc thing SN-Pv-respect.by.not.saying DCL
'El nombre de una persona difunta se respeta por no decirlo.'
The name of a dead person is honored by not saying it. (DS2005, queexem) RMH_09-28-07_146d
}

\subsection*{21.2.6 The plural articles}

Of the plural articles shown in Table 21.1, only coi is commonly used. It occurs with plural count nouns and also with mass nouns that refer to fine particles (such as \({ }^{\circ}\) hapáha quis \({ }^{\circ}\) flour) and solids (such as ipxasi 3P-flesh meat) when not viewed as a chunk (in which case quij would commonly be used). It does not occur with liquids (these take cop) or gases (these also take cop).
(80) Zaah quih coox cah caaytaj coi coccaa ha. sun/day the.Fl all the.Fl-Foc horse-Pl the.Pl 3IO-SN-Tr-look.for Dcl 'Viene todos los días a buscar los caballos.'
S/he comes every day to look for the horses. (ALIM 134) RMH_10-15-07_04
(81) María quih Juan quih tom coi cöiyeesxö. the.Fl the.Fl money the.Pl 3IO-3:3-Dt-hide+IO
'María le escondió el dinero a Juan.'
Mary hid the money from Juan. RMH_09-28-07_120
(82) Hintaac quih ool ipxasi coi 1P-mother's.younger.sister the.Fl organ.pipe.cactus 3P-flesh the.PL
\begin{tabular}{llllll} 
iyoocöim, & hocö & ine & pac & isaai & ta. \\
3:3-DT-grind.dry & pine & 3P-mucus & some & 3:3-Ir.ID-make & AUx.RL
\end{tabular}

\subsection*{21.3 Demonstrative adjectives}

The demonstrative adjectives are complex forms. A (presumably) complete list is given in Table 21.2. \({ }^{19}\)

The adjectives vary along four parameters: number (singular, plural as a group, and plural); profile or position (vertical, compact, horizontal, moving away, etc., like the definite articles with which some are related), relative location to the speaker (proximal, medial and distal), and sometimes the kind of item it is (especially liquids, for example).

While the demonstrative adjectives are written as single words in this grammar and in the

\footnotetext{
\({ }^{19}\) The \(\mathbf{m}\) in these adjectives assimilates to the point of articulation of the following consonant in these words (which happens to always be c) (see \(\S 28.5 .2\) ): himcop [ \(\mathrm{i} \mathrm{i} \eta \mathrm{k} \mathrm{op}\) ]. These same forms are used as demonstrative pronouns; see \(\S 4.3 .2\). In addition, the simple demonstrative pronoun tiix (see \(\S 16.2\) ) may be used for focal contrast after a determiner phrase, giving the appearance of being a demonstrative adjective (see §16.2.4). One regularly hears a slight contraction of the complex demonstratives in the speech of some people. The word hipquij is heard as either [?ipkix] or [?ik:ix], for example.
}
dictionary, this is not necessarily the correct analysis. There is a bit of evidence for them being single words, and there is important evidence (presented below in this section) for them being two words that have lexicalized combinations. If these complex forms are two words, the nonmotion ones have the structure shown in Figure 21.1, using hipcop Px-Vt this (standing) to illustrate.

Consider first the forms that have the structure shown in Figure 21.1, an important subset of the group. The second part of these forms is identical to any one of the six standard definite (non-motion) articles discussed in \(\S 21.2 .^{20}\) The first part varies along the relative distance parameter. We expect eighteen possible articles, but in fact the distance parameter is slightly richer than expected because plurality figures into the system in a marginal and irregular way. The uses and meanings of these demonstratives are discussed in §§21.3.2ff. Most of them — but not all - have meanings that are derivable from a consideration of the meaning of the two parts.

A number of the demonstratives in Table 21.2 - those in the shaded boxes - are very uncommon. Some of them were provided by language consultants only at a late stage in the preparation of the dictionary and are not often (if ever) found in texts or commonly heard. They are based more transparently on the etymological source of the articles, and the second part likewise very uncommonly used as a definite article. Because of their extreme rarity, they are not discussed further here. The plural forms are, for all practical purposes, neutralized to the "general" plural forms (hizcoi Px-Pl, tacoi Md-Pl, himcoi Dt-Pl). When the demonstratives are illustrated below, plural forms are given in each group to illustrate this.

One important set of demonstratives are those based etymologically on a subject-oriented form of the motion verbs moca (Twd-SN-move) come and intica (Aw-SN-move) go. These words - timoca, tintica, hizmocat, etc. - unlike those based on the positional articles, are single words by the evidence discussed below. As mentioned in 21.2 , certain ones are evidently actually functioning as articles as well as demonstratives. Details are given below.

\footnotetext{
\({ }^{20}\) The forms that use quih, such as himquih, do not have the phonetic variation that the word quih has, however.
}
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|c|}{Table 21.2: Demonstrative adjectives} \\
\hline & this (proximal) & that (medial) & that (distal) \\
\hline - vertical (sg.) & hipcop ~ hipcap & ticop \(\sim\) ticap & himcop ~ himcap \\
\hline - liquid & hizcop & tacop \(\sim\) tacap & himcop \(\sim\) himcap \\
\hline - vertical (pl.) & hizcoyolca & tacoyolca & himcoyolca \\
\hline - compact (sg.) & hipquij & tiquij & himquij \\
\hline - compact (pl.) & hizcoxalca & tacoxalca & himcoxalca \\
\hline - horizontal (sg.) & hipcom & ticom & himcom \\
\hline - horizontal (pl.) & hizcoitoj & tacoitoj & himcoitoj \\
\hline - viewed as group & hizcom & tacom & ? \\
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
- flexible (sg.) \\
- flexible (pl.)
\end{tabular}} & hipquih & tiquih & himquih \\
\hline & hizquihtoj, & taquihtoj, & himquihtoj, \\
\hline & hizquihtolca & taquihtolca & himquihtolca \\
\hline - generic / unidentified & hizquih & taquih & himquih \\
\hline \(\checkmark\) motion implied (sg.) & hipquihtim & tiquihtim & himquihtim \\
\hline - departing (sg.) & hipintica & tintica & himintica \\
\hline - departing (pl.) & hipinticat & tanticat & himinticat \\
\hline - approaching (sg.) & hipmoca & timoca & himmoca \\
\hline - approaching (pl.) & hizmocat & tamocat & himmocat \\
\hline - area & hizac & tahac & himcac \\
\hline - places & hizcahjoj & tacahjoj & himcahjoj \\
\hline - general plural / mass & hizcoi & tacoi & himcoi \\
\hline
\end{tabular}

The locative elements in the demonstrative adjectives are, for the most part, not independently occurring forms that would be expected to combine with a definite article. They are compared in Table 21.3 to the simple demonstrative pronouns (§16.2) and certain adverbs with which they show some similarity. The simple demonstrative pronouns only distinguish between proximal and non-proximal (labeled distal), while the demonstrative adjectives distinguish between proximal, medial, and distal.

The words tintica (singular) and tanticat (plural) prototypically correlate with objects that are moving away from a point of reference at a moderate distance. But these words are also used for motion that is not necessarily away from the speaker and in some situations seem to be not clearly deictic at all.
(83) ... xazoj tintica hant \(z\) itaao, ...
puma MD-Aw place a 3:3-Rl-pass.by
‘... Puma pasaba un lugar, ...’
... Puma was passing by a place ... (Conej__Puma_2.2)
```

Zixquisiil }\mp@subsup{}{}{\circ}\mathrm{ ctam tintica canoaa xepe quih iteel tintica caao
child male Md-Aw boat sea the.Fl 3P-edge Md-Aw SN-Tr-pass.by
tintica iiqui tpanzx,...
Md-Aw 3P-toward Rl-run

```
'El muchacho estaba corriendo detrás de la panga que iba por la orilla del mar, ...' The boy was running after after the boat that was going along the shore ... (DS2005, quitél)

The article tintica may be used with time expressions when referring to the course of that time expression.
a. zaah tintica the day
b. iizax tintica the month
c. hant tintica the year

Lizax tintica tcooo ma, iti cöhayaticpan.
3P-moon/month Md-Aw Rl-all DS 3P-on 3IO-1PLS-DT-work
'Trabajamos todo el mes.'
Trabajamos todo el mes. RMH_5-20-08_45
The use of tintica is common in situations where a trajectory is involved.
(87) Xepe com itacl tintica ah iti miihtolca.
sea the.Hz 3P-surface Md-Aw Foc 3P-on Px-be.Fl-Pl-ImpF
'Andan sobre la superficie del mar.'
They go on the surface of the sea. (DS2005, ah) RMH_08-21-07_101b
(88) Ctam tintica \({ }^{\circ} h e h e\) án \(^{\circ}\) tintica ano yeectim iti ... man Md-Aw countryside Md-Aw 3P.in 3P-Dt-cross 3P-on 'Mientras el hombre estaba en el monte, ...'
While the man was in the desert, ... (DS2005, caactim) RMH_11-288-07_185
```

Zixquisiil }\mp@subsup{}{}{\circ}\mathrm{ ctam tintica canoaa xepe quih iteel tintica caao
child male MD-Aw boat sea the.Fl 3P-edge MD-Aw SN-Tr-pass.by
tintica iiqui tpanzx, ...
MD-Aw 3P-toward Rl-run

```
'El muchacho estaba corriendo detrás de la panga que iba por la orilla del mar, ...' The boy was running after after the boat that was going along the shore ... (Ds2005, quitéel)
(90) Poosj tintica yazazni.
fishing.line MD-Aw Dt-tangled.up
'La piola se enredó.'
The fishing line got tangled up. RRR
The demonstrative tintica is also used with physical objects that extend in a line of sight: haxoj quih iteel seashore, xepe quih iteel seashore, haaho road.

\subsection*{21.3.1 Evidence for the phrasal structure}

The two parts of the demonstrative adjectives shown in Table 21.3 are obligatorily separated in two contexts.

The word xah intervenes between the two parts of the non-motion complex demonstratives listed in Table 21.3. This word has two meanings, which I take as polysemy although it is very likely that the words have a common source. The first word is a DP/NP adverb without a clear meaning (see \(\S 24.2 .12\) ). If there is no determiner, the adverb occurs phrase-finally. If there is an article, the adverb precedes the article.
(91) [Zaah xah zo ] toc cötap, hax taa ma, sun/day - a there 3IO-RL-stand just RL-be DS
‘Un día, ...'
One day, ... RMH_5-20-08_46
... [Tear xah quii ] quiicot yaaitim poho. Devil - the.Cm 3P-with-Pl 3P-PON-do-ImpF Doubt
'... posiblemente el diablo los está ayudando.'
... maybe the Devil is helping them. (Mn 12:27) RMH_-5-20-08_47
When this word occurs with a non-motion demonstrative it occurs between the locative element and the article element.
\(\begin{array}{llll}\text { (93) } & \begin{array}{ll}\text { Ox } & \text { cöiiha }\end{array} & \text { hiz-xah-hac, } & \ldots \\ \text { thus } & \text { 3IO-3P-PON-be } & \text { Px-—-LC }\end{array}\)
'Hoy en día, ...'
Nowadays, ... (Mt 12:32) RMH_5-20008_48
The word xah is also the coordinator that occurs with nominals (§25.1). The coordinator occurs at the end of each coordinated element, but to the left of the article if there is a determiner, as shown in \(\S 25.1\). The coordinator, like the adverb just mentioned, occurs between the two parts of a non-motion demonstrative.
```

(94) ${ }^{\circ}$ xiica quih quiistox ${ }^{\circ}$ hiz-xah-coi
people Px-Crd-PL
'y estas personas'
and these people... RRR

```

Neither the adverb xah nor the coordinator xah ever divides the motion demonstratives such as tintica. They go before the entire demonstrative.
```

.. icaaitom quih ihaaipot xah tintica
3P-PON-US-speak the.FL 3P-PON-pay CRD MD-AW
'... y todas sus respuestas.'
... and all his answers. Lk2:47 RMH_5-20-08_49

```

\subsection*{21.3.2 Proximal demonstrative adjectives}

The proximal demonstrative adjectives usually indicate that the object is physically present and close to the speaker. The item may be something not in the immediate presence of the speaker, but which is much closer to the speaker (like in the house) than to the addressee (who may be in another town). The choice of demonstrative is based on reasons analogous to those used for choosing an article (see §21.2). These demonstratives may also be used cataphorically; see §21.3.5.

\section*{- Vertical orientation}

Singular: hipcop (dialectal variant hipcap).
Examples: haaco hipcop this house, hehe hipcop this tree, this stick (in vertical position), cmaam hipcop this woman (standing). Also used with expressions of time: zaah hipcop today, zaah quih ccooo hipcop (sun the.FL SN-entire Px-Vt) the whole day today, ihamoc hipcop tonight. Occasionally used with nominals referring to liquids: cafee hipcop this coffee.

Singular (liquid): hizcop.
Examples: hax hizcop this water, \({ }^{\circ}\) hasaaiti coozlil \({ }^{\circ}\) hizcop this lubricating oil, panaal hizcap this honey.

Plural: hizcoyolca (uncommon - would give the idea of not together in some way).
Examples: zaah hizcoyolca (*hizcoi) these days, haacöt hizcoyolca these houses.
General plural: hizcoi (common).
Examples: comcaac hizcoi these people, haacöt hizcoi these houses. Also mass nouns: hocö hizcoi this wood, xiica an icaai hizcoi this sugar, hapaha quis hizcoi this flour.

\section*{- Compact}

Singular: hipquij.
Examples: trooqui hipquij this vehicle, \({ }^{\circ}\) hant imaasij \({ }^{\circ}\) hipquij this tire, hast hipquij this stone, sahmees hipquij this orange, haaonam hipquij this hat, cmaam hipquij this woman (seated). Also may be used with expressions for less tangible things: hant hipquij this place, \({ }^{21}\) pyeest hipquij this fiesta, he hipi hisoj hipquij (1Pro Intns 1P-self/body PxСм) I, me.

Plural: hizcoxalca (uncommon - would give the idea of not together in some way).
Examples: sahmees hizcoxalca these oranges.
General plural: hizcoi (very common).
Examples: sahmees hizcoi these oranges, haaonatz hizcoi these hats, haxöl inaail hizcoi these clam shells.

\section*{- Horizontal}

Singular: hipcom.
Examples: cmaam hipcom this woman (lying down), \({ }^{\circ}\) hehe iti icoohitim \({ }^{\circ}\) hipcom this table, haxaaza hipcom this arrow, hocö hipcom this board, zixcám hipcom this fish, hap hipcom this (dead) mule deer. Also may be used with expressions for less tangible things: hant hipcom this place.

Plural: hizcoitoj (uncommon — would give the idea of not together in some way).
Examples: zixcám hizcoitoj these fish.
Plural: hizcoi (common).
Examples: hocö hizcoi these boards, hapxöl hizcoi these ears of corn, uixcám hizcoi these fish.

Plural viewed as a group that is quite inclusive and not particular: hizcom. \({ }^{22}\)

\footnotetext{
\({ }^{21}\) The noun hant land, place occurs with a variety of demonstrative adjectives, with slightly different meanings resulting. Hant hipquij is a bit more specific than hant hipcom, and both of these are apparently more circumscribed than hant hizac.
\({ }^{22}\) Such nominals as subjects determine plural inflection on the verb: Comcaac hizcom miizj iyomaaj. These Seri people don't understand it.
}

Examples: xiica hizcom these things, \({ }^{\circ}\) xiica quih quiistox \({ }^{\circ}\) hizcom these people, comcaac hizcom these Seris, hast hizcom these stones, \({ }^{23}\) ziix quih hapahit hizcom (thing the SN-Pv-eat Px.PL-Hz) this food, xiica ilitcoj cmasl hizcom these yellow-headed gnats.

\section*{- Flexible}

Singular: hipquih.
Examples: hapaspoj \({ }^{\circ}\) hipquih this paper, \({ }^{\circ}\) hapaspoj iiqui icáaca \({ }^{\circ}\) hipquih this letter, \({ }^{\circ}\) eenm hacoaazj \({ }^{\circ}\) hipquih this chain, hataai \({ }^{\circ}\) hipquih this cloth, siimet hipquih this bread. Also eenim hipquih this metal (as opposed to eenim hipcap this knife).

Plural: hizcoi.
Examples: hapáspolca \({ }^{\circ}\) hizcoi these papers, hacalca hizcoi these clothes.

\section*{- Generic}
(Used as singular) hizquih.
Examples: oot hizquih the coyote (speaking generically).
(96) Hant com tahizoj ma \(\mathbf{x}\), oot hizquih itaho \(x\), land the.Hz Rl-be.mirage DS coyote Px.PL-FL 3:3-RL-see UT
hax xah tamoz \(x\), iiqui mpanzx. water just 3L-think UT 3P-toward Px-run
'Cuando hay un espejismo, el coyote piensa que es agua, y corre hacia él.' When there is a mirage, the coyote thinks it is water and runs toward it. (Ds2005, hizquih, improved) RMH_5-20-08_50

Conflated with Focus ah: hizcah.
Example: ziix hizcah just anything.

\section*{- Departing}

Singular: hipintica.
Examples: cmaam hipintica this woman (departing), cocázni \({ }^{\circ}\) hipintica this rattlesnake (departing). It also may be used with a noun that is the path of the moving object: hant hipintica this place (where someone or something is moving), haaho hipintica this road (that is ahead of us)..

\footnotetext{
\({ }^{23}\) The noun hast here is also in a singular form as is quite common for this noun, despite the plurality of the referent.
}

Plural: hipinticat.
Examples: cmajiic hipinticat these women (departing).

\section*{- Approaching}

Singular: hipmoca.
Examples: cmaam hipmoca this woman (approaching), haxz hipmoca this dog (approaching). It may also be used with a noun that is the path of the moving object as in hant hipmoca cötafp... (place Px-Twd 3IO-Rl-arrive) \(s\) /he was arriving here, ....

Plural: hizmocat.
Example: cmajiic hizmocat these women (approaching).

\section*{Location (and items that have vaguely defined limits)}

Always (?) used as singular: hizac.
Examples: hayeen hizac this face, hant hizac this place. Also used with less tangible items, especially including expressions of speech: hiitom hizac (1P-PON-speak Px-LC) my words, ziix quih iti me hszaxö hizac (thing the.Fl 3P-on 2IO 1SGS.Tr-Ir.ID-discuss Px-Lc) this thing that I will tell you, ziix quih hoaanloj hizac (thing the.Fl 1P-ON-do-Pl Px-LC) this work that we do.

\section*{- General plural (and mass)}
hizcoi: Typically used as the plural of the various non-motion demonstratives (see above). Also commonly used with nouns that may be viewed as non-liquid, non-gaseous masses: ziix ipxasi hizcoi (thing 3P-flesh Px-PL) this meat or xiica ipxasi hizcoi (thing.PL 3P-flesh Px\(\mathrm{PL}^{\prime}\) this meat ; xiica hapahit hizcoi (thing.PL SN-Pv-eat Px-PL) this food; ziix hapahit hizcoi this food; hap ipxasi hizcoi (mule.deer 3P-flesh Px-PL) this mule deer meat; hant xnoois hizcoi this garbage.

\subsection*{21.3.3 Medial demonstrative adjectives}

The medial demonstrative adjectives usually indicate that the object is physically present and at a moderate distance from the speaker. The choice of demonstrative is based on reasons analogous to those used for choosing an article (see §21.2). These adjectives are also used anaphorically; see §21.3.6.

\section*{- Vertical orientation}

Singular: ticop (dialectal variant ticap).

Examples: cmaam ticop that woman (standing), hehe ticop that tree, that stick (standing). Also used with expressions of time - zaah ticop that day, zaah quih iitax ticop (sun the.FL 3P-PON-go MD-Vt) that hour, ihamoc ticop (3P-PON-be.night Md-Vt) that night and to other less tangible things: iquipon ticop (3P-PON-US-HAVE-voice MD-Vt) that voice.

Singular (liquid): tacop.
Example: ziix ccam ihaaitloj tacop (thing SN-alive 3P-blood-PL MD-VT) that blood of animals.

Plural: tacoyolca (uncommon).
Example: zaah tacoyolca those days, haacöt tacoyolca those houses.
General plural: tacoi (common).
Example: haacöt tacoi those houses.

\section*{- Compact}

Singular: tiquij.
Examples: cmaam tiquij that woman (seated), \({ }^{\circ} \mathbf{a z o j} \mathbf{c a n o j}{ }^{\circ} \mathbf{~ t i q u i j}\) that star, heezitim tiquij that city. Also may occur with a nominal that refers to something less tangible: pyeest tiquij that fiesta.

Plural: tacoxalca (uncommon).
Examples: sahmees tacoxalca those oranges.
General plural: tacoi (common).
Examples: heezitim tacoi those cities, sahmees tacoi those oranges.

\section*{- Horizontal}

Singular: ticom.
Examples: cmaam ticom that woman (lying down), zixcám ticom that fish. Also may be used with a nominal that refers to something less tangible: hant ticom that place.

Plural: tacoitoj (uncommon).
Examples: zixcám tacoitoj those fish.
General plural: tacoi (common).
Examples: cmajiic tacoi those women, zixcám tacoi those fish.

Plural viewed as group: tacom.
Examples: xicaquiziil \({ }^{\circ}\) tacom those children, hehet tacom (plant-Pl Md-Hz) those plants, haso caacöl tacom (net(s) SN-big-PL Md-Hz) those big nets.
- Flexible

Singular: tiquih.
Examples: hapaspoj \({ }^{\circ}\) tiquih that paper, hataai \({ }^{\circ}\) tiquih that cloth, \(\mathbf{z i x}\) ipxasi tiquih (thing 3P-flesh Md-FL) that meat, ziix quih hoohit tiquih (thing the.Fl 1P-ON-eat MD-FL) that food that I eat, siimet tiquih that bread, \({ }^{\circ} \mathbf{z i i x}\) ihasii quiipe \({ }^{\circ}\) tiquih that incense.

Plural: taquihtolca (uncommon).
Examples: hapáspolca taquihtolca those papers, those books.
General plural: tacoi (common).
Examples: hapáspolca \({ }^{\circ}\) tacoi those papers, books, hacalca tacoi those clothes.
- Unidentified

Used as singular: taquih. This is not a common demonstrative. An expression like siimet
taquih means something like that other bread.
- Motion implied

Used as singular: tiquihtim (not common).
Example: ctam tiquihtim that man (going or coming somewhere).

\section*{- Departing}

Singular: tintica.
Example: cmaam tintica that woman (departing). It also may be used with a noun that is the path of the moving object: hant tintica that place.

Plural: tanticat.
Example: cmajiic tanticat those women (departing).
- Approaching

Singular: timoca.
Examples: cmaam timoca that woman (approaching). It also may be used with a noun
that is the path of the approaching object as in hant timoca that place, haaho timoca that road.

\section*{Plural: tamocat.}

Examples: hoopatalca tamocat those waves, \({ }^{\circ}\) xiica quih quiistox \({ }^{\circ}\) tamocat those people.

\section*{- Location}

Singular: tahac.
Example: hant tahac that place. Also used with expressions of speech: iitom tahac (3P-PON-speak Md-Lc) his/her words/speech, yaza tahac (3P-PON-speak.PL) their speech.

\section*{Plural: tacahjoj. \({ }^{24}\)}

Example: hant tacahjoj those places. Also may be used with expressions for less tangible things: hameencoj tacahjoj those families.

\section*{- General plural (and mass)}
tacoi: Typically used as the plural of the various non-motion demonstratives (see above). Also commonly used with nouns that may be viewed as non-liquid masses: ziix / xiica ipxasi tacoi (thing / thing.Pl 3P-flesh Md-PL) that meat; xiica hapahit tacoi (thing.Pl SN-Pv-eat MD-PL) that food; xnoois tacoi that garbage.

\subsection*{21.3.4 Distal demonstrative adjectives}

The distal demonstrative adjectives usually indicate that the object is physically present and visible, and at a significant distance from the speaker, although it may be close to the hearer. The choice of demonstrative is based on reasons analogous to those used for choosing an article (see §21.2). Since the distal demonstratives are not used anaphorically, they are much less common in narratives than the medial demonstratives.

\section*{- Vertical orientation}

Singular: himcop (dialectal variant himcap). Also used for liquids.
Examples: xaasj himcop that sahueso cactus, hast himcop that mountain, hehe hant quiti himcop (plant land SN-connected) that tree, haaco himcop that house, sooda coopol himcop that cola.

Plural: himcoyolca (uncommon).

\footnotetext{
\({ }^{24}\) The form tahajca appears in the Apostador text (line 117): hant tahajca that place. XXX QQQ
}

\section*{Examples: haacöt himcoyola.}

Plural: himcoi (common).
Examples: \({ }^{\circ}\) xiica hacaapxom \({ }^{\circ}\) himcoi those pigs, haacöt himcoi those houses.
- Compact

Singular: himquij.
Examples: tootar himquij that chicken, haat hanoohcö \({ }^{\circ}\) himquij (limberbush SN-Pvmake.concave) that pot-shaped basket.

Plural: himcoxalca (uncommon).
Examples: tootar himcoxalca those chickens, sahmees himcoxalca those oranges.
Plural: himcoi (common).
Example: cmajiic himcoi those women.

\section*{- Horizontal orientation}

Singular: himcom.
Example: hateeya himcom that bottle (lying down).
Plural: himcoitoj (uncommon).
Examples: hateeyaj himcoitoj those bottles (lying down), canoaataj himcoi those boats.
Plural: himcoi (common).
Examples: canoaataj himcoi those boats.

\section*{- Flexible}

Singular: himquih.
Examples: hapaspoj himquih that book, paper, eenm hacoaazj himquih that chain. Plural or mass: himcoi

Examples: hacalca himcoi that clothing, those clothes; hapáspolca himcoi those books, papers.
- Motion implied

Singular: himquihtim.

Example: ctam himquihtim that man (moving around). Singular: himquihtolca.
Example: ctamcö himquihtolca those men (moving around).

\section*{- Departing}

Singular: himintica. It also may be used with a noun that is the path of the moving object.
Examples: cmaam himintica that woman, haaho himintica that road (that is before \(u s\) ).
Plural: himinticat.
Examples: cmajiic himinticat those women.

\section*{- Approaching}

Singular: himmoca (not common).
Example: cmaam himmoca that woman (approaching from distance).
Plural: himmocat (not common).
Example: cmaam himmocat those women (approaching from distance).

\section*{- Location}

Singular: himcac.
Examples: hant himcac, that place, mahyaai himcac that opposite coast.
Plural: himcahjoj.
Example: hant himcahjoj, those places.

\subsection*{21.3.5 Cataphoric use of proximal demonstrative adjectives}

The proximal demonstrative adjectives are used to refer to something yet to be said in the discourse. Thus icaaitom hizac this word/message is followed shortly by the content of that message.

\subsection*{21.3.6 Anaphoric use of medial demonstrative adjectives}

The medial demonstrative adjectives are used anaphorically to refer to something already said in the discourse. For examples, the phrase icaaitom tahac that word/message refers back to some utterance already mentioned, and cmaam ticop that woman to some woman already introduced in the narrative. The distal demonstratives are not used this way.

The context of the following sentence is an essay about a particular species of fish.
(97) Taax ah aa itáh ma,

DDP FOC - 3:3-RL-do DS
zixcám ticom zixcám quiipe zo tomhaa ho.
fish MD-Hz fish SN-good a Rl-N-EQ Dcl
'Por esa razón, ese pez no es un buen pez.'
For that reason, that fish is not a good fish. (ES2007, oot_icaanj 06) RMH_5-20-08_51

\section*{22. Postpositions}

A few words are labeled postpositions in the 2005 dictionary; see Table 22.1. \({ }^{1}\) These seven lexemes, five of which are in common use, represent the class of words most similar to postpositions in other languages, but they have some special characteristics, including the fact that when the PP is not modifying an NP or in one other special situation, the P must appear in the VP.

The postpositions are like body part nouns (§13.1), kinship nouns (§13.2.3.1) and locational nouns ( \(\$ 13.4\) ) in that they obligatorily inflect for the person of their complement. One of them also reflects the number of the complement by the form that the possessed noun stem has. All of the forms are therefore appropriately always glossed with the person of the complement although under certain conditions the third person may be superfluous. For example, iti means on him/her/it/them since it contrasts with hiti (with first person possessor) and miti (with second person possessor).

The following simple examples illustrate the most common facts:
\begin{tabular}{|c|c|c|c|c|}
\hline \multicolumn{5}{|c|}{Table 22.1: Postpositions} \\
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
First \\
hino
\end{tabular}} & \multirow[t]{3}{*}{Second mino} & Third & Unspecified & \\
\hline & & ano*, quino** & & in, to, on, from \\
\hline & & iica \(\dagger\) & & next to, beside \\
\hline hiicx & miicx & iicx & & near \\
\hline hiihax & miihax & iihax, quiihax & & with (sg.) \\
\hline hiicot & miicot & iicot \(\sim\) quiicot & & with (pl.) \\
\hline hiiqui & miiqui & iiqui & quiiqui & toward, against \\
\hline & & itáai¢ & & to (meet) \\
\hline hiti & miti & iti & quiti & on \\
\hline \multicolumn{5}{|l|}{* Only for inanimates (singular or plural). ** Only for plurals.} \\
\hline \multicolumn{5}{|l|}{\(\dagger\) Not used much and not easy to elicit examples of. \(\ddagger\) Not used much.} \\
\hline
\end{tabular}

\footnotetext{
\({ }^{1}\) The label "relational noun" was used for these words in Marlett (1981b) and later work preceding the 2005 dictionary.
In addition to the basic postpositions discussed in this chapter, a few adverbs have developed that have merged a postposition with a complement (now reduced). For example, paquiiqui backward is a blending of ipac 3Pback and iiqui 3P-toward. See the example ...paquiiqui tjip, ... he fell backward (Conejo_cuernos 04).
}
\begin{tabular}{lllll} 
a. Hant com \(\quad\) iti \(\quad\) iyooquim. & b. & Iti iyooquim. \\
land the.Hz & 3P-on & 3:3-DT-put.items & & 3P-on 3:3-DT-put.items \\
'Los puso en la tierra.' RMH_08-13-07_07b \(\rightarrow\) & & 'Los puso en él/ella.' \\
S/he put them on the ground. RMH_08-13-07_07a & S/he put them on it.
\end{tabular}
c. Miti iyooquim.

2P-on 3:3-DT-put.items
'Los puso en ti.'
S/he put them on you. RMH_08-13-07_08a
(2) a. Ctam, tiix xepe com ano yiihtim.
man DDS sea the.Hz 3P.in Dt-be.Fl-Mult
'ESE HOMBRE estaba caminando en el mar.'
THAT MAN was walking out in the sea. RMH_08-13-07_08b
b. Ctam, tiix áno yiihtim.
man DDS 3P.in Dt-be.Fl-Mult
'ESE HOMBRE estaba caminando en él.'
THAT MAN was walking out in it. RMH_08-13-07_080
In (1a) and (2a) the postpositions have overt complements and in (1b) and (2b) the complement is not overt but nonetheless determines third person inflection on the postposition. (The postposition ano is morphologically anomalous but the inflection is still unambiguous.) In (1c) the complement is not overt as a separate phrase but it determines second person inflection on the postposition. The fact that the complement of the postposition may be non-overt is, of course, reflective a more general characteristic of the language (see chapter 4).

In some very special cases these words are undoubtedly true postpositions. They are sometimes (but infrequently) used in nominal phrases of the form [ [ DP P ] DP ]; an example is caail \({ }^{\circ}\) iti siml (drylake.bed 3P-on barrel.cactus) Emory's barrel cactus. See §8.2.1 for more examples, some of which are not lexicalized.

Some clear postpositional phrases also exist as introductory expressions. Three examples from \(\S 3.5\) and \(\S 3.10\) are repeated here to illustrate.
(3) Zaah ipac hac cöcaap cop iti, ... sun/day 3P-back the.Lc 3IO-SN-stand the.Vt 3P-on
'El próximo día, ...'
On the next day, ... RMH_08-21-07_75
(4) Taax iti, María quih cöyoofp. DDP 3P-on the.FL 3IO-DT-arrive
'En ese momento / en esa circunstancia, María llegó.'
At that moment / under those circumstances Maria arrived. RмH_08-21-07_-76b


The discussion in this chapter focuses on the use of postpositions in a simple clause, however. In the vast majority of common situations the postpositions obligatorily appear in preverbal position. \({ }^{2}\) As shown below, the postpositions have complements and therefore form a phrase with a DP in some semantic sense. However, there is no clear evidence that at any superficial syntactic level they form a syntactic constituent with their complements. Instead, the evidence indicates that the postposition is actually inside the VP (as the term is used in this grammar); see chapter 5 for more discussion, especially §5.7. Despite the possible incongruity of the name and the proposed syntactic analysis, the name "postposition" is retained here for the words shown in Table 22.1.

The close tie between the postposition and the verb of the clauses is also illustrated by the fact that it is impossible to use a postpositional phrase in isolation. For example, in answer to the question 'Where is the man walking?', it is impossible to answer with the sentence fragment xepe com ano (sea the.Hz 3P.in), unlike in English 'In the sea.' or Spanish 'En el mar.'

\subsection*{22.1 Morphology}

The postpositions inflect for person using the same basic patterns as for other inherently possessed nouns and locative nouns; see \(\S 13.2 .3\). The inflection indicates the person of the semantic complement. For example, the inflection for second person on the postposition miiqui indicates that the motion indicated by the root has the goal as its referent: toward you (singular or plural). Only one of the postpositions is not vague about the number of the referent: compare hiihax with me, hiicot with us, miihax with you (sg.), miicot with you (pl.), iihax with him/her, iicot with them (all comitatives, not instrumentals).

Two of the postpositions utilize the unspecified subject/possessor prefix ca- (see \(\S 17.1 .5\) ) before the third person possessor prefix to indicate an unspecified possessor: quiiqui toward one, and quiti on one. \({ }^{3}\)

\footnotetext{
\({ }^{2}\) They are clearly analogous to the "relational preverbs" discussed in Craig and Hale (1988) and similar words in Siouan languages (Rood 2002). They are also similar, mutatis mutandi, to the "fixed prepositions" of English that "do not permit variation in their position relative to the verb" (Huddleston \& Pullum 2002:275), although in Seri this is true of all of them, not just a set of lexicalized items.
\({ }^{3}\) The postposition quino presumably started out this way, but it has shifted semantically. Details are given below.
}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{(6)} & iOuiiqui & hapácatx \({ }^{\circ}\) & -ya? & (7) & ziix & quiti & quiih \\
\hline & US-3P-toward & SN-Pv-abandon & QM & & thing & US-3P-on & SN-be.FL \\
\hline & \multicolumn{4}{|l|}{¿Es permitido?'} & 'ropa' & & \\
\hline & Is it permitted? & RMH_08-13-07_09a & & & cloth & ng RMH_08-1 & \\
\hline
\end{tabular}

The postpositions are unstressed in many positions (as in (1a)), but stressed in others (as in (1b)). This important and interesting topic is taken up in §22.3.2. Other details - some quite idiosyncratic - about these postpositions are presented in the subsections below.

\subsection*{22.2 Semantics}

Some of the postpositions are quite restricted in their semantics, while a couple of them (ano and iti) occur as part of a complicated network of semantic relationships.

\subsection*{22.2.1 ano in, from, etc.}

The postposition ano has several different related meanings and usages. These are briefly illustrated below.
(8) The sense of in, inside
a. ... \({ }^{\circ}\) hehe án \({ }^{\circ}\) com ano moom.
countryside the.Hz 3P.in Px-lie
'... está en el monte.'
...it is in the countryside. (ES2007, acaam_ccaa 19b) RMH_08-13-07_09c
b. Haxz cop hameen hac ano caap iha. dog the.VT interior.of.house the.Lc 3P.in SN-stand DCL 'El perro está adentro de la casa.'
The dog is inside the house. Rмн_05-20-08_52
c. Coopa quij án hac an iyooxquim. glass the.Cm 3P.place.inside the.LC 3P.interior 3:3-Dt-.put.Hz
'Lo/la metió en el vaso.'
S/he put it into the glass. RMH_05-20-08_53
The sense of into
a. Hoopatalca tanticat canoaa com ano tapxotim ... wave-PL MD-Aw-Pl boat the.Hz 3P.in Rl-break-ImpF 'Las olas se caían en la barca, ...'
The waves were spilling over into the boat, ... (Mk 4:37) RMH_08-13-07_10a
b. Ctam quih canoaa com ano siij ta ityaai, ... man the.Fl boat the.Hz 3P.in Ir.Id-sit Aux.Rl 3:3-Rl-go.to 'Mientras el hombre estaba por subir al barco, ...'
As the man went to get into the boat ... (DS2005, cahiit) RMH_08-13-07_10b
(10) The sense of to (physical location)
... Jesús cop heezitim Capernaom hac ano miifp.
the.Vt settlement the.Lc 3P.in Px-arrive
'... Jesús llegó al pueblo de Capernáum .'
...Jesus arrived to the town of Capernaum. (LL 4:31) RMH_08-13-07_10c
(11) The sense of to (plural animate) \({ }^{4}\)

Hino miifp.
1P-in Px-arrive
'Llegó a nosotros.'
S/he arrived to us. (DS2005, ano) RMH_08-13-07_10d
(12) The sense of to, about regarding (something inanimate)
a. \(\begin{aligned} & \text { Cafee quih } \\ & \text { coffee the.FL } \\ & \text { 3P.in } \\ & \text { crazy }\end{aligned}\)
'Es adicto/a al café.'
S/he is addicted to coffee. \({ }^{5}\) (DS2005, ano) RMH_08-13-07_10e
b. Oohit quih ano caaatim iha.

3P-ON-eat the.Fl 3P.in SN-speak-ImpF DCL
'Se quejó acerca de su comida.'
S/he complained about her/his food. (DS2005, ano) RMH_08-13-07_10f
(13) The sense of from (physical location)
\({ }^{\circ}\) Hehe án \({ }^{\circ}\) z ano mota,
countryside a 3P.in/from TwD-RL-move
'Venía del monte, ...'
S/he was coming from the desert, ... (Hipocampo_9) RMH_08-13-07_10g
(14) The sense of from (abstract idea)

Hapáspoj \({ }^{\circ}\) quih hocö quih ano moca ha. paper the.Fl wood the.Fl 3P.in/from Twd-SN-move DcL 'El papel se saca de la madera.'
Paper is made from wood. (DS2005, ano) RMH_08-13-07_11a

\footnotetext{
\({ }^{4} \mathrm{~A}\) singular person is expressed using Oblique/Indirect Object inflection. See §2.4.
\({ }^{5}\) Another way to say this is:
}
(i) Cafee quih an isoj í \(z\) imaa ha. coffee the.FL 3P-in 3P-self first a SN-TR-N-know DCL 'Es adicto/a al café.' / S/he is addicted to coffee.
(15) The sense of to or from (a plural Addressee) \({ }^{6}\)
a. \({ }^{\circ}\) Ziix cxatlc \({ }^{\circ}\) quih hin itaaom, ...
tortilla the.FL 1P-in/from 3:3-RL-beg
'Estaba pidiendo tortillas de nosotros ...'
She was asking us for tortillas ... (DS2005, ano) RMH_07-20-07_45e RMH_08-13-07_11b
b. Comcaac himcoi ano hyoomx.
person/Seri.Pl Dt-Pl 3P.in 1SGS.Tr-Dt-say
'Se lo dije a esas personas.'
I said it to those people. RMH_08-13-07_11c
(16) The sense of onto (plural animates or inanimates) \({ }^{7}\)
\begin{tabular}{llllll}
\hline a. & \begin{tabular}{l} 
Hast \\
rock
\end{tabular} & quij & \(\frac{\text { mino }}{}\) & spaainj & aha. \\
\(2 P-i n\) & IR.ID-roll & AUX-DCL
\end{tabular}
'Rodando, la piedra se caerá encima de ustedes.'
The rock will roll over onto you. (DS2005, ano) RMH_08-13-07_11d
b. Haaco quih isxáp hac hin hant yahjiit.

Abs.house the.Fl 3P-roof the.LC 1P-in land DT-fall
'El techo de la casa se cayó encima de nosotros.'
The roof of the house fell onto us. (DS2005, ano) RMH_08-13-07_11e
This postposition also has a grammatical usage, linked to plural nominals, which is discussed in §22.3.3.

The postposition ano is irregular in its morphology since it does not use the common prefix i- for third person possessor in the form ano. \({ }^{8}\) It also obligatorily loses its final vowel when it precedes another vowel such as the 3:3 prefix \(\mathbf{i}\) - in (19). \({ }^{9}\) A difference in stress is also possible in cases like the following where no overt complement is expressed.
(17)
Áno hyooquim.
3P.in 1SGS.TR-Dt-put.items
'Los/las metí.'
I put them in. RuH_08-13-07_-13a
\(\underline{\text { Àno }}\)\begin{tabular}{l} 
hyooquim \\
3P.in \\
1SGS.Tr-DT-put.items
\end{tabular}
'Los/las metí en él/ella/ellos/ellas.'
I put them in it/them. RMH_08-13-07_13a

\footnotetext{
\({ }^{6}\) See the complications in this regard that are explained in detail in \(\S 22.3 .3\). This is a grammaticalization of the postposition.
\({ }^{7}\) A singular complement takes the postposition iiqui or iti in these cases, respectively.
\({ }^{8}\) In this respect, however, it reflects its presumed etymological source, the noun án, which means (its) area, (its) zone.
\({ }^{9}\) It also commonly, but less regularly, loses that vowel when it precedes \(\mathbf{h}\) (glottal stop) followed by a vowel. This seems to be a matter of speech style if not idiolect.
}
(19) Án iyooquim.

3P.interior 3:3-Dт-put.items
'Los/las metió.'
S/he put them in. RmH_08-13-07_13b
(20) Àn iyooquim. 3P.interior 3:3-Dт-put.items
'Los/las metió en él/ella.'
S/he put them in it/them. RMH_08-13-07_13b

Moreover, the postposition ano is irregular, and unique, in that all forms in the paradigm other than ano must have plural complements. The postposition ano and the postposition iti on form an interesting and somewhat complicated trio with the indirect object inflection. See §22.3.3 for details. Moreover it has an additional third person form quino; while ano may occur with singular or plural complements, quino only occurs with plural complements and is limited to clauses with certain verbs (such as \(\sqrt{\mathbf{a f p}}\) arrive), in which situations it freely alernates with ano. The following examples show quino with the permitted plural complements.
..., comcaac coi quino ( \(\sim\) ano) tafp, .. person/Seri.PL the.PL 3P.PL-in 3P.in RL-arrive
‘..., llegó a las personas seris, ....'
..., he arrived to the Seri people, ... (Dos_Hermanos_61.4) RMH_08-13-07_13c
(22) ..., cocsar coi ano ( \(\sim\) quino) tafp,
non-Indian.Mexican the.Pl 3P.in 3P.PL-in RL-arrive
‘..., llegó a los mexicanos no indígenas, ...'
..., s/he/it arrived to/among the non-Indian Mexicans, ... (Hombre_Baril_39) RMH_08-13-07_13d
(23) Háxaca coi quino ( \(\sim \underline{\text { ano }) ~ m i i f p . ~}\)

Abs-pet-Pl the.Pl 3P.Pl-in 3P.in Px-arrive
'Llegó a los perros.'
S/he/it arrived to/among the dogs. RMH_08-13-07_13e
(24) Zaalca /hehet coi quino (~ ano) yoofp.
cave-Pl / plant-Pl the.Pl 3P.Pl-in 3P.in Dt-arrive
'Llegó a las cuevas / árboles.'
S/he arrived to the caves / trees. RMH_08-13-07_14c
The following examples demonstrate that quino cannot take a singular complement.
(25) *María tintica cmaam quij quino yoofp.

Md-Aw woman the.CM 3P.Pl-in DT-arrive
('María llegó a la mujer.') (María arrived to the woman.)
(26) Quino ( \(\sim\) ano) miifp.

3P.Pl-in 3P.in Px-arrive
'Les llegó.' (*‘Le llegó.)
S/he/it arrived to/among them. (*S/he arrived to him/her.) \({ }^{10}{ }_{\text {RMH_08-13-07_13f }}\)

\footnotetext{
\({ }^{10}\) The singular goal is expressed with Indirect Object inflection; see \(\S X X\).
}
(27) ..., icaheme ihmaa hac ano (*quino) miifp.
camp other the.LC 3P.-in Px-arrive
‘..., llegó a otro campamento.'
... \(s\) /he arrived to another camp. (DS2005, coféaa) RMH_08-13-07_14a
(28) Ano (*quino) yoofp.

3P.-in DT-arrive
'Llegó a él (campamento)'
S/he arrived to it (camp). RMH_08-13-07_14b
(Quino is grammatical if the complement is understood to be plural.)


See §24.3.1.3 for discussion of the effect of the attenuating adverb halx on the word ano.

\subsection*{22.2.2 iicx near}

The postposition iicx near is homophonous with an adverb that has the same meaning, and in fact the postposition iicx (which inflects for person, as shown in Table 22.1) is generally used in combination with the adverb iicx (which is invariant, see §24.3.2). Three examples are given here to display common usage:


\subsection*{22.2.3 iihax and iicot}

The postposition iihax has a plural form iicot, which has a variant - perhaps preferred - of quiicot. \({ }^{11}\) It has two major senses, one of which is with (comitative, animate complement).

\footnotetext{
\({ }^{11}\) Both words are frequent in the NTT and yet quiicot seems to be about three times as common, with no obvious distributional difference. The word iicot is also a possessed noun that means a place between (plural items).
}
(33) Iihax yaticpan.

3P-with.SG DT-work
'Trabajó con él/ella.'
S/he worked with him/her. (DS2005, ihax) RMH_08-13-07_15c
(34) He quiicot ( \(\sim \underline{\text { iicot }) ~ s i i j ~ c a h a . ~}\)

1Pro 3P-with.Pl Ir.Id-sit Aux.SN-Dcl
'Iré con ellos/ellas (como en un vehículo).'
I am going to go with them (as in a vehicle). RMH_08-13-07_15d
(35) Xiica tacoi quiicot ( \(\sim \underline{\text { iicot }) ~ q u i i j ~ i h a . ~}\)
thing-PL MD-PL 3P-with.PL SN-sit DCL
'Está con esas personas.'
S/he is with those people. RMH_08-13-07_15e
(36) Quiicot (~ iicot) quiij iha.

3P-with.PL SN-sit DCL
'Está con ellos/ellas.'
S/he is with them. RMH_08-13-07_15f
(37) Hiicot itoonec,

1P-with.PL 3:3-RL-carry-Pl RMH_05-20-08_54
'Nos acompañaron en llevarlos ...' (es decir, Nos ayudaron a llevarlos, ...'
They accompanied us in carrying them ... (i.e., They helped us carry them ...)
(14) Taax iicot tap

DDP 3P-with.PL RL-stand
'Estaba con ellos/ellas, ...'
S/he was with them, ... RMH_05-20-08_55
(15) \({ }^{\circ}\) Xiica quiziil \({ }^{\circ}\) ctamcö coi (qu)iicot hamaalam. children male-PL the.PL 3P-with.PL 1PLS-Px-play-PL
'Jugamos con los niños.'
We played with the boys. RMH_05-20-08_56
The other meaning of this postposition is the same as.
(38) Miihax cösimoz caha.
2P-with.SG 3IO-Ir.Id-think AUX.SN-DCL
'Va a pensar lo mismo que tú.'
S/he is going to think the same as you. (DS2005, inax) RMH_08-13-07_16a

The word quiihax is not a simple variant of iihax in the way that quiicot is of iicot. It also does not mean with unspecified person. It is very common as part of the expression meaning be similar to.
(39) Juan quij Pedro quij ihaa quiihax coha ha. the.Cm the.Cm 3P-PON-EQ 3IO-SN-be \(_{\text {Irreg }}\) DcL
'Juan es similar a Pedro (p.ej., con respecto a su carácter).'
Juan is like Pedro (e.g., with respect to his character). RMH_08-13-07_166

\subsection*{22.2.4 iiqui toward, etc.}

The postposition iiqui has several distinguishable senses. \({ }^{12}\)
(40) The sense of toward

b. iHiiqui hsicxö!

1P.toward Im-push
‘¡Empújalo hacia mí!’
Push it toward me. RRR
(41) The sense of onto (singular) \({ }^{13}\)

Hast quij miiqui spaainj haa hi.
rock the.Cm 2P-toward Ir.Id-roll Aux DcL
'Rodando, la piedra puede caerse encima de ti.'
The rock may roll over on you. RMH_08-13-07_16d
(42) The sense of for (a purpose)

Taax iiqui impaxi ha.
DDP 3P-toward SN-N-Pv-finish DCL
'No se hace para eso.'
It isn't made for that use. (DS2005, iqui) RMH_08-13-07_16e
(43) The sense of about

Yaticpan quih iiqui croocö iha.
3P-PON-work the.FL 3P-toward SN-crazy DCL
'Está adicto/a a su trabajo.'
S/he really enjoys work. (DS2005, iqui) RMH_08-13-07_16f

\footnotetext{
\({ }^{12}\) It also occurs in the common phrase iiqui cöihiin \({ }^{\circ}\) hac with respect to, in comparison to where it precedes a nonverbal head.
\({ }^{13}\) The plural counterpart uses the postposition ano.
}
(44) The sense of with (not comitative)
a. ¿Hax quih iiqui tpam?
water the.FL 3P-toward/with RL-Pv-swallow
‘¿Se toma con agua?’
Is it swallowed with water? (DS2005, iqui) RMH_08-13-07_17a
b. ¿Hataai \({ }^{\circ}\) iictim quih iiqui hipjc!
cloth 3P-PON-be.cut the.FL 3P-toward Im-grab
‘‘Agárralo con el pedazo de tela!’
Grab it with the piece of cloth! (DS2005, iqui) RMH_08-13-07_17b
c. iliqui caaitom! 3P-toward Im-speak
‘¡Habla con ella/él!’
Speak with him/her! (DS2005, iqui) RMH_08-13-07_17c
(45) The sense of and

Haaco zo canoaa \(z\) iiqui hnyaa.
Abs.house a boat a 3P-toward 1SGS.Tr-Px-own
'Tengo una casa y una panga.'
I own a house and a boat. (DS2005, iquii) RMH_08-13-07_17d

\subsection*{22.2.5 iti on, etc.}

Several senses of iti are distinguishable: on, on top of, in, during, while, and from. The sense while was illustrated at the beginning of this chapter, and the sense from is discussed in §22.3.3.
(46) The sense of \(o n\)
¿Miizj hoocta! miti hpsozám xo tax.
well Im-look.at 2P-on 1SGS.In-Ir.Id-UO-put.Vt Emph Sbrd
‘¿Cuidado! Te puedo pisar.'
Be careful! I might step on you. (DS2005, cozám) RMH_11-19-07_92
(47) The sense of on top of

Icaaspoj \({ }^{\circ}\) com \({ }^{\circ}\) hehe iti icoohitim \({ }^{\circ}\) com iti coom iha.
pencil the.Hz table the.Hz 3P-on SN-lie DCL
'El lápiz está en la mesa.'
The pencil is on top of the table. (DS2005, iti) RMH_08-13-07_17e
(48) The sense of in (with certain complements perceived as two-dimensional) \({ }^{14}\)

Zaah quij hamiime com iti quiij iha.
sun the.Cm sky the.Hz 3P-on SN-sit Dcl
'El sol está en el cielo.'
The sun is in the sky. (DS2005, iti) RMH_08-13-07_17f

\footnotetext{
\({ }^{14}\) The word hamiime can mean heaven - a three-dimensional place - and the postposition used is ano:
}
The sense of during
Ihamoc ccooo tintica
3P-PON-be.night \(\quad\) SN-entire MD-AW
3P-on
cohpmíim.
3IO-1SGS.In-PX-sleep
'Dormí toda la noche anoche.'
I slept all night last night. RMH_08-13-07_18a

This postposition is also used with expressions such as zaah hipcop (sun/day Px-Vt) today, moxhámt last year and (borrowed) names of the days of the week, to be able to include that information in the clause. (The word moxíma yesterday does not use the postposition.)
(16) Miércoles cop iti cösiifp caha.

Wednesday the.Vт 3P-on 3IO-Ir.Id-arrive Aux.SN-DcL
'Llegará el miércoles.'
S/he/it will arrive on Wednesday. RMH_05-20.08_57
(17) Jueves cop iti cösoos caha.

Thursday the.Vt 3P-on 3IO-Ir.Id-sing Aux.SN-Dcl
'Cantará el jueves.'
S/he will sing on Thursday. RMH_05-20-08_59
(18) Hant haa moca cop iti cösihiimet caha.
land/year there Twd-SN-move the.Vt 3P-on 3IO-Ir.Id-married Aux.SN-DcL
'Se casará el año próximo.'
S/he will get married next year. RMH_05-20-08_60
(19) Moxhamt quih iti \({ }^{\circ}\) imiipla coha \({ }^{\circ}\) ha.
last.year the.FL 3P-on 3P-PON-bad 3IO-SN-be \({ }_{\text {Irreg }}\) DCL
'Falleció el año pasado.'
S/he died last year. RMH_05-20-08_61

\subsection*{22.2.6 itaai to (special)}

The postposition itaai was only recently added to the list of postpositions because it is not common and seems to be highly restricted in its usage. The dictionary lists it as occurring with three verbs, specifically in the expressions itaai \(\sqrt{\text { afp }}\) meet (someone or some thing that is arriving), itaai \(\sqrt{ } \mathbf{a p}\) travel by land parallel to a boat with respect to (someone), and itaai \(\sqrt{ } \mathbf{y a a i}\) meet (someone or some thing that is arriving). The verbs in these expressions are \(\sqrt{ } \mathbf{a f p}\) arrive (intransitive), \(\sqrt{ }\) ap stand (intransitive), and \(\sqrt{ }\) yaai travel to (a place) (transitive). The inflection of the postposition reflects the person of the object or person who is being met.
(ii) Yooz quij hamiime com ano quiij iha. God the.CM sky the.Hz 3P.in SN-sit DCL 'Dios está en los cielos.' / God is in heaven. RRR
(50) ¡Canoaa quih itaai cafp! boat the.FL 3P-to Im-arrive ' \(i\) Vete a encontrar la panga!' Go meet the boat! (DS2005, itáa tcaafp) RMH_08-13-07_18b
(51) \({ }^{\circ}\) Hant pofii ta \(^{\circ}\), he socaiitim caha. tomorrow 1Pro Ir.Id-spearfish Aux.SN-DcL

\section*{Hitaai masoii \\ aha.}

1P-to 2PlS-Ir.Id-stand.Pl Aux-Dcl
'Mañana voy a pescar más cerca de la orilla. Ustedes pueden estar paralelo a mí en la orilla.'
Tomorrow I am going spearfishing close to shore. You can follow me (along the shore) (DS2005, itai *caap) RMH_08-13-07_18c
i \(\frac{\text { Itaai }}{}\) nsyaai haa -ya?

3P-to 2SGS-Ir.ID-travel.to Aux QM
‘¿Vas a ir a encontrarlo?' RMH_08-13-07_18d
Are you going to go out and meet him/her/it? (Could be a boat, a car, or a person.)
This is the extent of the information that has been collected about itaai.

\subsection*{22.2.7 iica next to}

The postposition iica is not common. It may in fact be an archaic form of iiqui (§22.2.4). The 2005 dictionary lists examples with three positional verbs ( \(V_{\mathbf{i j}}\) sit, \(\sqrt{ }\) ap stand, and \(\sqrt{ }\) oom lie) as well as with the verb \(V_{\mathbf{j i i t}}\) make fall).
(53) i Me hamác iica siij quee -ya?

2Pro fire 3P-next.to Ir.Id-sit Aux.SN QM
‘¿Vas a sentarte al lado de la lumbre?’
Are you going to sit beside the fire? (DS2005, iica) RMH_08-13-07_19a
\& Hast com miica itjiit?
stone the.Hz 2P-next.to 3:3-RL-make.fall
‘¿Te pegó con la piedra?'
Did s/he slam the rock down on you? (DS2005, iica *ojiit) RMH_08-13-07_19b (the action involves throwing down, releasing the item with force)

Iica also occurs with \(V_{i i h}\), as example (62) in the following section illustrates. \({ }^{15}\)

\footnotetext{
\({ }^{15}\) In addition, the expressions iica \(\sqrt{ } \mathbf{i i j}\) (next.to sit), iica \(\sqrt{ }\) ap (next.to stand) and iica \(\sqrt{ }\) oom (next.to lie) are listed as meaning belong.
}

\subsection*{22.3 Syntax}

A fact that may have escaped the reader's notice despite all of the examples that have been given is that the postpositions are virtually obligated to appear in preverbal position. This becomes more apparent when a large corpus is examined and one finds that this to be true. The postposition always appears in a preverbal position when the PP is an adjunct of the verb. It is claimed in chapter 5, especially \(\S 5.7\), that the postposition is in the VP, that it may be separated from the verb by certain other VP constituents, and that there is some very limited variability in word order. These details are not reviewed here.

\subsection*{22.3.1 Discontinuity}

The complement may be separated from the postposition and appear earlier, or later, in the clause. This is an extremely common situation; in fact, one has to look quite assiduously to find good examples of where this is \(\underline{n o t}\) the case. A simple example of discontinuity is given here:
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Haas & cop & imocl & hac ] & haasax & z & ano & yiij. \\
\hline mesquite & the.V & 3P-plac & the.LC & pack.rat & a & 3P.in & DT-sit \\
\hline 'Hay un ni & de ra & nopale & mezqu & & & & \\
\hline There is a & \(k r\) & nest un & squit & tree. (DS2 & & 8 82 & \\
\hline
\end{tabular}

Such examples illustrate the same structure proposed in chapter 2 (see Figure 2.1): a string of DPs followed by the VP.

There is no evidence for - and there is evidence against - any further reanalysis of the [ P V ] sequence as a verb that subcategorizes for an additional argument. Example (55) is still an intransitive clause by all available tests.

One such example in which the complement is clearly not separated from its complement is given in (56).
(56) Ctam quih canoaa com ano sij ta ityaai, hant yahjiit. man the.Fl boat the.Hz 3P.in IR.ID-sit Aux.Rl 3:3-Rl-go.to land Dt-fall ‘Cuando el hombre iba a la panga en que iba a estar, se cayó.' RMH_11-28p-07_187 When the man went to the boat that he was going to sit in, he fell down. (DS2005, cahjiit)

Other examples with "discontinuous" complements are given immediately below.
\(\ldots, \frac{\text { Tahejöc himquij comcaac quih iti toii, ... }}{\underline{\underline{i}} \text {, }}\) Tiburon.Island Dт-Cm person/Seri.Pl the.Cm 3P-on Rl-be.Fl.Pl
‘..., la gente seri estaba en la isla Tiburón, ...'
... the Seri people were on Tiburon Island, ... (Gigante_Comelon_2) RMH_08-13-07_20a
(58) Haso quih moosni quih ano tiij xox, ... net the.Fl turtle the.Fl 3P.in RL-sit although
‘Aunque había una caguama en la red, ...'
Although there was a turtle in the net, ... (DS2005, cyeeno) RMH_08-13-07_20b
(59) Haat hacazlil coi ah hatxiin quij ano moma.
limberbush SN-Pv-chew.flat the.Pl Foc Abs-headring the.Cm 3P.in Twd-Px-move
'Un cayahual se hace de torote que se ha machado.'
A headring is made from limberbush that has been chewed flat. (DS2005, ah) RMH_08-13-07_200
(60) Hant iti hihiih zo ziix hapahit \(z \underline{\underline{\text { iti }} \text { tmiih, ... }}\) place 3P-on 1P-PON-be.Fl a thing SN-Pv-eat a 3P-on RL-N-be.Fl
'No hay comida en donde vivo, ...'
There isn't any food at my place, ... (Burgos_41) RMH_08-13-07_20d
(61) María quih comcaac quih iiqui yaanim. the.Fl person/Seri.Pl the.Fl 3P-toward Dt-be.closed
'La gente se amontonó alrededor de María.'
The people crowded around María. (DS2005, caanim) RMH_08-13-07_20e
(62) iTrooqui nyaa \({ }^{\circ}\) hipquij hapaspoj \({ }^{\circ}\) z iica tiih? vehicle yours Рх-CM paper a 3P-beside RL-be.FL
‘¿Trae papeles tu carro?’
Does your car have (registration) papers? (DS2005, iica) RMH_08-13-07_21a
(63) Hitrooqui quij \({ }^{\circ}\) hasaaiti coozlil \({ }^{\circ}\) quih

1P-vehicle the.Cm lubricating.oil the.FL
ano hsahaama
ha.
3P.in 1 SGS.Tr-Ir.Id-cause.trickle Aux-Dcl
'Voy a poner aceite en mi carro.'
I am going to put oil in my car. (DS2005, caháama) RMH_08-13-07_21b
(64) Xicaquiziil \({ }^{\circ}\) tacoi hamt pac ano cohpyeenim. child.Pl Md-Pl dirt some 3P.in 3IO-1SGS.In-Dt-splash 'Salpiqué tierra en esos niños.'
I threw dirt on those children. (DS2005, cöquenim) RMH_08-13-07_21c
(65) Siimet ihyaa \({ }^{\circ}\) quih panaal quih iqqui cohyoneezj. bread mine the.FL honey the.FL 3P-toward 3IO-1SGS.Tr-Dt-spread 'Puse la miel en mi pan.'
I spread the honey on my bread. (DS2005, cneezi) RMH_08-13-07_21d
(66) Hast hax cooscl 00 ticom, hant taax hill Intns SN-mottled DL Md-Hz place DDP
\begin{tabular}{llllll} 
panaal & \(z\) & \(\underline{\text { ano }}\) & tiij & ma, hyaai. \\
honey & \(a\) & 3P.in & RL-sit & DS & 1SGS.TR-DT-make
\end{tabular}

> 'Ese cerro moteado - recolecté miel en ese lugar.'
> That speckled hill - I collected honey in that place. RMH_08-13-07_21g

The complement may also be right dislocated (§3.12) to follow the verb.
\({ }^{\circ}\) Hasaaiti coozlil \({ }^{\circ}\) quih \(\underline{\underline{\text { áno }}}\) hsahaama ha, trooqui quij. lubricating.oil the.Fl 3P.in 1SGS.Tr-Ir.Id-cause.trickle Aux-Dclvehicle the.Cm 'Voy a poner aceite en mi carro.'
I will put oil in it - the vehicle. RmH_08-13-07_21e
(68) Ctam ticop áno yiihtim, xepe com. man Md-Vt 3P.in Dt-be.Fl-ImpF sea the.Hz
'El hombre fue en ella - el mar.'
That man went on it - the sea. Rмн_08-13-07_21f
The examples with a "discontinuous", "fronted" complement are very common and there is no pause or other intonational division between the complement and the rest of the sentence. This suggests that these are not Topic-Comment structures.

\subsection*{22.3.2 Phonological properties}

The postpositions sometimes have a greater degree of prosodic prominence than at other times. Thus the word ano is sometimes pronounced [ano] (unstressed) and sometimes pronounced ['an:o:], with stress and with the consonant and vowel lengthening that are conditioned by the stress (see §28.5.1).

There are three common patterns, illustrated by the following schema:
\begin{tabular}{llll} 
a. & Pòstposition & Vèrb & (both with reduced stress) \\
b. & Pòstposition & Vérb & (only postposition has reduced stress) \\
c. & Póstposition & Vèrb & (only verb has reduced stress)
\end{tabular}

In addition, as shown below, one can construct examples in which stress is distinctive and meaningful, where the same lexical items appear in examples that have different meanings, as illustrated schematically here.
\begin{tabular}{lllllll} 
(70) & a & DP & DP & Pòstposition & Vérb & (meaning A) \\
& b & DP & DP & Póstposition & Vèrb & (meaning B)
\end{tabular}

The first situation, (69a), where both are unstressed, is found in adverbial clauses in which everything in the adverbial clause is spoken without stress. These examples are therefore not as interesting as contexts where some variation is found, as depicted in (69b) and (69c). It is important to be aware of this case, however, when looking at examples extracted from long
sentences.
One general principle seems to be that the postposition is stressed when there is intended focus on a non-overt complement. As a result, the postposition is unstressed, as shown in (69b), when its overt complement immediately precedes it in the sentence. This is true of all of the examples above in which this configuration is found. Example (1a) is repeated below with the reduced stress on the postposition explicitly shown.
(71) Complement P

Hant com itit iyooquim.
land the.Hz 3P-on 3:3-Dт-put.items
'Los puso en la tierra.'
S/he put them on the ground. RMH_08-13-07_07a
The overt complement may be separated from the postposition and marked with a focus adverb; the postposition in this situation is unstressed even though it is separated from its complement.
Haat hacazlil coi ah hatxiin quij à̀no moma.
limberbush SN-Pv-chew.flat the.Pl Foc Abs-headring the.Cm 3P.in Twd-Px-move
'Un cayahual se hace de torote que se ha machado.' Rмн_08-13-07_200 RмН_11-288-07_189
A headring is made from limberbush that has been chewed flat. (DS2005, ah)
The presence of other phrases that are in focus mean that the complement of the postposition is not in focus; therefore the postposition is unstressed in these cases as well. \({ }^{16}\)
¿Hamt -ya à \(\underline{\underline{\text { ¿no }}}\) (*áno) conteenim?
dirt QM 3P.in 3IO-2SGS-RL-splash
‘¿Les tiraste TIERRA?’
Did you throw DIRT on them? RMH_08-13-07_26f
\begin{tabular}{rllll}
\begin{tabular}{l} 
Comcaii \\
old.woman
\end{tabular} & quij & inol & com & itajíz, \\
the.CM & 3P-hand & the.Hz & 3:3-RL-feel.pain.from
\end{tabular}

\footnotetext{
\({ }^{16}\) Focus on the complement of the postposition is indicated in other ways. For example, to put contrastive focus on the first person plural complement of the postposition in (76) one includes the pronoun he at the beginning of the sentence:
}
(ii) \(\begin{array}{lllll}\mathbf{i} \mathbf{H e} & \text { ziix } & \text { zo } & \text { hino } & \text { camje! } \\ & 1 \text { PRO } & \text { thing } & \text { a } & 1 \mathrm{P} \text {-in } \\ & \text { IM-bring }\end{array}\)
'¡Tráenos algo a NOSOTROS!' / Bring US something!
'Le dolía su brazo a la anciana y apretaba una piedra en él (en varios lugares).'
The old woman's arm hurt, and she repeatedly pressed a stone against it. (Ds2005, coosnan)
(75) Hast quij \(\underline{\underline{\text { ìqui }} \text { yásinan. }}\)
stone the.Cm 3P-toward Dт-press.ImpF
'Apretaba una piedra contra él/ella.'
S/he repeatedly pressed a stone against it. RMH_08-13-07_26b
¿Ziix zo hìno camjc! thing a 1P-in Im-bring
‘¿Tráenos algo!’
Bring something to us! RMH_08-13-07_26a
In some situations the postposition is obligatorily stressed. In the following examples, each with the subject (rather than the complement) immediately preceding the postposition, the postposition must be stressed.

Complement is explicit in the clause in question but separated from the postposition
(77) Xepe ticom ctam ticop \(\underline{\underline{\text { áno }} \text { yiihtim. }}\)
sea Md-Hz man Md-Vt 3P.in Dt-be.Fl-ImpF
'Ese hombre andaba en el mar.'
That man was walking in the sea. RMH_08-13-07_25d
(78) Ctam ticop áno yìihtim, xepe com.
man Md-Vt 3P.in Dt-be.Fl-ImpF sea the.Hz
'Ese hombre andaba en él - el mar.'
That man was walking in it - the sea. RMH_08-13-07_25e

\section*{Complement is implicit in the clause in question}
(79) Hacat timoca áno yoofp. shark Md-Twd 3P.in DT-arrive 'El tiburón llegó entre ellos.'
The shark arrived among them. RmH_08-13-07_25f
(80) Quisíil quih tipon, hax itacaaixaj oo ma, child the.FL RL-have-voice Intns 3:3-RL-cause.hard DL DS
quiiquet quih \(\underline{\underline{i q q u i}}\) yopanzx.

SN-pregnant.with the.FL 3P-toward DT-run
'El niño dio un grito fuerte y su madre corrió hacia ella/él.' RMH_08-13-07_259 The child yelled loudly and her/his mother ran toward her/him. (Ds2005, cacáaixa)
(81) Cafee cop \({ }^{\circ}\) xiica an icaai \({ }^{\circ}\) ano hyaai. coffee the.Vt sugar 3P.in 1SGS.Tr-Dt-make
'Metí azúcar en el café.'
I put sugar in the coffee. RMH_08-13-07_34a
As a result of this situation, "minimal pairs" for stress on the postposition are easily constructed. In the following examples the words and the word order are identical. The different meanings are signalled unambiguously by the difference in the stress on the postposition.

In other situations, when the postposition has a non-overt complement in the clause, the postposition may or may not be stressed, as there may or may not be focus on the complement. This is illustrated by the following pairs of examples.
a. i Hamt pac à̀no conteenim?
dirt some 3P.on 3IO-2SGS-Rl-splash
‘¿Les tiraste tierra?’
Did you throw dirt at them? RMH_08-13-07_26e
b. ¿ Hamt quih pac áno conteenim?
dirt the some 3P.on 3IO-2SGS-RL-splash
‘¿Les tiraste tierra a ELLOS?’
Did you throw dirt on THEM? (contrastive focus) RMH_08-13-07_26d
This option, however, seems to be mitigated in its use by another principle, which is for a VP-initial postposition to be stressed even though its complement may not be especially in focus. Therefore some of the examples below with an unstressed initial postposition require very specific contexts to be acceptable; these are marked with \#.
(86) \({ }^{\circ}\) Hant pofii ta \({ }^{\circ}\), iáno (*àno) cmiihtim! tomorrow 3P.in Im-N-be.Fl-ImpF
'Mañana no vayas en él.'
Tomorrow don't walk in it! RMH_08-13-07_22b
(87) Háxaca pac toc cötoii, zixcám z itaaitoj, Abs-pet-Pl some there 3IO-RL-stand.Pl fish a 3:3-Rl-eat-Pl
toc cötoii ma, ihmaa zo toc cömota,
there 3IO-RL-stand.PL DS other a there 3IO-TwD-RL-move
áno (*àno) yaato.
3P.in DT-fight
'Había unos perros allí comiendo un pescado cuando vino otro y peleó con ellos.' There were dogs there eating a fish, another one came along and fought with them. (DS2005, caato) RMH_08-13-07_22j
(88) \({ }^{\circ}\) Hax cactim \({ }^{\circ}\) quij miiho isax, áno cmaalim. Áno cmaalim. puddle the.Cm 2P-PON-see CNCSv 3P.in Im-N-play 3P.in Im-N-play 'Si ves un charco, no jugues en él. No juegues en él.' If you see a puddle, don't play in it. Don't play in it. RMH_11-88p-07_192
a. \(\underline{\underline{\text { àno }} \text { hsahaama }}\)
3P.in 1SGS.Tr-Ir.ID-cause.trickle Aux-Dcl
'Se lo meteré.'
I will put it in it. RMH_08-13-07_22ia
b. \(\underline{\underline{\text { Áno }} \text { hsahaama }}\)
ha.
3P.in 1SGS.Tr-Ir.Id-cause.trickle Aux-Dcl
'Sí. Se lo meteré.'
I will put it IN IT. RMH_08-13-07_22ib
a. \#;Àno cmíihtim!
3P.in Im-N-be.Fl-ImpF
'No vayas en él.' RMH_08-13-07_22aa
Don't walk in it! (such as the sea)
b. ¡Áno cmìihtim!
3P.in Im-N-be.Fl-Impf
'No vayas EN ÉL.' RMH_08-13-07_22ab
Don't walk IN IT! (such as the sea)
a. \# iÀno contéenim?
3P.in 3IO-2SGS-Rl-splash
‘¿Se lo echaste en ellos?' RMH_08-13-07_22cb->
Did you throw it on them? RMH_08-13-07_22ca
b. ¿Áno contèenim?
3P.in 3IO-2SGS-RL-splash
‘¿Se lo echaste En ELLOS?'
Did you throw it ON THEM?
a. \# Ìti yomíih.
3P-on Dt-N-be.Fl
b. Íti yomìih.
3P-on Dt-N-be.Fl
'No está en él/ella.'
It isn't on it. RMH_08-13-07_22e
a. Ìiqui yopánzx.
3P-toward Dt-run
'Corrió hacia él/ella.' RMH_08-13-07_22fa S/he ran toward him/her/it.
a. \# iÀno móta?
3P.in Twd-Rl-move
RMH_08-13-07_22ga
b. Íiqui yopànzx.
3P-toward DT-run
'Corrió hacia él/ella.' RмH_08-13-07_22fб
S/he ran toward him/her/it.
b. ¿Áno mòta?
3P.in Twd-Rl-move
'Viene de él/ella?' (¿Está saliendo?)
Is it coming (out) from it? RMH_08-13-07_22gb
a. \# Ìti nscámom aha. b. Íti nscàmom aha.
3P-on 2SGS-Ir.ID-N-lie Aux-Dcl 3P-on 2SGS-Ir.Id-N-lie Aux-Dcl
RMH_08-13-07_22ha RMH_08-13-07_22hb \(\rightarrow\)
'No debes acostarte en él/ella.'
\(\begin{array}{lll}\text { a. } & \begin{array}{ll}\text { \# Ìti } & \text { yíih. } \\ & \text { 3P-on } \\ \text { DT-be.FL }\end{array}\end{array}\)
\(\begin{array}{lll}\text { a. } & \text { \# Ìti } & \text { yíih. } \\ & \text { 3P-on } & \text { Dt-be.Fl }\end{array}\)

RMH_08-13-07_22da

You shouldn't lie down on it.
b. Íti yìih.

3P-on DT-be.FL
'Está en él/ella.'
It is on it. RMH_08-13-07_22db

It is possible, although less common, for the postposition to be stressed to show contrastive focus on the postposition itself.
(97) Xepe com áno cmiihtim.
sea the.Hz 3P.in Im-N-be.Fl-ImpF
'No te metas EN el mar.' (Puedes andar cerca de él.)
Don't go IN the ocean. (You can go near it.) rmH_11-28p-07_191
The postposition may be initial in the VP and yet not be in absolute clause-initial position. The difference is significant for the accentual properties of the postposition. In the following examples the sentence begins with a time adverb or time adjunct. Since the postposition is in

VP-initial position, it is stressed.
¿Cmaax áno mota?
now 3P.in TwD-RL-move
‘¿Ahora está saliendo de él/ella?'
Now is it coming from it? RMH_08-13-07_22m
(99) ¿Cói áno mota?
still 3P.in Twd-RL-move
‘¿Todavía está saliendo de él/ella?’
Is it still coming from it? RMH_08-13-07_22n
(100) Moxíma áno cohpyeenim.
yesterday 3P.in 3IO-1SGS.Tr-RL-splash
'Ayer se lo tiré en ellos.'
Yesterday I threw it on them. RMH_08-13-07_25a
(101) Haptco \(\underline{\underline{\text { áno }} \text { cohpyeenim. }}\)
already 3P.in 3IO-1SGS.In-DT-splash
'Ya se lo he tirado en ellos.'
I already threw it on them. RMH_08-13-07_25b
(102) ; Zaah hipcop cmaax áno cmiihtim! sun/day Px-VT now 3P.in Im-N-be.Fl-ImpF
'No andes en él hoy.'
Don't walk in it today! RMH_08-13-07_25c
In the following examples, however, the postposition is preceded by a VP-initial adverb (see \(\S 5.1)\) and has reduced stress. This may be an example of a domain-specific avoidance of stress clash. \({ }^{17}\)
Anxö \(\quad\) ìtit \(\quad\) yiih.
InTNS \(\quad\) 3P-on
DT-be.FL
'Está en él/ella mucho.'
S/he is on it a lot. RMH_-08-13-07_22k
(104) ©Miizj \(\underline{\underline{\text { àno }}}\) mota?
well 3P.in Twd-Rl-move
‘¿Está saliendo bien?’
Is it coming out from it well?
(i.e., quickly, easily) RMH_08-13-07_221

\subsection*{22.3.3 Grammaticalization}

Two of the postpositions enter into the subcategorization of verbs; they have become grammaticalized as markers for nominals that are recipients, addressees, etc. These facts are more interesting than they may first appear to be, and show the degree of grammaticalization that has taken place.

First, there may be a recipient/addressee that is not linked to a syntactic relation, as shown in (105) for the verb \(\sqrt{ }\) âaom beg (see §18.5.5). When this is the case, the recipient/addressee whether singular or plural - appears as the complement of a particular postposition: iti on for

\footnotetext{
\({ }^{17}\) These facts regarding the interplay between adverbs and stress on the postposition are very clear. The intonational pattern of the clause depends very importantly on them.
}
singular nominals, ano in for plural ones.
\begin{tabular}{lllll}
\hline \hline Vâaom & Semantics: & Agent & Patient & (Addressee) \\
beg for Patient & Syntax: & Subject & Direct Object & \(\left(\| \mathrm{PP}_{\mathrm{iti}} /\right.\) ano \(\left.\|\right)\) \\
(from Addressee) & & & & \\
\hline
\end{tabular}
(106)
a. Siimet quih miti itaaom, ...
bread the.Fl 2P-on 3:3-Rl-beg
'Estaba mendigando pan de ti, ...'
S/he was begging for bread from you (sg.), ... RMH_08-13-07_28a
b. Siimet quih min itaaom
bread the.Fl 2P-in 3:3-Rl-beg
'Estaba mendigando pan de ustedes, ...'
S/he was begging for bread from you (pl.), ... RMH_08-13-07_28b
Some verbs subcategorize to for an oblique object that, whether singular or plural, is crossreferenced on the verb with indirect object inflection. One verb that uses this pattern is \(\sqrt{ }\) cazit snatch, grab (see §18.5.3).
\begin{tabular}{lllll}
\hline \hline Vcazit & Semantics: & Agent & Theme/Patient & \begin{tabular}{l} 
(Recipient/Addressee) \\
snatch, grab
\end{tabular} \\
\hline
\end{tabular}
a. Tom quih he iyocazit.
money the.FL 1IO 3:3-Dт-grab
'Me arrebató el dinero.'
S/he took the money away from me by force. RMH_08-13-07_29a
b. Tom quih he iyocázitim.
money the.Fl 1IO 3:3-Dt-grab-ImpF
'Nos arrebató el dinero.'
S/he took the money away from me by force. RMH_08-13-07_29b
A third pattern is typical of several verbs, and is illustrated by the verb Vamje bring (see §18.5.3). In this pattern, singular addressees/recipients are encoded obligatorily as oblique objects (cross-referenced by indirect object morphology), illustrated by (110a), while plural addressees/recipients are encoded by postpositional phrases with ano, illustrated by (110b) and (111).
a. iHe camjc!
1IO Im-bring
‘‘Tráemelo!’
iHino camjc!
1P-in Im-bring
'1Tráenoslo!'
Bring it to us! RmH_08-13-07_30b
¿Ziix \(\quad\) zo \(\underline{\underline{\text { hino }}}\) camjc!
thing a 1 1-in
'Tráenos algo.'
Bring something to us! RMH_08-13-07_26a

See also the verbs \(\sqrt{\mathbf{a m x}}\) say (no addressee or only plural addressee as complement of ano) and \(\sqrt{ } \mathbf{a a m x}\) say (singular addressee as oblique object) discussed in \(\S 18.5 .5\) and \(\S 19.12\) respectively.

\subsection*{22.3.4 Idiomatic expressions}

Three of the postpositions (ano in, iti on and iiqui toward) commonly enter into combinations with verbs to produce idiomatic expressions of varying degrees of semantic opacity, as shown below. Such expressions are as common in Seri as are expressions with so-called particles in English. The postposition in these examples is normally stressed. See the discussion in \(\S 7.3\).

\subsection*{22.3.5 Analysis}

It seems clear that the category of postposition has a place in Seri grammar at least because of their limited use in noun phrases and with certain sentence-initial phrases (see the beginning of this chapter). However, the more important question is what is the status of these words when they occur in standard clauses where they always occur in preverbal position. In the absence of evidence to the contrary, they should presumably be analyzed as being of the same category as other instances of those words of the same form. \({ }^{18}\)

\footnotetext{
\({ }^{18}\) Craig and Hale (1988) suggest a historical development for this kind of situation, of which Seri represents a type that is slightly different from the ones that they describe. They essentially propose that a sequence [ [NP P] \({ }_{\text {PP }}\) V ] is reanalyzed as \(\left[\mathrm{NP}[\mathrm{P}-\mathrm{V}]_{\mathrm{V}}\right]\) by the adjunction or incorporation of the postposition to the verb. However, they write about these morphemes as verb prefixes; but in Seri the data do not indicate that the \(P\) is attached to the verb qua prefix. The term "adjunction" is used here to refer to the preverbal positioning of the P without implying any particular morphological analysis.
The structure that presumably would be the historical (if not synchronic) analysis of (112) is given as Figure 22.1. (This diagram assumes that the direct object and postpositional phrase are not in the VP, but this is probably not important.)
}


Evidence has been presented that the postpositions are part of the verb phrase; see \(\S 5.7\) and the end of §22.3.2. There is no evidence that they are actually prefixed to the verb or in any way affect the transitivity of the clause. The semantic complements of the postpositions do not determine indirect/oblique inflection on the verb (§2.4); there is no evidence that they are oblique arguments of the verb. No evidence of any syntactic constituency between the postposition and its semantic complement has been found. An example such as (112) therefore seems to be most appropriately analyzed without any structural PP , and with the P in the VP , as shown in Figure 22.2. As the facts in \(\S 5.7\) have shown, the P follows VP-initial adverbs and so is not simply adjoined to the VP.
(112) Comcaii quij oop
old.woman the.CM 3P-ON-sew.basket the.FL
zaah cop
sun
'La anciana puso su canasta en el sol.'

Two patterns are commonly attested with respect to the order of phrases in the examples with intransitive verbs that we have seen (looking only at those where the nominals precede the verb):

\footnotetext{
Under Craig and Hale's analysis, the complement of the P is superficially an object of the verb. There is evidence for this analysis in some languages, as Craig and Hale show. In Seri, however, there is no evidence that the DP left by the presumed adjunction of the P to the V has any properties of a direct object; in fact, the evidence is clearly in the other direction since the transitivity of the clause is unaffected. There is no difference in the morphological transitivity of an intransitive verb (for example) that occurs in a sentence without an adjoined postposition and one with such a postposition. (See Appendix C for the several available tests of transitivity.)
}
(113) a. \(\quad \mathrm{DP}_{\text {Subject }} \mathrm{DP}_{\text {P-complement }} \mathrm{P}\) Verb (see (56), for example)
b. \(\quad \mathrm{DP}_{\text {P-complement }} \mathrm{DP}_{\text {Subject }} \mathrm{P}\) Verb \(\quad\) (see (57), for example)

It is less common to find examples in texts and normal conversation with three overt nominals and a transitive verb. Three orders should be possible, in principle, if we vary only the position of the complement of the postposition. However, one possibility seems to be ungrammatical. This fact is at this point unexplained.
(114) a. \(\quad \mathrm{DP}_{\text {Subject }} \mathrm{DP}_{\text {Direct Object }} \mathrm{DP}_{\text {P-complement }} \mathrm{P}\) Verb
b. \(\quad \mathrm{DP}_{\text {Subject }} \mathrm{DP}_{\text {P-complement }} \mathrm{DP}_{\text {Direct Object }} \mathrm{P}\) Verb
c. \(\quad * \mathrm{DP}_{\text {P-complement }} \mathrm{DP}_{\text {Subject }} \mathrm{DP}_{\text {Direct Object }} \mathrm{P}\) Verb
(115)

'Juan puso la víbora de cascabel en el tambor.'
Juan put the rattlesnake into the barrel. (a) RMH_08-13-07_33d (b) 20\#\#62

\section*{23. Adjectives}

Notions that correspond to prototypical adjectives in other languages are most commonly expressed in Seri with intransitive stative predicates. These are not distinguishable morphologically from other intransitive predicates (see §18.2) and no significant motivation internal to Seri has been found to distinguish them from other verbs as a word class. The vast majority of adjectival notions are therefore represented in Seri consistently as relative clauses using deverbal nouns when used attributively and as verbs or deverbal nouns (see §10.4.1) when used predicatively.

An example using the predicate meaning small is presented here to contrast with the adjectives discussed later in this chapter. The root \(\sqrt{ }\) isil (for singular subjects) cannot stand alone as a word. When it modifies a noun, using a deverbal form, it may be either positive (qu-isil SNsmall) or negative (i-m-isil SN-N-small). (See chapter 14 for discussion of deverbal noun morphology.) These forms are illustrated in examples (1) and (2).

\section*{(1) Canoaa quih quisil com, tiix ihsexl aha.}
boat the.Fl SN-small the.Hz DDS 1SGS.Tr-Ir.Id-buy Aux-DCL
'Compraré la PEQUEÑA panga.'
I will buy the SMALL boat.
(2) Canoaa quih imisil com, tiix ihsexl aha. boat the.Fl SN-N-small the.Hz DDS 1SGS.Tr-Ir.Id-buy Aux-Dcl
'Compraré la panga que NO es pequeña.'
I will buy the boat that is NOT small.
Such deverbal nouns may occur as fused-heads in the nominal phrase (see §4.3.4), as in (3).
(3)
\begin{tabular}{|c|c|c|c|}
\hline Quisil & com ] & ihsexl & aha. \\
\hline SN-small & the.Hz & 1SGS.Tr-Ir.ID-buy & Aux-DcL \\
\hline 'Compraré & 1/la peq & eño/a.' & \\
\hline I will buy th & small & & \\
\hline
\end{tabular}

And such words may be used predicatively in the verbless construction (§10.4) with some modal element.
(4) Canoaa com quisil iha boat the.Hz SN-small DcL
'La panga es pequeña.'
The boat is small.
(5) Canoaa com imisil iha. boat the.Hz SN-N-small DCL 'La panga no es pequeña.' The boat is not small.

Such predicates may also be inflected in any of the ways that one expects for intransitive verbs. Some examples with the root \(\sqrt{ }\) isil are: yisil it was small, xisil it is small!, misil it is small,
yomisil it was not small, pisil (if) it is small, pomisil (if) it isn't small, tisil is it small?, (when) it was small, tmisil isn't it small?, etc.

Nevertheless, apart from the very large class of stative predicates of which \(\sqrt{ }\) isil small is an example, there is a very small class of adjectives in the language (other than the demonstrative adjectives (§21.3) and the interrogative adjective zó which? (§6.2.1.5)). \({ }^{1}\) They are a rather unusual and heterogeneous set of words; see the presumably complete list in Table 23.1. For some of them, if one asks a speaker about the word, one just gets a puzzled look in return since the words are just that unusual or restricted in usage. And some of them may be confused with cognate adverbs.

Adjectives differ from the stative verbs illustrated above using \(\sqrt{ }\) isil small. First, while all of the adjectives can be used attributively, as documented below, these words never occur with any prefix or suffix. They thus cannot be inflected with verbal morphology of any type, including negation. Only a few ungrammatical examples are presented here to illustrate.
(6) a. *imcoox / * imoox ('no todos') (not all)
b. * yotazo ('había uno') (there was one)
c. * sihmaa ('habrá otro') (there will be another)
d. * pozaac ('si es pequeño') (if it is small)

Second, most of the adjectives cannot function as fused heads of the nominal phrase (see Table 23.1). Only three of them may do this: cöhaisx injured (by hunting weapon), ihmaa other \((s)\), and tazo one. These three adjectives may be followed by a determiner, which is a crucial fact here to show their place in the nominal phrase.
i[ \begin{tabular}{llll} 
Cöhaisx & tintica \(]\) & iiqui & hpancojc! \\
injured & MD-AW & 3P-toward & Im-run-PL
\end{tabular}
'iCorre tras el que está herido!'
Run after the injured one! (offered)

'..., traerán otras.'
..., they will bring others. (DS2005, caazi)
i[Ihmaa zo] ntconyaa? other a 2SGS-RL-N-own
¿ ¿No tienes más (otro)?’
Don't you have any more (another one)? (DS2005, queeme)

\footnotetext{
\({ }^{1}\) See also the adjectival roots that appear in compounds discussed in \(\S 13.5\).
}
\begin{tabular}{llll}
\hline & \multicolumn{2}{c}{ Table 23.1: Simple adjectives } & \\
& & may function as \\
cöhaisx & fused head & may be used \\
ihmaa & other & predicatively \\
tazo & one, single & yes & yes \\
& true & yes & \(?\) \\
áa & yes & \(?\) \\
aapa & strong, sturdy & no & no \\
coox & all (entirety) & no & narely \\
íi & first & (pronoun) & no \\
xahxaii & kind of like, somewhat resembling & no & no \\
xapi & none & no & no \\
zaac & small & no & no \\
\hline
\end{tabular}
(10) [ Tazo cah ] siitom aha.
one the.Fl-Foc Ir.ID-speak Aux-DCL
'UNO debe hablar.'
ONE should talk. (1 co 14:27)
(11) [ Tazo ipi ] tmahcaail, yoque. one Intns RL-N-remain Dt-US-say
'Ni uno quedó, se dice.'
There wasn't even ONE left over, it is said. (DS2005, ccaail)
Only a few ungrammatical examples with the other adjectives are presented here to demonstrate their inability to function as fused heads.
\begin{tabular}{llllll} 
a. & \(*[\) zaac & quij & \(]_{\mathrm{DP}}\) & ('el pequeño') & (the small one) \\
b. & \(*[\) aapa & quij & \(]_{\mathrm{DP}}\) & ('el enorme') & (the strong one) \\
c. & \(*[\) xapi & & \(]_{\mathrm{DP}}\) & ('ninguno') & (none) \\
d. & \(*[\) coox coi & \(]_{\mathrm{DP}}\) & ('todos') & (all)
\end{tabular}

The example in (12d) is meant to demonstrate that coox cannot occur with a determiner following it. However, coox all may be used pronominally and in that way appears at first glance to be functioning as a fused head. See \(\S 16.3\) for reasons that motivate the categorization of coox as a true pronoun in those contexts.

Third, most of the adjectives cannot be used predicatively in the verbless construction
(§10.1). Two ungrammatical examples are given below. \({ }^{2}\)
```

* Minol cop zaac iha.
2P-finger the.VT small DcL
('Tu dedo es pequeño.) (Your finger is small.)
*¿Taax coox -ya?
DDP all QM
('¿Son todos?' / '¿Es todo?') (Is that all of them? Is that all?)

```

\subsection*{23.1 Discussion of specific adjectives}

The adjectives in Table 23.1 are discussed individually in the following sections.

\subsection*{23.1.1 Áa true, real, authentic}

The adjective áa true, real, authentic is homophonous with the adverb áa truly, really, which most typically follows verbs ( \(\$ 24.4 .1\) ). The adjective is more commonly found in compounds and lexicalized expressions that also tend to be quite transparent semantically: haapis áa (tobacco real) factory-made cigarette, siml áa (barrel.cactus real) a variety of barrel cactus, xcoomoj áa (fly real) common housefly, moosni áa (black.sea.turtle real) (a variety of?) black sea turtle, ziix hapahit áa (thing SN-Pv-eat real) solid meal, real food (not junk food), cocsar áa (non-Indian.Mexican real) non-Indian Mexican (used in special situations), and cmiique áa (person/Seri real) clean-living person. Simple non-lexicalized examples are not very common. Two examples are given here.
(15) ... xo cmiique áa \(z\) imhaa ha. but person/Seri real a SN-N-EQ DCL
'.. pero no era una verdadera persona.'
... but s/he wasn't a real person. (Hipocampo_24) RMH_05-29-07_116a
(16) ¡Hamt áa com an hant hiij!
soil real the.Hz 3P.in land Im-sit
‘iSiéntate en el mero suelo!’
Sit on the ground itself! \({ }^{3}\) (Offered) RMH_05-29-07_116b

\subsection*{23.1.2 Aapa strong, sturdy}

The adjective aapa strong, sturdy and sometimes enormous is also more commonly found in compounds and lexicalized expressions. Two with the first sense are inol aapa right hand and

\footnotetext{
\({ }^{2}\) Adjectives are not used in constructions comparable to the English examples I sat there hungry, You found me naked, I think him uninformed, You strike me as cantankerous.
\({ }^{3}\) For some speakers this implies that one will sit on sand and not just on the ground.
}
haitaapa northwest wind (compare hai wind; the \(\mathbf{t}\) is unexplained, however). Two with the sense of a very large size are mosnaapa a variety of black sea turtle \({ }^{4}\) (compare moosni black sea turtle), and Caail \({ }^{\circ}\) Aapa (a particular very large dry lake bed). Non-lexicalized uses of the word imply something that is bigger and/or stronger than the usual kind.
(17) Trooqui aapa \(z\) an hasiihca ha.
vehicle strong a 3P.in 1PLS-IR.Id-sit.PL Aux-DCL
'Iremos en un vehículo fuerte.'
We will go in a heavy vehicle. \({ }^{5}\) (offered)
(18) Haaco aapa zo nsaai
(a)ha.

Abs.house strong a 2 SGS-Ir.Id-make Aux-Dcl
'Debes hacer una casa fuerte.'
You should make a sturdy house.
(19) Canoaa aapa ha.
boat enormous DCL
'Es una panga enorme.'
It is an enormous boat.
This same adjective is used with the sense of correctly identified in the following examples.
(20) \(\quad . . \begin{array}{lll}\text { hax tiix }\end{array}\) aapa haa, teete ma, ...
‘... dijo que de veras era él, ...'
... he said that he really was he, ... (Ac9:20)
(21) Tiix aapa ha toc cömoma.

DDS Foc there 3IO-Twd-Px-move
'Es de veras él/ella que viene.'
That's really him/her coming. (Offered)

\subsection*{23.1.3 Coox all}

Cases where the word coox all is unambiguously an adjective modifying a nominal are those in which it occurs before the determiner, \({ }^{6}\) and these are surprisingly uncommon. \({ }^{7}\) The adjective modifies a singular noun or a deverbal noun. In some cases, such as (22), the referent is

\footnotetext{
\({ }^{4}\) According to Lorenzo Herrera, this variety of sea turtle doesn't become thin and so was a preferred variety for eating.
\({ }^{5}\) It was explained that the quintessential example of a trooqui aapa is a Hummer.
\({ }^{6}\) Coox occurs in the NTT more than 1200 times, as does ihmaa. The word tazo occurs more than 400 times.
\({ }^{7}\) The adjective coox all, entire has a cognate adverb that occurs preverbally and means completely (§24.3.1.7). The verb \(\sqrt{ } \mathbf{c o o o}\) also figures in the picture; see \(\S 18.2\). In many situations the preferred expression for all is a verbal form using this root.
}
obviously necessarily singular and so the combination of a singular noun with coox expresses the entirety of that item in some distributive sense - not all of the meat, in example (24), but all kinds of meat.
(22) Hant quih coox com iti tatax, ... earth the.Fl all the.Hz 3P-on Rl-go
'Viajó por toda la tierra (por todos lados), ...'
S/he went over the whole world (everywhere), ...
(23) iZiix quih iti cöiitom coox cah iti cöhaaizi!
thing the.FL 3P-on 3IO-3P-PON-speak all the.FL-FOC 3P-on 3IO-Im-make-PL '¡Hagan todo lo que él les diga!'
Do everything that he says to do! (Jn 2:5)
(24) Ziix ipxasi quih coox cah iyoohit. thing 3P-flesh the.Fl all the.Fl-Foc 3:3-Dt-eat
'Come toda clase de carne.'
S/he/it eats all kinds of meat. \({ }^{8}\)
In other cases, the combination implies the entire set of items implied by the singular noun. Such noun phrases determine singular number marking on the verb; see (26) and (27), for example.
\begin{tabular}{|c|c|}
\hline Zaah quih coox & ca \\
\hline sun/day the.Fl all & the.FL-Foc \\
\hline 'Todos los días, ...' & \\
\hline Every day ... \({ }^{9}\) & \\
\hline
\end{tabular}
\begin{tabular}{lllllll} 
Ziix & quih & quiisax & \(\underline{c o o x}\) & cah & isiiho & (a)ha. \\
thing & the.FL & SN-have.life & all & the.FL-FOC & 3:3-Ir.ID-see AUX-DCL
\end{tabular}
'Todo el mundo lo/la verá.'
Everyone will see him/her/it.
(27) Haxz quih coox cah yaxi.
dog the.Fl all the.Fl-Foc Dt-die
'Todos los perros murieron.'
All of the dogs died.

\footnotetext{
\({ }^{8}\) The meaning S/he/it eats all of the meat can be expressed with the pronoun coox following the determiner phrase, as in Ziix ipxasi quih coox iyoohit. On this construction, see \(\S 8.5\).
\({ }^{9}\) It is important to note that the meaning all day is not a possible interpretation of this phrase.
}
(28) Zaah, tiix thaa ma \(x\), cmiique coox cah \({ }^{\circ}\) iisax hant yaait \({ }^{\circ}\). sun/day DDS RL-EQ DS UT person/Seri all the.Fl-Foc s/he.is.happy
'En ese día toda la gente es feliz.'
On that day everyone is happy. (offered)
The use of coox with a plural noun and a plural verb is not impossible, however, as illustrated by the following example.
(29) Háxaca coox cah yaxyat.

ABS-pet-Pl all the.Fl-Foc DT-die-PL
'Todos los perros murieron.'
All of the dogs died.
The following expressions, used as adjuncts with verbs to indicate with gusto, energetically, are common, however, and plural nouns also occur with coox in these: iisax (or ihiisax) quih coox com (3P-spirit the.Fl all the.Hz) (with) all his/her heart, iistox (or ihiistox) quih coox com (3P-?-PL the.Fl all the.Hz) (with) all their hearts, miisax (or mihiisax) quih coox com (with) all your heart. These adjuncts determine oblique/indirect object inflection in the following examples; when they are not present in these clauses, that inflection is not used.
\begin{tabular}{|c|c|c|c|}
\hline iisax quih coox com cöitatolec, & itzáxö, & \multirow[t]{2}{*}{\begin{tabular}{l}
0x \\
thus
\end{tabular}} & imii: \\
\hline 3IO-3:3-RL-ask.for.help & 3:3-RL-discuss & & 3:3-Px-tell \\
\hline ... le rogó, le habló, y le dijo: ...' & & & \\
\hline he begged him for help, he spoke to him and & aid to him: & (Ac 16 & \\
\hline
\end{tabular}
(31) Iistox quih coox com cöimqueept, comcaac coi, 3IO-3:3-Px-like-Pl person/Seri.Pl the.PL
quino cöhiifp hac, hin taht.
3P.PL-in 3IO-1P-PON-arrive the.Lc 1SGDO RL-see-PL
'Las personas me recibieron con mucha alegría cuando llegué y me vieron.'
The people received me very gladly when I arrived and they saw me. (Offered)

\subsection*{23.1.4 Cöhaisx injured (by hunting weapon)}

The word cöhaisx injured (by hunting weapon) is odd-looking in that it begins with a consonant (c̈̈) that is common in verb-initial position as an allomorph of the third person oblique/indirect object prefix (§17.1.2.4) and it has the sequence ha, which looks suspiciously like the beginning of a passive deverbal noun, although no other forms of it appear to exist. Other currently-used expressions for injure or hunt are not similar. The word occurs in the lexicalized expression hamác cöhaisx (fire injured) smoke signal.


\subsection*{23.1.5 Ihmaa other}

The adjective ihmaa other is presumably derived historically from the homophonous negative subject-oriented deverbal noun based on the equative verb \(\sqrt{ }\) haa, namely imhaa [i \(?^{\prime} \mathrm{m}\) a a] what is not \(\{\mathbf{i} \mathbf{- m}-\mathrm{haa} \mathrm{SN}-\mathrm{N}-\mathrm{EQ}) .{ }^{10}\) The metathesis of \(\mathbf{m h}\) is regular, as described in §28.5.10.


This adjective can be modified by the intensifier hax and followed by the focused article cah (§24.2.2) to give the meaning one after another.
\({ }^{\circ}\) xiica quih quiistox \({ }^{\circ}\) hax \(\underset{\text { IntN }}{\text { ihmaa }}\)\begin{tabular}{l} 
cah \\
other \\
'una persona tras otra' \\
the.FL-FOC
\end{tabular}
one person after another (Lk 11:29)

Since this adjective can fuse with the head of the nominal phrase (see §4.3.3), it in not possible to give unambiguous examples of it being used predicatively. The following example, for instance, can be analyzed with ihmaa being used pronominally rather than predicatively.
He hiionam quih ihmaa ha.
1PRO 1P-hat the.FL
'Mi sombrero es otro.'
My hat is another one.

\subsection*{23.1.6 íi first}

The adjective íi first has a cognate postverbal adverb with a similar meaning. Therefore any discussion of the adjective needs to be careful to select examples without deverbal nouns in order to distinguish the adjective from the adverb. The adjective per se is very infrequent. Two

\footnotetext{
\({ }^{10}\) The deverbal noun imhaa (SN-N-EQ) what is not is homophonous with the adjective since the metathesis of \(\mathbf{m h}\) still occurs. The two words are written distinctly in current work, with the verbal form keeping the root \(\sqrt{ }\) haa intact.
}
examples of it used adnominally are given here. \({ }^{11}\)
(38) aal íi quij

3P-spouse first the.Cm
'su primer esposo, su primera esposa'
his/her first spouse (DS2005, all)
(39) Hipiix tax hitrooqui cheel í chaa ha. DPS - 1P-vehicle SN-red first SN-EQ DCL 'Éste es mi primer carro rojo.'
This is my first red vehicle. \({ }^{12}\)
This adjective also occurs in some lexicalized expressions such as haamjö íi (a plant, Hechtia montana) and yaazi \({ }^{\circ}\) íi his firstborn child (3P-PON-carry first). \({ }^{13}\)

\subsection*{23.1.7 Tazo one}

The adjective tazo one is the only "number" word that is not a verb (see §18.2). It is undoubtedly related historically to the verb \(\sqrt{ }\) azoj alone, be one, and it is also commonly used as a head (§4.3.3), as shown above in (11). Example (40) illustrates its attributive use. Example (41) looks like a predicative use, but it may also be an example of tazo used pronominally (see \(\S 4.3 .3\) ).
\begin{tabular}{ll} 
(40) & \begin{tabular}{l} 
Hanso ziix tazo \(]\) \\
just thing \\
cahcaail
\end{tabular} \\
& 'Falta sólo una cosa.' \\
& SN-remain/lacking DCL
\end{tabular}

\subsection*{23.1.8 Xahxaii kind of like}

The commonly-used adjective xahxaii kind of like, somewhat resembling is presumably derived historically from a subject-oriented deverbal noun based on the verb \(\sqrt{ } \mathbf{C i i}\) feel, sense, namely

\footnotetext{
\({ }^{11}\) Example (39) has the adverb tax in the DP, which is also common with the adverb íi first. See §24.2.9. This adjective is written with an accent in the practical orthography to ensure that a reader gives it primary phrasal stress.
\({ }^{12}\) The construction with the copula was strongly preferred for this example.
\({ }^{13}\) This adjective fuses tightly with the word preceding it. When it follows hitrooqui my vehicle, for example, the result (hitrooqui ii) is pronounced with three syllables and not four, as if it were hitroquíi, in unguarded speech. The primary stress occurs on the right, as expected.
}
hax haii (just SN-Pv-feel), with some irregular changes in the consonants. \({ }^{14}\) This adjective might be analyzed as one that requires an NP complement. If so, it most commonly modifies a null head (or fuses with the head, depending on the analysis). In some cases the entire phrase [Noun xahxaii] is translated well as artificial \(N\) or pseudo \(N\) and it is possible that in these cases, at least, the adjective means simply artificial and does not take a complement NP.
..., \({ }^{\circ}\) zaxt quisil \({ }^{\circ} \underline{\text { xahxaii }}\) tiquij hax ipac oo cötayaxi, ... child somewhat.resembling MD-CM just 3P-back DL 3IO-RL-measure
‘..., ese "niño" crecía más y más...'
... that to-all-appearances child grew more and more ... [He was actually a giant.]
(Gigante_Comelon_91)
itoaa xahxaii cap
3P-foot/leg somewhat.resembling the.VT
'su pierna artificial (prótesis)'
his/her artificial leg (prosthesis) (DS2005, xaxaiii)
\[
\begin{align*}
& \text {... iquiisax }{ }^{\circ} \text { tazo xahxaii ha. }  \tag{44}\\
& \text { one's.spirit one somewhat.resembling DCL } \\
& \text { '... son como si fueran una persona.' } \\
& \text {... they are as if they were one person. (MA1 19:6) }
\end{align*}
\]

\subsection*{23.1.9 Xapi any}

The adjective xapi any is used only in a clause that is negative in some way, either the main verb or the deverbal noun that the adjective modifies. \({ }^{15}\) The noun that it modifies is always singular. Most commonly, the clause in which it occurs is part of a response to something that another person has said. Generally unstressed (which is unusual for an adjective), and enclitic, xapi is not a common word.
(45) Canoaa xapi zo htemaho ho.
boat any a 1SGS.Tr-Rl-N-see DCL
'No, no estoy mirando ninguna panga.'
No, I'm not watching any boat. (DS2005, xapi)
(46) Sooda xapi zo himasi ha.
soda.pop any a 1P-ON-N-drink DCL 'No he tomado ningún refresco.'
I haven't drunk any soda pop. (offered)

\footnotetext{
\({ }^{14}\) This word occurs in the NTT more than 500 times.
\({ }^{15}\) When it is used with a deverbal noun, one might think it is an adverb of some sort; but it is not used with finite verbs.
}
\begin{tabular}{llll} 
(47) & Tiix imoopis & \(\frac{\text { xapi }}{}\) ha. \\
DDS SN-N-UO-smoke & any & DCL \\
'No, no ha fumado.' & \\
& No, s/he has not smoked. & \\
& (DS2005, xapi)
\end{tabular}
(48) Himiim xapi ha.

1P-PON-N-sleep any DCL
' Ni siquiera he dormido.'
I haven't even slept. (Offered)

\subsection*{23.1.10 Zaac small}

The word zaac small is primarily (if not exclusively) found in compounds and lexicalized expressions such as inol zaac little finger, but see also mojepe zaac young sahuaro cactus (or, according to one consultant, a small but apparently full-grown sahuaro) and xtiip zaac young giant cockle. \({ }^{16}\)

\subsection*{23.1.10.1 Obsolete adjectives}

Several adjectives listed in the 2005 dictionary are obsolete or archaic and therefore little is known about how they were really used other than the attributive use that was sometimes documented in the dictionary. These include caaxöc belonging to someone else, cool small, mozaj dark-colored, poot medium-sized (used only to describe a mesquite tree), tepo in useless condition, and xcoctz old.

\subsection*{23.2 Adjectives as morphologically defective verbs}

Some adjectives might be best viewed as morphologically-defective stative verbs. These adjectives are listed in Table 23.2. The roots of these particular adjectives appear in verb paradigms where they are inflected for mood, negation, person, etc. Only one fact keeps them from being analyzed like the vast majority of stative predicates in the language: exactly where one expects a subject-oriented deverbal noun with the prefix \(\mathbf{c}\)-, for attributive or predicate adjectival use, these adjectives appear. In this regard compare a partial paradigm with the stative verb \(\sqrt{ }\) heel red with a partial paradigm with the stative verb \(\sqrt{ }\) heeque small, especially juvenile (and by extension, toy) (plural, \(\sqrt{ }\) heecto).
\begin{tabular}{lrr} 
Distal Realis & yo-heel & yo-heeque \\
Dependent Irrealis & po-heel & \begin{tabular}{r} 
po-heeque
\end{tabular} \\
Independent Irrealis & s-heel & s-heeque \\
Neutral Realis & t-heel & t-heeque \\
Subject Deverbal & c-heel & heeque
\end{tabular}

\footnotetext{
\({ }^{16}\) One consultant suggested that it means solitary and gave some examples where this would be true: haxz zaac solitary \(\operatorname{dog}\) (out of its usual place), etc. Other consultants did not confirm this.
}
\begin{tabular}{lll}
\hline & Table 23.2: Adjectives as morphologically defective verbs \\
& & Verb root \\
caii, queeej & mature & \(\sqrt{ }\) caii, \(\sqrt{ }\) queeej \\
cazojeecoj, cazojeecöl & unmarried and elderly & \(\sqrt{ }(\mathrm{C})\) azojeecoj, \(\sqrt{ }\) (C)azojeecöl \\
heeque, heecto & small (commonly juvenile) & \(\sqrt{ }\) heeque, \(\sqrt{ }\) heecto \\
hiitiscal & arrogant & \(V_{\text {hiitiscal }}\) \\
pootsi & stunted & \(V_{\text {pootsi }}\) \\
roocö & crazy & \(V_{\text {roocö }}\) \\
\hline
\end{tabular}

For that reason, it is possible to suggest that a word like heeque small, juvenile (plural heecto) is actually the deverbal noun that corresponds to SN -juvenile and blocks the regular conjugated form *c-heeque.
(50)
¿Heeque -ya? ¿Caii -ya? juvenile QM mature QM
¿¿Es juvenil? ¿Es grande?’ Is it young? Is it grown? (offered)
trooquij heecto
vehicle-PL juvenile-PL
'camioncitos (juguetes)'
toy trucks (DS2005, heeque)

Three other adjectives behave in the same way in that they simply replace the regularlyconjugated subject-oriented deverbal forms of the related predicate: hiitiscal proud, arrogant, haughty, pootsi stunted, \({ }^{17}\) and roocö crazy. \({ }^{18}\)
(52) Ctam roocö zo yoofp.
man crazy a Dt-arrive
'Un hombre loco llegó.'
A crazy man arrived. (DS2005, roocö)


The following example illustrates the verb with which this adjective is associated.

\footnotetext{
\({ }^{17}\) This word is apparently a loanword from a Uto-Aztecan language, as documented in the 2005 dictionary. This fact suggests that in at least this case the process is one of verbalization of an adjective rather than a complication of the morphology.
\({ }^{18}\) The root \(\sqrt{ }\) roocö does have the c- prefix in the usage iiqui croocö addicted to as in (i).
(i) Hamaax \({ }^{\circ}\) quih iiqui croocö iha. alcohol the.FL 3P-toward SN-crazy DCL
'Es un alcohólico.' / S/he is an alcoholic. (Offered) RRRecording
}
(54) ¡Xoroocöxam!

Em-crazy-Pl
‘¿Están locos!’
They are crazy!

\subsection*{23.2.1 Details on specific adjectives}

\subsection*{23.2.1.1 Caii mature, grown up}

The predicate \(\sqrt{ }\) caii mature, grown up (used to describe people) and its suppletive plural root \(\checkmark\) queeej are very commonly attested in their inflected verb forms, as in (55). \({ }^{19}\)
a. ¡Xocaii!
b. ¿Xoqueeej!
Em-mature
‘¡Ha crecido!’
S/he has grown up!

Em-mature.PL
‘¡Han crecido!’
They have grown up!

The (morphologically defective) subject-oriented deverbal forms caii and queeej are used in some fairly fixed expressions such as cmiique caii (person mature) adult and comcaac queeej (people mature.PL) adults. They are also used in less-fixed expressions and may function as fused heads.
(56) [ Caii ] quij yihiimet. mature the.См Dт-married
'El mayor se casó.'
The older one got married.
The regularly-conjugated forms ccaii (SN-mature) and cqueeej (SN-mature.PL) are found in a few expressions also, however, such as ctam cmaa ccaii (male now SN-mature) young man (plural: ctamcö cmaa cqueeej, man-PL now \(\mathrm{SN}-\mathrm{mature} . \mathrm{PL}_{\mathrm{L}}\) ) and zacaam cmaapa ccaii (young.woman right.now SN-mature) adolescent girl.

\subsection*{23.2.1.2 Cazojeecoj unmarried and elderly}

The adjective cazojeecoj unmarried and elderly (plural: cazojeecöl) is a compound adjective presumably based historically on the regular verb \(\sqrt{ }\) azoj alone and the compounding root \(\sqrt{ }\) eecoj, which indicates large size ( \(c f\). Vaacoj large). The corresponding verbal root was documented in earlier work (including the 2005 dictionary) as being \(\sqrt{ }\) Cazojeecoj, which means that it conjugates like the verb ccazoj, which occurs in expressions like full of holes. (See \(\S 27.5\) for the conjugation pattern of C - empty consonant - verbs.) At least some speakers, however, use

\footnotetext{
\({ }^{19}\) The noun comcaii old woman (plural comqueej) is obviously etymologically derived from cmaam caii woman mature.
}
the expected stem \(\sqrt{ }\) azojeecoj. \({ }^{20}\)
(57) ctam cazojeecoj
man unmarried.and.elderly 'solterón'
elderly bachelor
(58) ¿Ttazojeecoj? / ¿Tazojeecoj?

RL-unmarried.and.elderly
‘¿Es soltero/a de mayor edad?’
Is s/he unmarried and elderly?

\footnotetext{
\({ }^{20}\) René Montaño Herrera uses the regular conjugation, for example.
}

\section*{24. Adverbs}

The class of adverbs is relatively small although interesting in many ways. Moreover, there is no regular word formation process to create more words of this class, although adverbs combine in some creative ways to give a variety of expressions, some of which must be listed in the lexicon due to their semantic idiosyncrasies. A few adverbs have obviously developed from a fusion of a noun and postposition, as discussed below (§24.3.2).

Some determiner phrases are used in ways reminiscent of adverbs. One is the phrase iisax quihiih quih (extreme degree, 3P-? SN-remain.behind the.FL) (which occurs as an oblique/ indirect object, determining indirect object morphology (§17.1.2.4) on the verb of the clause (see §2.4.13). This phrase is rendered extremely in free translation.
(1) \({ }^{\circ}\) Iisax quihiih quih \({ }^{\circ}\) cötaacoj ma \(\mathbf{x}\), ... extreme.degree 3IO-RL-big DS UT
'Se vuelve extremadamente grande, ...'
It gets extremely big, ... (Mt 13:32) RMH_11-28p-07_193
(2) Cocsar ctam zo toc cötiij, oiisax quihiih quih \({ }^{\circ} \underline{\text { cöxaacoj. }}\) non-Indian man a there 3IO-RL-sit extreme.degree 3IO-Em-big 'Un hombre mexicano no indígena que estaba allí es mucho más grande.' A non-Indian Mexican man who was there is much bigger. RMH_11-28p-07_194
\begin{tabular}{lll}
\({ }^{\circ}\) Iisax quihiih caha \\
extreme.degree & & consaziim \\
3IO-2SGS-Ir.ID-pretty & aha. \\
\end{tabular}
'Vas a estar muy bonita.'
You are going to be very pretty. RмH_-11-28p-07_195
Another nominal phrase with an adverbial use is the invariant phrase mos itacl \(\mathbf{0 0}\) (also 3Psurface DL) once again. This phrase also determines third person indirect/oblique object inflection on the verb.
(4) \({ }^{\circ}\) Mositacl \(\mathbf{o o}^{\circ}\) ziix zo cöiyoohit. once.again thing a 3IO-3:3-DT-eat
'Una vez más comió algo.' / 'Volvió a comer algo.'
Once again s/he ate something. RMH_11-28p-07_196
(5) He cmaax \({ }^{\circ} \underline{\text { mos itacl } 00^{\circ}}\) ziix zo cösiihit caha.

1Pro now once.again thing a 3IO-Ir.ID-eat Aux.SN-DCL
'Una vez más comeré algo.'
Once again I will eat something. RMH_11-28p-07_197
A noun that is used adverbially is quipac (US-3P-back), literally one's back; it also determines third person oblique/indirect object inflection. Occurring primarily with scalar stative
predicates, it indicates the greatest degree that the predicate can have (i.e., a superlative).
(6)
\begin{tabular}{lll} 
Tiix quipac & \multicolumn{1}{c}{ cösmiipe } & caha. \\
DDS most & 3IO-Ir.ID-N-good & AUX.SN-DCL \\
'Será el peor.' & \\
That one will be the worst. RMH_08-24-07_66a
\end{tabular}
(7) Coocj coi quipac cöcaaixaj zo haa piij ta ... SN-two the.Pl US-3P-back 3IO-SN-strong a/one there Ir.Dp-sit DS 'Cuál de los dos es el más fuerte ...'
Which of the two is the strongest ... (Viento_Norte_2)
See also: quipac cöquiipe (US-3P-back 3IO-SN-good) the best, quipac cocheel the reddest (US-3P-back 3IO-SN-red), quipac cocxatcaj (US-3P-back 3IO-SN-thin) the thinnest, quipac coha (US-3P-back 3IO-SN-be Irreg ) the highest ranking, quipac iiha cöcapii \({ }^{\circ}\) the fattest, quipac cöcatxo (US-3P-back 3IO-SN-many) the most numerous, quipac panaal cöcapii the most honey-flavored (US-3P-back honey 3IO-SN-taste.like). The expression panaal cöcapii honey-flavored (see §2.5) already has a predicate inflected for 3IO. The inclusion of quipac does not result in an extra occurrence of 3IO. There is no stacking of the inflectional morphology.

This noun is used in the form ipac in the following example in which it does not indicate a superlative.
... haapa cap iixaj quih ipac cöimaai. northwest.wind the.Vt 3P-PON-strong the.Fl 3P-back 3IO-3:3-Px-make
'... el Viento Norte lo hizo con toda su fuerza'
... the North Wind did it with all of his strength. (viento_Norte_6)
The adverbs are discussed in several major groups (although there is some overlap): DPinitial and NP-initial adverbs (§24.1), DP-final and NP-final adverbs (§24.2), VP-initial adverbs (§24.3), VP-final adverbs (§24.4), sentential adverbs (§24.5), and adverbs that modify adverbs (§24.6).

\subsection*{24.1 DP-initial and NP-initial adverbs}

An adverb may precede and modify a nominal phrase. It appears, however, that one adverb actually modifies the DP while two adverbs modify the NP. The reason for claiming a difference is that these adverbs typically co-occur with a delimiting (closing) adverb that indicates the scope of the adverb. The differences are illustrated in Figures 24.1-2. It is also possible that the structure of these phrases is flatter than shown in these figures. Clear evidence to decide this matter has not been found.

\subsection*{24.1.1 Delimiting modifier hanso (DP)}

The adverb hanso just (sometimes hans before a vowel), which most commonly occurs before a verb (see §24.3), may occur at the beginning of a DP to indicate just, nothing more than. The delimiting adverb \(\mathbf{0 0}\) (see §24.2.8) often follows the DP when the adverb hanso is used.
(9) [ Hanso hehe \(z \quad\) oo ] cohpooh, ihsiicö aha. just stick a DL 3IO-1SGS.Tr-Ir.Dp-do 1SGS.Tr-Ir.Id-kill Aux-Dcl
'Lo mataré CON NADA MÁS QUE UN PALO.'
I will kill it with JUST A CLUB. (DS2005, hanso) RMH_08-24-07_12
(10) [ Hanso hizaax oo ] cöhapacta.
just DPP DL 3IO-IM-cause.be.in.appearance
'Haz Sólo esto.'
Do JUST THIS. (Mt 5:39) RMH_08-24-07_13
(11) [ Hanso ziix tazo ] cahcaail iha, ... just thing one SN-remain/lacking DCL
'Sólo falta UNA COSA, ...'
ONLY ONE THING is lacking, ... (Mk 10:21) RMH_08-24-07_14
(12) i[ Hanso tom me ihaaipot quih] hexl!
just money 2IO 3P-PON-pay the.FL Im-take
'Toma SÓLO TU PAGO.'
Take JUST YOUR PAY! (Mt 20:14) RMH_08-24-07_18
(13) \(\ldots\) [ hanso \({ }^{\circ}\) ziix ccam \({ }^{\circ}\) quij itaasi hac oo ] itaaj iiha, ... just animal the.Cm 3P-name the.Lc DL 3:3-Rl-know-Pl only
'.. la saben solamente como el nombre del animal, ...'
... they only know it as the animal's name, ... (siete_filos11b)
(14) [ Hans itáaasi hac oo ] cöimiih. just 3P-name the.LC DL 3IO-3:3-Px-say
'Le llama por su propio nombre.'
S/he calls it by its own name. (Enciclo_xpacaaf.007) RMH_11-288-07_198

\subsection*{24.1.2 Despecifying modifier hax (NP)}

The word hax is an intensifier before verbs (see §24.3.1.1) and it may have that meaning in a few cases when it precedes a DP such as the demonstrative pronoun in (15).
(15) \(\cdots\) hax tiix áa haa ha. IntNs DDS real SN.EQ DCL
'... sin duda es él.'
... that's him without a doubt. (Jn 6:14) RMH_08-24-07_16
Most commonly, however, when it occurs with a nominal (generally indefinite), it is best
understood as a despecifying adverb, translated here as just any. The adverb makes it clear that no specific referent is intended. Evidently this adverb modifies the NP complement of the DP in that it very commonly co-occurs with either the delimiting adverb xah (§24.2.12) or the delimiting adverb \(\mathbf{0 0}\) (§24.2.8) appearing before the indefinite article. \({ }^{1}\) A proposal for the structure of the DP in (18) is given in Figure 24.3. \({ }^{2}\)

‘\(¡\) Trae cualquier olla!’
Bring just any pan! RMH_08-24-07_19
(17) \(\quad i\left[\left[\underline{\text { Hax haxölinaail }}{ }^{\circ}\right.\right.\) cooxp xah \(]\) zo ] camjc! just mollusk SN-white DL a Im-bring
' \(\quad\) Trae cualquier molusca blanca!’
Bring just any white mollusk! RMH_08-24-07_20
(18) \(\quad i[[\underline{\text { Hax }}\) Juan quih itaamt \(\underline{\text { xah }}]\) zo \(]\) camjc! just the.FL 3P-sandal(s) DL a Im-bring
‘Trae cualquier zapato de Juan!’
Bring just any of John's shoes! RmH_08-24-07_21
(19)
[ [ \(\underline{\text { Hax }}\) hant xah ] zo ] hasoziit aha. just place Dl a 1PLS-Ir.Id-go.to.Pl Aux-DCL
'Vamos a cualquiera de esos lugares.'
We are going to any one of those places. (DS2005, hax) RMH_08-24-07_22


\footnotetext{
\({ }^{1}\) The word xah is homophonous with the coordinator and (§25.1). It has unusual syntactic characteristics and these make it unsuitable for deciding its true position. Examples like (20) with \(\mathbf{0 0}\) are therefore very important.
}
(20) [ [ Hax cmiique ctam oo \(]\) zo ] haquix piih ta, ... just person/Seri man DL a somewhere Ir.Dp-be.Fl DS
'Si cualquier hombre seri está en algún lugar, ...'
If any Seri man is somewhere, ... RMH_08-24-07_23
[ [ Hax ziic xah ] zo ] miiho isax, \({ }^{3}\)... just bird Dl a 2P-PON-see Cncsv
‘Cualquier ave que ves, ...'
Whatever bird you see, ... RmH_11-28p-07_199
(22) [[ Hax trooqui oo ] zo miiho isax, áno hiij. just vehicle DL a 2P-PON-see CnCsv 3P.in Im-sit
' Cualquier carro que ves, súbete en él.'
Just get in whatever car you see. RMH_11-288-07_200
The example in (23) is unusual in that there is no indefinite article, and the example in (24) is unusual in that the noun phrase is definite although nonspecific in interpretation.

(24) [ [ Hax ctam xah cah(a) \(]\) ] seehe cöocoaa ha. just man DL the.Fl-Foc to.be/do.(it) 3IO-3P-ON-know DCL
'Cualquier hombre lo puede ser/hacer.'
Any man can do/be it. RMH_08-24-07_25

\subsection*{24.1.3 Hipimax even (NP)}

The adverb hipimax (or its dialectal variant hapimax) occurs at the beginning of an NP that is morphologically indefinite and singular; the DP has the article zo. But this morphological indefiniteness may be due to the presence of the negative verb rather than semantic indefiniteness (see §21.1.8). \({ }^{4}\) This adverb also simultaneously requires the NP-final intensifying adverb ipi before the indefinite determiner (see §24.2.11).

\footnotetext{
\({ }^{2}\) The structure shown there proposes that the adverb is adjoined to the DP, although arguments in favor of this structure over a flatter structure have not been found.
\({ }^{3}\) The concessive meaning of the subordinator here is not salient. The person may be going out with the explicit purpose of finding a bird.
\({ }^{4}\) This is especially evident in the case of (28) below where the adverb hipimax occurs at the beginning of the DP, and the adverb ipi follows the focal pronoun and is in turn followed by the indefinite article because of the negation.
}
(25)
\(\begin{array}{lllllll}\text { Iitxo } & \text { cah } & \text { [ } \begin{array}{lllll}\underline{\text { hipimax }} \text { hant } & \text { iti } & \text { isoii } & \text { ipi }] & \text { zo }] \\ \text { 3P-PON-many } & \text { the.FL-FOC } & \text { place } & \text { 3P-on } & 3 P-I r . I D-s t a n d . P L ~\end{array} & \text { INTNS a }\end{array}\)
toc cöyomahca.
there 3IO-Dt-N-located
'Había tantos de ellos que no había donde podrían estar parados.' RмH_ \(\mathbf{0 8 - 2 4 - 0 7} \_26\)
There were so many of them that there wasn't even a place for them to stand. (mk2:2)
[ [ Hipimax ziix mozáxö xah ipi ] zo ] htcmaa ho. even thing 2P-ON-discuss DL Intws a 1SGS.Tr-Rl-N-know Dcl 'No say de qué estás hablando.'
I don't know what you're talking about. (LL 22:60) RMH_08-24-07_27
[ [ Hipimax isoj isaai ipi ] z] itcmaa ho. even 3P-self 3:3-Ir.Id-make Intns a 3:3-Rl-N-know Dcl
'No sabía qué hacer.'
S/he just didn't know what to do. RMH_08-24-07_28

'... el hombre llamado Jesús — de donde viene, hasta eso no sabemos.' RMH_08-24-07_29 ...the man named Jesus - where he comes from, even that we don't know. (Jn9:29)

Figure 24.3: Diagram of the DP in example (18)


\subsection*{24.2 DP-final and NP-final adverbs}

Some adverbs follow the DP and some follow the NP, as shown in Figure 24.1-2. Evidently more than one such adverb of the same category may occur. Some of the combinations attested include:
(29) \begin{tabular}{rllll} 
Combination & Example & Combination & Example \\
& hapi/hipi oo & \((30)\) & ah oo & \((87)\) \\
& hapi/hipi mos & \((31)\) & max íiqui & (97) \\
& hapi/hipi xah & \((42)\) & oo xox mos & (130)
\end{tabular}

\subsection*{24.2.1 Intensifier hapi (DP)}

The intensifier hapi (or its somewhat less common dialectal variant hipi) \({ }^{5}\) commonly modifies a DP, including an overt pronoun or a non-overt pronoun. Many of the examples show it with an agentive subject although some examples show it with non-agentive subjects.
\begin{tabular}{lllll}
{\(\left[\begin{array}{llll}\text { He } & \text { hipi } & \text { oo }\end{array}\right]\)} & ma htah & \\
1PRO & InTNS & DL
\end{tabular} 2SGDO 1SGS.Tr-RL-do \(\quad\) DS
ma, ...
DS
'Yo mismo te hice, ...'
I MYSELF caused you, ... (Ac 13:47) RMH_08-24.07_32b
(31) [ He hapi mos] siitax caha.

1Pro Intns also Ir.Id-go Aux.SN-Dcl
'Yo iré también.'
I MYSELF will go also. RMH_08-24-07_32c
(32) [ He hapi ] hpanaaaij, ...

1Pro Intns 1SgS.In-Ir.Dp-return
'Yo regresaré, ...'
I MYSELF will return .... RMH_08-24-07_33c
(33) [ He hapi ] hpteejim ... 1Pro Intns 1SGS.In-Rl-old 'Yo soy viejo, ...'
I am old ... RMH_08-24-07_35a
(34) [ Me hipi ] ziix zo cöhaaitoj. 2Pro Intns thing a 3IO-Im-cause.eat-Pl
'Denles USTEDES de comer.'
YOU give them something to eat! (MN 14:16) RMH_08-24-07_32a
(35) [ Me hapi ] pyeest quij contmisat
aha.
2Pro Intns fiesta the.Cm 3IO-Aw-2SgS-Ir.Id-move-Pl Aux-Dcl
'Ustedes deben ir a la fiesta.'
YOU (pl.) should go to the fiesta. RMH_08-24-07_32e

\footnotetext{
\({ }^{5}\) The distribution of the variants has not been studied. It is not clear whether it is a generational difference or perhaps a carry-over from previous geodialectal differences.
}
(36) [ Tiix hapi] siitax caha. DDS Intns Ir.Id-go Aux.SN-Dcl 'ÉSE irá.'
THAT ONE will go. RMH_08-24-07_32d
(37) [ Taax hipi ] he cocaaaxoj iha. DDP Intns 1 IO SN-follow-PL DcL
'Ellos me siguen.'
THEY follow me. (Jn 10:27) RMH_08-24-07_30
(38) [ María quij hapi ] taaitom, ...
the.Cm Intns Rl-speak
'MARÍA habló, ...'
MARÍA spoke, .... RMH_08-24-07_33a
(39) [Santaar coi hipi ] itíyala, yoque. soldier the.Pl Intns 3:3-RL-defend-Pl Dt-US-say
'Los soldados mismos la defendieron.'
The soldiers THEMSELVES defended her. (Apostador_403) RMH_08-24.07_31
(40) [ \({ }^{\circ}\) Xiica quiti cooyaj \({ }^{\circ}\) tacoi hipi ] poozcam, authorities Md-Pl IntNS Ir.Dp-arrive.PL
'Las AUTORIDADES vendrán, ...'
The AUTHORITIES will come, ... (Ac 16:37) RMH__08-24-07_33b
(41) [ Hateeya com hapi ] hant cahjiit iha. bottle the.Hz Intns land SN-fall Dcl
'La botella se cayó (sin que nadie le empujara).'
The bottle fell (without anyone pushing it). RMH_08-24-07_35b
(42) [ Cmaam hipcop hipi xah ] ziix comsisiin iha xo .... woman Px-Vt Intns Dl thing SN-pitiable Dcl but
'Esta mujer es pobre pero, ....'
This woman is poor but .... (Mk 12:44) RMH_08-24-07_35e
A nominal phrase may consist solely of hapi; it is assumed here that this is a case of a fused head (see \(\S 4.3\) ). As a result of the common word order with the verb in clause-final position), this means that very often the word hapi ends up in preverbal position, which in turn makes it look like a preverbal adverb although of course it is not always in that position. \({ }^{6}\)

\footnotetext{
\({ }^{6}\) In fact, M. Moser \& Marlett (2005) mistakenly list it as such.
}
(43) [Santaar coi hipi ] itíyala, cmaax [hipi] itoonec, ... soldier the.Pl Intns 3:3-Rl-defend-Pl now InTNS 3:3-RL-carry-PL
'Los SOLDADOS mISMOS los defendieron, entonces ELLOS MISMOS los llevaron, ...'
The SOLDIERS THEMSELVES defended them, then THEY THEMSELVES took them, ...
(Apostador_403-404) RMH_08-24-07_34a
(44) ..., [ hax hipi ] itahit, ... Intns Intns 3:3-RL-eat
‘..., ÉL MISMO lo comió, ...’
..., he ate it HIMSELF, ... (Hombre_Baril_30) RMH_08-24-07_34b
(45) Hizcoi, taax [ hipi ] hsiihit aha.

Px-Pl DDP Intns 1SGS.Tr-Ir.Id-eat Aux-DCL
'Comeré estos yo mismo.'
I will eat THESE MYSELF. (Gigante_Comelon_167) RMH_05-20-08_63
(46) ..., [ hipi ] hant com iti tiij, tsiijim \(x\), ... Intns land the.Hz 3P-on Rl-sit Rl-move Ut
‘ ..., podía moverse en el suelo por sí, ...'
..., s/he could move about on the ground by himself, ... (Gigante_Comelon_100) RMH_08-24-07_34c
[ Hapi ] \({ }^{\circ}\) hacx cmiih \({ }^{\circ}\) iha. Intns dead DCL
'Se murió (sin enfermedad, sin violencia).'
S/he died (without sickness, without violence). RMH__8-24-07_35c
(48) [ Hipi ] sooxp ta cooxp iha.

Intns Ir.ID-white Aux.RL SN-white DcL
'Desde que ha existido ha sido blanco.'
It's always been white. RMH_08-24-07_35d
Attempts to obtain examples with passive subjects modified with hapi were unsuccessful.
```

* i[ Hapi ] ntpazt?
IntNS 2SGS-Rl-Pv-tattoo
('¿Fuiste tatuado?')
(Were you tattooed?)

```
* \(\dot{\text { i [ Hapi }}\) ] ntahnip?
        IntNS 2SGS-RL-Pv-hit
    ('¿Fuiste pegado?')
    (Were you hit?)

The intensifier may modify a direct object (overt or non-overt) as in the following examples.
... [ he hipi ] hizi cmis iha.
1Pro Intns 1PlDO SN-Tr-resemble Dcl
'.. nos parecen A NOSOTROS.'
...they resemble US. (Ac 10:47) RMH_08-24-07_36
```

... [ he hipi ] him payoozxam x, ...
1Pro Intns 1SgDO Ir.Dp-worship.Pl Ut
`... me tendrán A Mí como su Dios...'
... they will have ME as their god... (He 8:10) RMH_08-24-07_38

```

The adverb hipi easily occurs with DPs that are possessors.
(53) [Juan hipi ] yaazi \({ }^{\circ}\) quih yoofp.

Intns his.child the.Fl Dt-arrive
'La hija / El hijo de Juan llegó.'
John's own child has arrived. RMH_08-24-07_39
[ hapi ] mito quij
Intns \(2 \mathrm{P}-\) eye the.Cm
'TU ojo'
YOUR Own eye RMH_08-24-07_40b
\(\left[\begin{array}{l}\text { hapi }\end{array}\right]\) ito quij
INTNS
'SU ojo'
HIS-eye the.CM
(56) [ hapi ] hyaazi \({ }^{\circ}\) quij Intns my.child the.Cm 'MI hijo' RMH_08-24-07_40d
¿[Me hapi ] mata -ya?
2Pro Intns 2P-mother QM
‘¿Es TU madre?’
MY OWN child (man speaking)
Is it YOUR mother? RMH_08-24-07_40a
(58) Juan quih \({ }^{\circ} h i z a \operatorname{tacs} x^{\circ}\), [ hipi ] yaazi \({ }^{\circ}\) cop iyoocta. the.FL looked.to.one.side Intns his.child the.VT 3:3-DT-look.at
'Juan miró a su lado y miró a su propio hijo.'
Juan looked to his side and looked at his (own) child. (DS2005, cacsx) RMH_08-24-07_40e
[ Hipi ] hyaa \({ }^{\circ}\) ha yax ihmexl. Intns mine Dcl since 1SGS.Tr-Px-take
'Como era mío, lo agarré.'
Since it was MINE, I took it. RMH_08-24-07_41a
(60) [ he hipi ] hiitom hac 1Pro Intns 1P-PON-speak the.LC
'lo que YO MISMO he dicho (mis propias palabras)'
what I MYSELF have said (my own words) RMH_08-24-07_41b
The construction with a pronoun, hipi and the noun for body/self is an important periphrastic expression to refer to a person (see \(\S 16.1 .3\) for more examples and discussion). See also the discussion of hipi in relation to the reflexive pronouns in \(\S 11.3\).
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline (61) & [ he & hipi ] & hisoj & hipquij & (62) & [ me & hipi ] & misolca & coi \\
\hline & 1 Pro & Intns & 1P-body & Рх-См & & 2Pro & Intns & 2P-body-PL & the.PL \\
\hline & 'yo mis & & & & & 'ustede & s mism & & \\
\hline & I myself & RMH_08-24 & 07_42a & & & you yo & urselves & RMH_08-24-07_42b & \\
\hline
\end{tabular}

The word hipi is quite commonly used in clauses with the compound postposition ptiiqui
toward each other.


\subsection*{24.2.2 Focus ah / ha (DP)}

The focus adverb has two major allomorphs; it is ha after personal pronouns (§16.1).
(64) [Me ha ] ntahtxima, xah nyoomoz.

2Pro Foc 2SGS-Rl-rich - 2SGS-Dt-think
'Tú te crees rico/a.'
YOU just think you're rich. (offered) RMH_08-24-07_42e
(65) [ He ha ] hpmahiti.

1Pro Foc 1SgS.In-Px=begin
'Soy yo quien empezó.'
I was the one who began. (DS2005 cahiti) RMH_08-24-07_42f
(66) \([\mathrm{Ee}\) ha \(]{ }^{\circ}\) quipac cota \({ }^{\circ}\) xah yoomoz. 3Pro Foc s/he.is.superior - Dt-think
'Él/ella se cree mejor que ellos.'
S/HE thinks s/he's better than they. (Offered) RMH_08-24-07_43a
(67) [ Me ha ] ma hnzaxö.

2Pro Foc 2SGDO 1SGS.Tr-Px-discuss
'Estoy hablando A TI.'
I'm talking to YOU. RMH_11-88p-07_201
It has the allomorph ah elsewhere, including after the demonstrative pronouns (§16.2). \({ }^{7}\)
(68) Hoocta, [tiix ah ] ma macoene. Im-look.at DDS FOC 2SGDO PX-curse 'Mira, ÉSE/ÉSA te maldijo.'
Look, THAT ONE has put a curse on you. (DS2005, cacoéne) RMH_08-24-07_43b
```

...,[ taax ah}] pac toc cömomat,...
DDP FOC some there 3IO-TwD-PX-move-PL
`..., algunas de ÉSAS venían, ...
..., some of THOSE [giant women] were coming, ... (Dos_Hermanos_36)

```

\footnotetext{
\({ }^{7}\) One consultant for this grammar generally uses aha instead of \(\mathbf{a h}\).
}
(70) [ Taax ah ] aa itáh ma, ... DDP FOC - 3:3-RL-do DS
'Por ESA RAZÓN, ...'
For THAT REASON, ... RMH_08-24-07_43d
[ Tiix ah ] hap \(z\) imiicö.
DDS Foc mule.deer a 3:3-Px-kill
'ÉSE/ÉSA mató un venado bura.'
S/HE killed a deer. RMH_08-24-07_44e
(72) [ \({ }^{\circ}\) Ziix coqueht hanípatim \({ }^{\circ}\), tiix ah ] hamacaalam. volleyball DDS Foc 1PLS-Px-play.with
'Jugamos VÓLIBOL.'
We played VOLLEYBALL. RMH_08-24-07_449
(73) Hap com tooxi ma \(x\),
mule.deer the.Hz RL-die DS UT

'Cuando se mata un venado bura, la persona llamada "ano caafajquim" toma los los pulmones y el corazón.'
When a mule deer is killed, the person who is called "ano caafajquim" takes the lungs and heart. (DS2005, caafc) RMH_08-24-07_43e

The focus adverb is ah after DPs that are always definite and have overt determiners demonstrative adjectives or (more commonly) definite articles.
[ Hahoot hac ah ] contita, cömiizquim.
Abs-entrance the.Lc Foc 3IO-Aw-Rl-move 3IO-Px-enter
'Entró POR LA PUERTA.'
S/he entered BY THE DOOR. (DS2005, ah) RMH_08-24-07_43c
(75) He [hásalca coi ah ] cohpmitalhaa iiha.

1Pro flat.basket-Pl the-Pl Foc 3IO-1SGS.In-Px-buy/sell only
'Vendí sólo LAS CORITAS.'
I sold only THE FLAT BASKETS. (DS2005, ah) RMH_08-24-07_44a
(76) [ Haat hacazlil coi ah ] hatxiin quij limberbush SN-Pv-chew.flat the.Pl Foc Abs-headring the.Cm ano moma.
3P.in Twd-Px-move
'Un CAYAHUAL se hace de torote que se ha machacado.'
A HEADRING is made from limberbush stems that have been flattened by chewing.
(DS2005, ah) RMH_08-24-07_44b
Comcaac xeele quih quisyoj quih [Tahejöc quij ah ] person/Seri.Pl fog the.Fl SN-Tr-drink-Pl the.Fl Tiburon.Island the.Cm Foc
iti moii.
3P-on Px-be.Fl.PL
'Los seris que tomaban el agua que trae la niebla vivían en la ISLA Tiburón.'
The Seris who drank the dew water lived on TIBURON ISLAND. (DS2005, xeele) RMH_08-24-07_44c
(78) Juan quih [hap cop ah ] imiicö.
the.FL mule.deer the.VT FOC 3:3-Px-kill
'Juan mató el VENADO BURA.'
Juan killed the MULE DEER. RMH_08-24-07_44d (contrastive focus)
(79) [ Haxöl Iihom (hac) ah ] ano miizcam.

Desemboque the.Lc Foc 3P.in Px-arrive.PL
'Llegaron a Desemboque.'
They arrived to DESEMBOQUE. RMH_08-24-07_44f (contrastive focus)
(80) [Xepe com itacl tintica ah ] iti miihtolca. \({ }^{8}\) sea the.Hz 3P-surface Md-Aw Foc 3P-on Px-be.Fl-Pl-ImpF
'Se sientan en la SUPERFICIE del mar.'
They sit on the SURFACE of the sea. (DS2005, ah) RMH_08-24-07_44h
(81) [ Pablo cop ah ] iitom mac toox itahiyat ma Paul the.VT FOC 3P-PON-speak the.LC far 3:3-RL-make.extend DS
'Pablo habló por largo tiempo, ...'
PAUL made his talk go on for a long time, ... (Ac 20:9) RMH_08-24-07_45a
... [itaamalca tiquij ah ] hehe cop \({ }^{\circ}\) ano cöitqueetij \({ }^{\circ}\) ma \(x\), ... 3P-antler(s) Md-Cm Foc plant the.Vt it.pulled.it.aside DS UT
‘... el arbusto jaló a ESOS CUERNOS a un lado, ...'
... the bush pulled THOSE HORNS to one side, ... (Conejos_Cuermos 05)
The definite article quih (§21.2) fuses with ah to give the contracted form cah.
```

Juan cah yoofp.
the.Fl-Foc Dт-arrive
'Llegó Juan.'
JUAN arrived. RMH_08-24-07_45d

```

\footnotetext{
\({ }^{8}\) The sequence tintica ah in (242) comes out as only three syllables: [tintika ? ].
}
(84) Xiica hizcoi-loomz cah tihiiha ma, imiimlajc. thing.Pl Px-Pl baby.mussel the.Fl-Foc Rl-pure DS 3:3-Px-bring-Pl
'Estas personas han traído pura CRÍA DE MEJILLONES.'
These people have brought just BABY MUSSELS. (EZ2007, loomz 05)
\begin{tabular}{|c|c|c|c|c|}
\hline \({ }^{\circ}\) Ziix quiisax \({ }^{\circ}\) & coox & \(\underline{\text { cah }}\) & iitax & \multirow[t]{2}{*}{isax, ...} \\
\hline person all & the.FL-Foc & 3P-PON-go & CNCSV & \\
\hline 'Aunque cada p & ersona vaya, & & & \\
\hline Although ever & erson may & O, .... RMH_10-1 & -67_14 & \\
\hline
\end{tabular}

This adverb is sometimes followed by the adverb \(\mathbf{0 0}\) (§24.2.8).
[ Taax \(\underline{\text { ah }} 00\) ] cötpacta max, ... DDP FOC DL 3IO-RL-be.in.appearance DS UT
'Por Eso, ...'
THAT's why, ... (ES2007, litro 05) RMH_08-24-07_45b
(87) Xazoj cop [ inooslca coi ah oo ] cöitáh \(\mathbf{~ x}\), ...
puma the.VT 3P-claw-Pl the.Pl FOC DL 3IO-3:3-Rl-do UT
'El puma lo hizo con SUS GARRAS, ...'
The puma did it with its CLAWS, ... (DS2005, inósj) RMH_08-24-07_45c
The focus adverb ha / ah is most commonly found in realis clauses. In irrealis clauses, the independent pronoun may be used to indicate emphasis. Compare the following examples.
```

a. Me ha Juan quih ma nzaxö.
2Pro Foc the.Fl 2SGDO Px-discuss
b. Juan quih me ha ma nzaxö.
the.Fl 2Pro Foc 2SGDO Px-discuss

```
'Juan te está hablando A TI.'
Juan is talking TO YOU. (a) RMH_10-16-07_16a (b) RMH_10-16-07_16b
a. He me maszaxö caha.
1 Pro 2Pro 2SgDO Ir.Id-discuss Aux.SN-Dcl
b. *Me ha he masxaxö caha. 2Pro Foc 1Pro 2SgDO Ir.Id-discuss Aux.SN-DCL
c. *Me ha ma hsxaxö
aha. 2Pro Foc 2SgDO 1SgS.Tr-Ir.Id-discuss AUx-DCL
'Te hablaré A TI.'
I will talk to YOU. (a) RMH_10-16-07_15
b. *Me ha Juan quih ma szaxö caha. [deverbal irrealis]

2SGDO Ir.ID-discuss Aux.SN-DCL
(Juan te hablará a ti.) (Juan will talk to you.)
This focus adverb may have an etymological as well as functional relationship with the construction used to question a nominal in focus. The form haa (glossed Aux) that appears in finite interrogative irrealis clauses (§20.2.1) is identical to the equative verb be (§10.3).
(91) ¿Caamiz quih haa -ya him miite? shirt the.Fl Aux QM 1SgDO 2SGS-Rl-give
‘¿Era LA CAMISA que me diste?'
Was it THE SHIRT that you gave me? (contrastive focus) \({ }^{9}\) RMH_10-16-07_17a
(92) ¿Luis quih haa -ya toos?
the.Fl Aux QM Rl-sing
'Era Luis que cantó?'
Was it LUIS who sang? (contrastive focus) \({ }^{10}\) RMH_10-16-07_17b
```

¿Me haa -ya ntahcazni?
2Pro Aux QM 2SgS-Rl-Pv-bite
``Fuiste TÚ que fue mordido?'
Was it YOU who was bitten? (contrastive focus) }\mp@subsup{}{}{11}\mathrm{ RMH_10-16-07_17c

```

\subsection*{24.2.3 Simple focus \(h\) (DP)}

A nominal that is interpreted as indefinite or nonspecific and which does not have an overt determiner may be followed by the adverb \(\mathbf{h}\). These nominals appear in situ in the clause. The adverb \(\mathbf{h}\), which has the allomorph ih after a consonant other than \(\mathbf{h}\), might be thought of as a portmanteau of an indefinite article (singular zo or plural pac) and the focus adverb ah (§24.2.2). Nevertheless, it is simply glossed Foc here.

\footnotetext{
\({ }^{9}\) The answer includes the focus adverb ah.
(i) Yohaa. Caamiz caha ma hiime.
yes shirt the.Fl-FOC 2SGDO 1SGS.Tr-PX-give
'Sí. Te di LA CAMISA.' / Yes, I gave you THE SHIRT. RRR
\({ }^{10}\) The answer might be:
(ii) Yohaa. Luis caha yas. yes the.FL-FOC DT-sing
'Sí. Era Luis que cantó.' / Yes, it was Luis who sang. RRR
\({ }^{11}\) The answer might be:
(iii) Yohaa. He ha hpmahcazni. yes 1PRO FOC 1SGS.In-PX-PV-bite
'Sí, fui yo quien era mordido.' / Yes, I was the one who was bit. RRR
}
(7) \(\quad\left[\right.\) Cocazni \(^{\circ} \quad\) h \(]\) hin yocazni.
rattlesnake Foc 1SGDO Dt-bite
'Me mordió una VÍBora de cascabel.'
A RATTLESNAKE bit me. (simple focus) RRR
(8) [Comcaac xahxaii hoox oo quizil ih ] hamiiht. person.Pl sort-of-like Intns Dl SN-small.Pl Foc 1PLS-PX-see-Pl
'Hemos encontrado algunas muy pequeñas seudo-personas, ...'
We have found some very little people-like things ... (Dos_Hermanos_78)
(9) [Eenim ih ] ititaamt, yoque.
metal FOC 3:3-RL-have-sandal(s) Dt-US-say
'Se dice que llevaba sandalias de metal.'
It is said that he wore metal sandals. (Apostador_31) RMH_08-24-07_54a
(10) Zixquisiil \({ }^{\circ}\) emaam cop [hateepen ih] imaazi.
child female the.VT basket Foc 3:3-Px-carry
'La muchacha está llevando una canasta.'
The girl has a (non-Indian-style) basket it in her hand. (HE 92) RMH_08-24-07_54b
(11) [Caaytaj quih coocj hax quiteexolcoj oo h] imiimlajc. horse-Pl the.Fl SN-two Intns SN-skinny-Pl Dl Foc 3:3-Px-bring-Pl
'Trajeron dos caballos flacos.'
They brought two skinny horses. RмH_05-20-08_64

\subsection*{24.2.4 Contrastive focus hi (DP)}

The focus adverb hi (with allomorph ihi following a consonant other than h) indicates contrastive focus.

\section*{(12)}
[Caaytaj ihi ] miizcam. horse-Pl Foc Px-arrive.PL
'Llegaron CABALLOS.'
HORSES arrived. (contrastive focus) \({ }^{12}\) RMH_ \(08-24-07 \_55\)
(13)
[Caay quih tazo hi] miifp. horse the.Fl one Foc Px-arrive
'Un caballo llegó.'
ONE horse arrived. RMH_05-20-08_65

\footnotetext{
\({ }^{12} \mathrm{An}\) attempt to use this focus adverb in a question was rejected.
}
(14) [Cocazni \({ }^{\circ}\) hi ] hin yocazni. rattlesnake FOC 1SGDO Dt-bite
'Me mordió una VÍBORA DE CASCABEL.' ('Era una víbora de cascabel que me mordió.) RMH_08-24-07_56 A RATTLESNAKE bit me. (It was a rattlesnake that bit me.) (To answer ¿Áz haxeheya ma tcazni? What bit you?)
(15) [Caaytaj quih coocj ihi] miizcam. \({ }^{13}\) horse-Pl the.Fl SN-two Foc Px-arrive.PL
'Llegaron DOS CABALLOS.'
TWO HORSES arrived. RMH_08-24-07_57a

\subsection*{24.2.5 Specifier íiqui (DP)}

The stressed adverb íiqui indicates the inclusion of the nominal in a particular set.
(94) [ Zaah quih íiqui] xoosim. sun the.Fl even Em-laugh
(95) [ Tiix íiqui ] z imiihit. DDS even a/one 3:3-Px-eat
'Hasta el sol rió.'
Even the sun laughed. вмн_08-24-07_46a
'Hasta él comió uno.'
Even s/he ate one. (Offered)
(96) [ Haxz cap \(\underline{\text { íqui }] z \quad \text { imiihit. }}\) dog the.Vт even a/one 3:3-Px-eat
'Hasta el perro comió uno.'
Even the dog ate one. (DS2005, iqui) RMH_08-24-07_46c
In the following example this adverb co-occurs with another DP-final adverb, max (§24.2.7).
(97) Maal quih taanpx ma,

2P-spouse the.Fl RL-go.home DS
[ iicto \({ }^{\circ}\) coi max íiqui] imiiht. her.children the.Pl even even 3:3-Px-see-PL
'Tu esposa regresó a su casa y hasta sus hijos la vieron.'
Your spouse went home, even her children saw her. хмн_04-11-07_10

\footnotetext{
\({ }^{13}\) Compare example this with the following:
(iv) Caaytaj quih coocj miizcam.
horse-PL the.FL SN-two Px-arrive.PL
‘iLlegaron dos caballos!’
Two horses arrived! (no emphasis on the number, but surprise at the arrival) RMH_08-24-07_57b
(v) * Caaytaj coocj miizcam.
(Llegaron dos caballos.) (Two horses arrived.)
}

\subsection*{24.2.6 Additive mos (DP)}

The adverb mos also may indicate an additive factor, although in some cases its meaning is a bit less clear.
(98) [ Tiix mos] temiiquet, toc cöquiihtim iha. DDS also Rl-be.person there 3IO-SN-be.Fl-ImpF DcL
'Ése también era persona, allí estaba.'
That one was also a person, there s/he was. (Hipocampo_8)
(99) [Hehe is quih cacat quih mos] imiihit.
plant 3P-seed the.FL SN-bitter the.FL also 3:3-PX-eat
'Come también semillas amargas.'
Another thing it eats is bitter seeds. (ES2007, acaam_ccaa 06)
(100) \({ }^{\circ}\) Ziix yacóso caaixaj \({ }^{\circ}\) emaam cop itoonec, [quisil cop mos ] donkey female the.Vt 3:3-RL-carry-PL SN-small the.Vt also
itoonec, Jesús quij cöimiimlajc.
3:3-RL-carry-PL the.CM 3IO-3:3-Px-bring-PL
'Llevaron la burra, llevaron también su cría, las trajeron a Jesús.' RмH_08-24-07_46d
They took the donkey, they took also its foal, they brought them to Jesus. (Mk 21:7)
(101) [ Hasahcapjö cop mos] iif com cöitníp x, imiisi. senita.cactus the.VT also 3P-nose the.Hz 3IO-3:3-Rl-hit UT 3:3-Px-drink
'Picotea el cacto senita con su pico y lo toma.'
It stabs the senita cactus with its beak and drinks it. (ES2007, acaam_ccaa 08)
When there is no overt nominal to follow, the adverb mos appears alone.
a. [Mos] toc cömoii. also there 3IO-Px-be.Fl.PL
b. * Toc mos cömoii.
'Ellos también estaban allí.'
They also were there. RмH_05-20-08_66

'También se va a perder.'
It is also going to be wasted. RRR
(104) a. [Mos] miizj \({ }^{\circ} \mathbf{i t i} \quad\) miistox \({ }^{\circ}\). also well 3P-on Px-have.life-PL
b. *Miizj mos iti miistox.
'Ellos también los hicieron con ganas.'
They also did it with gusto. RRR
\([\underline{\text { Mos }}] \underset{\text { Dт-rain }}{\text { yoopca. }} \quad \underset{\text { also }}{\text { Mos }}] \underset{\text { Px-hot.weather }}{\text { imcozim. }}\)
'También llovió. También hizo calor.'
It also rained. It was also hot. RMH_05-20-08_67
In addition, when mos occurs with an indefinite DP that has either the singular article zo or the plural article pac, it most commonly occurs before the word zo although examples obtained through direct elicitation of the order ... zo mos ... and ... pac mos ... were also judged grammatical.
(106) a. [Mojet mos zo ] Tahejöc quij iti tmiih iho. bighorn.sheep also a/one Tiburon.Island the.Cm 3P-on Rl-N-be.Fl DcL
b. [Mojet zo mos ] Tahejöc quij iti tmiih iho.
'Tampoco había borrego cimarrón en la isla Tiburón.'
There also weren't bighorn sheep on Tiburon Island. (a) (ES2007, Hapj_10) (b) RMH_11-28p-07_202
\begin{tabular}{lllll} 
Hant tintica & cömihaait & hac & \({ }^{\circ}\) ziix an iquitóm \({ }^{\circ}\) & zo \\
land & MD-AW & 3IO-2P-PON-pass.by.PL & the.LC & purse
\end{tabular}
mapomoonec, ... [ tom mos zo ] mapomoonec, 2SGS-Ir.Dp-N-carry.items-Pl money also a 2SGS-Ir.Dp-N-carry.items-PL

'No lleven nada para el camino: ni bolsa, ... ni dinero, ni ropa de repuesto.'
Take nothing with you for the trip: no purse, ... no money, not even an extra shirt.
(Lk 9:3) RMH_08-24-07_47
a. [Zixcám heecto mos pac] toc cömoii. fish small-Pl also some there 3IO-Px-be.Fl.PL
b. [Zixcám heecto pac mos ] toc cömoii.
'Había también unos cuantos pescaditos.'
There were also some small fish. (a) (Mk 8:7) RMH_08-24-07_49a (b) RMH_08-24-07_49b
\({ }^{\circ}\) Ox tpacta ma \({ }^{\circ}\), [ cmajiic mos pac ] toc cötoii, ...
then woman.Pl also some there 3IO-Rl-be.Fl.Pl
'Entonces también algunas mujeres estaban allí, ...'
Then some women also were there, ... (Mk 14:40) RMH_08-24-07_49c

\subsection*{24.2.7 Intensifying modifiers max and xox (DP)}

The adverb max even and its apparent but infrequent synonym xox may modify a DP. \({ }^{14}\) In example (97) above, the word max co-occurs with the adverb íiqui.
..., [taax max ] imaaj iha.

DDP even SN-Tr-N-know-Pl DCL
'... hasta ELLOS no lo saben.'
... even THEY don't know it. (Mt 24:36) RMH_08-24-07_49d
... xo [ he max ] himaa ha. but 1Pro even 1P-PON-N-know DCL
'... pero hasta YO no lo sé.'
... but even I don't know it. (Mt 24:36) RMH_08-24-07_49e
... [hoox cöiiha hizac max ] ... exactly 3IO-3P-PON-be Px-LC even
‘... hasta el día de hoy...'
... to this very day ... (Mt 27:8) RMH_08-24-07_49f
... [ hai xah hax caacoj xah com max itaaal? wind Crd water SN-big Crd the.Hz even 3:3-Rl-command ‘ \(¿ . .\). manda a hasta EL VIENTO Y EL LAGO?'
... he commands even THE WIND AND THE LAKE? (Lk 8:25) RMH_08-24-07_50a
[ \({ }^{\circ}\) Azl canl \({ }^{\circ}\) com max \(]\) taa oo cöhapacta ha. stars the.Hz even DDP DL 3IO-SN-be.in.appearance DCL
'Hasta LaS ESTRELLAS son así.'
Even THE STARS are like that. ( 1 Co 15:41) RMH_08-24-07_50b
[ Haxz cap max ] tootar coi iyoocotim, itamzo x. dog the.Vt even chicken the.Pl 3:3-Dt-kill-ImpF 3:3-RL-want UT 'Hasta el perro mató las gallinas si lo quería hacer.'
Even THE DOG killed chickens if it wanted to. (DS2005, max) RMH_08-24-07_50c
[ hast hizcoi max ] stone Px-Pl even
'hasta LAS PIEDRAS'
even THE STONES RMH_08-24-07_50d
(117) [ Ziicalc com xox ] bird-Pl the.Hz even 'hasta LOS PÁJAROS (en general)' even THE BIRDS (in general) RMH_11-288-07_203
[ Cocsar coi xox ] cöpiih oo ta, masiyoj
aha.
Mexican the.Pl even 3IO-Ir.Dp-be.Fl Dl DS 2PlS-Ir.Id-give.food Aux-DcL
'Deben repartir hasta a LOS MEXICANOS NO INDÍGENAS.'
You (pl.) should distribute even TO THE NON-INDIAN MEXICANS. (offered) RMH_08-24-07_50e

\footnotetext{
\({ }^{14}\) The 2005 dictionary missed including the adverb xox.
}
```

    [Comcaii hipcop xox] soos caha.
    woman Px-Vt even Ir.ID-sing Aux.SN-DCL
    'Hasta ESTA MUJER cantará.'
    Even THIS WOMAN will sing. RMH_08-24-07_50f
    ```

\subsection*{24.2.8 Delimiter 00 (NP and DP)}

The adverb oo may occur at the end of an NP or DP, often in conjunction with another, prenominal adverb (see §24.1.1 and §24.1.2), and seems to demarcate the DP or emphasize the DP a bit more strongly. The same adverb occurs after a verb (§24.4.4).
(120) \({ }^{\circ}\) Alo quicös \({ }^{\circ}\) com, tiix xepe quih cxatlc quih cmeque com, juvenile.mullet the.Hz DDS sea the.FL SN-thin-PL the.FL SN-warm the.Hz
\begin{tabular}{cllll}
{\(\left[\begin{array}{ll}\text { tiix }\end{array}\right.\)} & \(\mathbf{0 0}]\) & ano & calx & iha. \\
DDS & DL & 3P.in & SN-go-PL & DCL
\end{tabular}
'Los "alo quicös" andan en el mar cálido y poco profundo.'
"Alo quicös" go in the warm shallow water. (ES2007, alo quicös) RMH_08-24-07_50g
i[ Ihamoc tazo cap oo ] haa -ya?
3P-PON-be.night one the.VT DL SN.EQ QM
¿¿Era por una noche?’
Was it for one night? (Multitopic_11) RMH_08-24-07_51a
¿[Tiquij oo ] haaya? (123)
Md-Cm Dl Aux-QM
¿[Hant oo ] tap? land DL RL-stand
¿Es aquél?’
‘¿Viajó a pie?’
Is it that one? RMH_08-24-07_51b
Did s/he travel on foot? RMH_08-24-07_51e
(124) [ Zaah quih quipxa oo ] iti toofin ma ... sun/day the.FL SN-few DL 3P-on RL-? DS
'Pocos días después, ...'
Just a few days later, ... RmH_08-24-07_51c
(125) [ Hast oo ] quíh
stone DL SN-Tr-do
'El/la que trabaja con piedra, ...'
S/he who goes for (does) stone, ... RMH_08-24-07_51d
(126) [ Hant com oo ] iti moca ha. land the.Hz DL 3P-on Twd-SN-move Dcl
'Viene de la tierra.'
It comes from the earth. RMH_08-24-07_51f
(127) [ Haa oo ] yiij. there DL DT-sit
'Está allí.'
S/he's over there. RMH_08-24-07_51g
(128) [ He oо \(]\) ma hmiih.

1Pro Dl 2SGDO 1SgS.Tr-Px-do
'Te lo hice.'
I did it to you. RMH_08-24-07_51h

If the DP is right-dislocated, the adverb \(\mathbf{0 0}\) appears in sentence-final position, of course.
```

(129) ... icaaitom quih ihaaipot xah tintica, coox oo.
3P-PON-US-speak the.Fl 3P-PON-pay CrD Md-Aw all DL
'... y sus respuestas, todas.'
... and his replies, all of them. (Lk 2:47) RMH_11-28p-07_204

```

The following example documents the presence of three adverbs at the end of a DP.
(130) [Zixcám heecto tacoi of xox mos] ihsiihit aha.
fish juvenile-Pl Md-Pl Dl even also 1SGS.Tr-Ir.Dp-eat Aux-DCL
'Voy a comer también hasta los
I am also going to eat even the little fish. RMH_08-24-07_51i
See also the end of \(\S 16.3\) for the effect of this adverb following the pronoun coox all.

\subsection*{24.2.9 Adverb tax (DP)}

The meaning and function of the adverb tax is unclear. It occurs only when the verb or deverbal noun is followed by the adverb íi first (see §23.1.6), although the adverb íi does not require a nominal to be so marked in the clause.
[ Ctam ticop tax ] isiihit íi aha.
man Md-Vt - 3:3-Ir.Id-eat first Aux-Dcl
'Ese hombre será el primero a comerlo.'
That man will be the first one to eat it. (DS2005, tax) RMH_08-24-07_52a

'Fui el primero en llegar.'
I was the first to arrive. (DS2005, tax) RMH_08-24-07_-52b
\(\left[\begin{array}{lllll}\text { Sahmees } & \text { hipquij } & \underline{\text { tax }}] & \begin{array}{l}\text { ihpoohit }\end{array} & \underline{\text { íi, }} \\ \text { orange } & \text { Px-CM } & - & \text { 1SGS.Tr-Ir.DP-eat } & \text { first }\end{array}\right.\)
cmaax mos \({ }^{\circ}\) ziix is cooil \({ }^{\circ}\) quij mos ihsiihit aha. now also watermelon the.Cm also 1SgS.Tr-Ir.Id-eat Aux-Dcl
'Primero voy a comer esta naranja y luego voy a comer la sandía.' RMH_08-24-07_52c
First I'm going to eat this orange and then I'll eat the watermelon. (DS2005, tax)

'Aquél fue el primero en verlo.'
That one was the first one to see it. RMH_08-24-07_52d
(135) [ Iyas quih tax ] hayoiitoj íi. 3P-liver the.Fl - 1PlS-Dt-eat-Pl first
'Primero comimos su hígado.'
We ate its liver first. (Topete_104) RMH_05-20-08_68

\subsection*{24.2.10 Adverb haxehe (DP)}

The intensifying adverb haxehe commonly follows the interrogative pronouns áz what? and quíih who?.


\subsection*{24.2.11 Intensifier ipi (NP)}

The intensifier ipi is restricted to DPs in negative clauses. \({ }^{15}\) These particular DPs have no determiner; note that in none of the following examples is there a determiner before ipi. But the DP with ipi may be the complement of a partitive construction (§8.5) - see examples (141)(142) for the most obvious illustrations - and they themselves may be the head of a partitive construction - see examples (142) and (143) with the pronoun \(\mathbf{z o} / \mathbf{z}\) after the DP with ipi.

\footnotetext{
\({ }^{15}\) It is phonetically very similar to, if not indistinguishable from, the Intensifier hipi \(\sim\) hapi (§24.2.1) although it does not have a variant with the vowel a.
}
(139) [ Hap tazo ipi ] hyomaho. mule.deer one Intns 1 SGS.Tr-DT-N-see
'No vi ni un venado bura.'
I didn't see even ONE mule deer. (DS2005, ipi) RMH_08-24-07_53a
[ Tom quisil ipi] hyonyaa. money SN-small Intns 1SGS.Tr-Dt-N-own
'No tengo NADA de dinero.'
I don't have A BIT of money. (ALIM_89) RMH_08-24-07_53b
[ [ Xicaquiziil \({ }^{\circ}\) coi] quisil ipi] \({ }^{16}\) immoqueepe ha. children the.Pl SN-small Intns SN-N-sick DCL
'Ni UNO de los niños está enfermo.'
Not even ONE of the children is sick. (ALIM_170) RMH_08-24-07_53c
(142) ... xicacaziil \({ }^{\circ}\) cmaa quiih \({ }^{\circ}\) hizi quiinim hizcom [tazo ipi] zo ... children new 1PLDO SN-Tr-mix.with Px-Hz one IntNS a/one
‘... ni uno de los niños de nuestra generación ...'
... not even one of the children of our generation ... (ES2007, lamz_12) RRR
... hax cpaaisx, [ taax ipi ] \(z\) imasi ha. water SN-clean DDP INTNS a SN-TR-N-drink DCL
'.. no toma NADA de agua limpia.'
... it doesn't drink A BIT of clean water. (ES2007, acam_ccaa_ _09b)

\subsection*{24.2.12 xah (NP and DP)}

The adverb xah, which is an attenuator in other situations (§24.6.1), and which is homophonous with the coordinator xah (§25.1), occurs infrequently with a DP. Just like the coordinator xah, however, it has the unusual characteristic of occurring just to the left of the determiner. It does not have a clear translation.
```

[Zaah xah zo ] toc cötap, ...
sun/day - a there 3IO-RL-stand
'Un día, ...'
One day, ... RMH_-5-20-08_46

```
(145) [ Hant xah zo ] toc cötap ...
        land/year - a there 3IO-RL-stand
    'Un año, ...'
    One year, ... RMH_05-20-08_69

\footnotetext{
\({ }^{16}\) This is synonymous to [ xicacazíil \({ }^{\circ}\) coi tazo ipi ] .... (children the.PL one even).
}
(146) Ziix hipxahcop haa, poho - ox tee, yoque. thing Px--Vt SN.EQ Doubt thus Rl-say Dt-US-say '¿Tal vez es éste? - preguntó, se dice.'
"Might this be him/her/it?" s/he asked, it is said. (DS2005, poho) LHC_2-06-07_190
(147) [ Hast caacoj xah zo ] cfizo hi haa miip. rock SN-big - a SN-lift Foc there Px-stand
'Debe estar levantando una roca pesada.'
S/he must be lifting a heavy rock. (one hears him grunting) RMH_05-20-08_70
(148) [ Cxonala \(\underline{\text { xah }] ~ h a a ~ m o o m . ~}\)

SN-have.nightmare - there Px-lie
'Debe estar soñando con una pesadilla.'
S/he must be having a nightmare. (one hears the sounds) RMH_05-20-08_71
(149) [ Quiim xah ] haa moom.

SN-sleep - there Px-lie
'Debe estar durmiendo.'
S/he must be sleeping. RмH_05-20-08_72
(150) [ Zixcám xah zo ] quihit ih haa miij. fish - a SN-Tr-eat Foc there Px-sit
'Debe estar comiendo un pescado.'
S/he must be eating a fish. RmH_05-20-08_73
(151) [ Cmaam hipcop hipi xah ] ziix comsisiin iha xo .... woman Px-Vt Intns - thing SN-pitiable DCL but
'Esta mujer es pobre pero, ....'
This woman is poor but .... (Mk 12:44) RMH_08-24-07_35e
(152) [ Hapi xah] ziix comsisiin iha, cmaam hipcop. Intns - thing SN-pitiable Dcl woman Px-Vt
'Es una pobrecita, esta mujer'
She's just a poor thing, this woman (There are others who are poorer.) RMH_05-20-08_74
(153) Hapi xah ooque ha.

Intns - SN-cause/say DcL
'Está mintiendo.'
S/he's lying — s/he's just saying that. RMH_05-20-08_75
(154) Hapi xah htamzo, hpyootax.

Intns - 1SGS.Tr-Rl-want 1SGS.In-Dt-go
'Fui de mi propia voluntad.'
I just went on my own. RMH_05-20.08_76

\subsection*{24.3 VP-initial and general VP adverbs}

The syntax of many VP-initial adverbs is discussed in §5.1. This section presents an overview of those adverbs and others without repeating information about the syntactic facts. The adverbs are divided into thematic groups.

\subsection*{24.3.1 Intensifying and attenuating adverbs}

Several adverbs are used to intensify or attenuate the predicate.

\subsection*{24.3.1.1 Intensifier hax}

The common adverb hax intensifies the verb that is in turn commonly followed by the adverb oo (§24.4.4).
¡Ctam hipcom isliicot hac [hax xomasol oo ]! male Px-Hz 3P-back the.LC Intns Em-yellow! DL
'La espalda de este macho está muy amarilla!'
This male's back is very yellow! (Conejo_Puma_6.2)
(156) Hinaail com [hax toopol oo ], mos coospoj iha. 1P-skin the.Hz InTNS RL-black DL also SN-spotted DCL 'Mi piel es muy negra y manchada.'
My skin is very black and spotted. (lagatijas_04) QQQ check punctuation
When this adverb occurs with a non-stative verb, it indicates repetition or extension of time during which the action takes place.
(157) Hant cmatj com iti hatom \(\mathbf{x}\), [ hax ihpmozácanim \(\mathbf{0 0}\) ]. land SN-hot the.Hz3P-on 1SGS-Rl-lie UT IntNS 1SGS.In-Px-do.push-ups DL 'Cuando estoy en tierra caliente, hago lagartijas.'
When I am on hot ground, I do push-ups. (lagartijas_19)
(158) Haxz cop hax yamasij oo. ¿Ma scatxla ha!
dog the.Vt Intns Dt-display.teeth Dl 2SgDO Ir.Id-bite Aux-Dcl 'El perro abrió la boca y está mostrando sus dientes. ¡Te va a morder!'
The dog is showing its teeth. It is going to bite you. RMH_08-24-07_59a
(159) Hax ihpyocaptim oo.

Intns 1SGS.In-Dt-jump-Impf DL
'Yo brincaba.'
I just jumped. (like in fright, one foot at a time) RMH_08-24-07_59b

\subsection*{24.3.1.2 Intensifier hoox}

The adverb hoox also intensifies the verb. The adverb itself is often followed by the adverb \(\mathbf{0} \boldsymbol{0}\) (§24.4.4).
(160) Hisoj com hoox tsoop, hax cömiin oo. 1P-body the.Hz Intns Rl-thick Intns 3IO-Px-short DL 'Mi cuerpo es muy grueso y corto.'
My body is very thick and short. (lagatijas_27)
(161) ..., hoox 00 tizil, ... Intns DL RL-small.PL
‘... eran tan pequeños, ...'
... they were so little, ... (Dos_Hermanos_36.3)
(162) Caanj xah \({ }^{\circ}\) zixcám coospoj \({ }^{\circ}\) xah hoox miitxo.
grouper CRD spotted.cabrilla CRD InTNS Px-many
'Las bayas y cabrillas son numerosas.'
Gulf groupers and spotted cabrillas are numerous. (ES2007, lamz_10) RRR
(163) ..., hipi hoox oo tazoj, coox itahit ma x, ... Intns Intns DL RL-alone all 3:3-RL-eat DS UT
‘... comió todo POR SI MISMO ...'
... he ate all of it BY HIMSELF, ... (Hombre_Bariil_44)
(164) Me hoox oo ntazoj ma, ma hxamsisiin.

2Pro Intns Dl 2SgS-Rl-alone DS 2SgDO 1SgS.Tr-Em-love
'Te amo SÓLO A TI.'
I love ONLY YOU. RMH_08-24-07_60b
(165) He hoox hitoj cohmiiho.

1Pro Intns 1P-eye-Pl 3IO-1SgS.Tr-Px-see
'Lo vi con mis PROPIOS ojos.'
I saw it with my OWN eyes. RMH_08-24-07_60a
The adverb hoox with a verb meaning be indicates quantity or identity.
(166) Comcaac hoox taa yoozcam.
person/Seri.Pl Intns Rl-be DT-arrive.PL
'MUCHAS personas llegaron.'
LOTS of people arrived. RMH_08-24-07_60c
(167) Taax ah oo cötpacta ma,

DDP FOC DL 3IO-RL-be.in.appearance DS
hoox cöiiha hizac max, ...
Intns 3IO-3P-PON-be Px-Lc even
'Por eso, hasta el día de hoy ...'
For that reason, to this very day ... (Mt 27:8) RMH_08-24-07_60d

\subsection*{24.3.1.3 Halx}

The adverb halx occurs in some contexts with the vague meaning that is translated here as just, as examples below show. Sometimes the adverb halx with this simple meaning does not collocate well - the examples are rejected by speakers and these examples are flagged with an asterisk to indicate their ungrammaticality.

In more contexts, however, this same adverb is accompanied by a morphological or phonological effect on the word that follows it (which may not be the verb itself); the meaning of the combination is something like more or less, somewhat. \({ }^{17}\) In these contexts the adverb is glossed as Attenuator. The phonological contexts are divided into four types (where V represents either a monomoraic or bimoraic nucleus: (a) ... 'VCC..., (b) ...'VCVC..., (c) ...'V(C)..., (d) elsewhere.

If a consonant cluster follows the stressed vowel of the word modified by halx, the vowel a is inserted, presumably as an infix. The consonant cluster may be entirely inside the root, as in (168)-(172), or it may span a root-suffix boundary, as in (173)-(175), although in some cases it is not always easy to distinguish the two.
\begin{tabular}{|c|c|c|c|c|}
\hline (168) & a. & \begin{tabular}{l}
¿Halx aanpx! \\
just Im-return.home ‘¡Pues vete a casa!’ \\
Just go home! RMH_08-24-07_61a
\end{tabular} & b. & \begin{tabular}{l}
¿Halx aanapx! \\
Atten Im-return.home+Atten ‘¡Vete a casa por un rato!’ \\
Go home for a while! RмH_08-24-07_61b
\end{tabular} \\
\hline (169) & a. & * \(\underset{\text { just }}{\text { Halx }} \quad \begin{gathered}\text { maapl. } \\ \text { Px-cold }\end{gathered}\) & b. & \begin{tabular}{l}
Halx maapal. \\
Atten Px-cold+Atten \\
'Hace algo de frío.' \\
It's kind of cold. RMH_08-24-07_61c
\end{tabular} \\
\hline (170) & a. & \begin{tabular}{l}
iHalx casyoj! \\
just Im-drink-PL \\
‘¡Tómenlo no más!’ \\
Just drink (pl.) it! RMH_08-24-07_61d
\end{tabular} & b. & \begin{tabular}{l}
¿Halx casayoj! \\
Atten Im-drink-Pl+Atten \\
‘¡Tomen algo de ello!’ \\
Drink (pl.) some of it! RMH_08-24-07_61e
\end{tabular} \\
\hline (171) & a . & * Halx yootxo. just Dт-many & b. & \begin{tabular}{l}
Halx yootaxo. \\
Atten Dt-many+Atten \\
'Había algunos.' \\
There were some. RMH_08-24-07_61h
\end{tabular} \\
\hline
\end{tabular}

\footnotetext{
\({ }^{17}\) These same patterns (with enclitic \(\mathbf{a}\), infix \(-\mathbf{a}\) - and stress shift) are found with verbs in dependent clauses to show simultaneity of action. See \(\S 3.8\).
}
a. iHalx icaticpan itaa?
just Inf.In-work 3:3-RL-know
‘¿Puede trabajar de vez en cuando?’
Can s/he work sometimes? RmH_08-24-07_61f
b. i \(\underline{\text { Halx }}\) icatícapan itaa?

Atten Inf.In-work+Atten 3:3-Rl-know
'¿Sabe algo de cómo trabajar?
Does s/he know something of how to work? (DS2005, halx) RMH_08-24-07_619
(173) Halx yaasatim.

Atten Dt-deflate-Impf+Atten
'Cada rato se desinfla un poco.'
It deflates every little while. (< ل \(\mathbf{a a s}-\mathbf{t i m})\)
(174) Halx yásatim xo mos iyoocatx.

Atten Dt-sing-Impf+Atten but also 3:3-Dt-release
'Cantaba cada rato pero luego dejó de cantar.'
S/he was singing every little while but then s/he stopped. RMH_05-20-08_77 (< ل \(\mathbf{V o s - t i m}\) )
(175) Halx itaatatim,...

Atten 3:3-Rl-cook.under.coals-ImpF+AtTEN
'Cocinaba debajo de las brasas
S/he was cooking it under the coals, ... \({ }^{18}\) RMH_05-20-08_78 (< Vaat-tim)
If there is no consonant cluster but the verb has a trochee headed by the stressed vowel, the stress of the word is shifted to the syllable following the normally-stressed syllable and that vowel is lengthened. \({ }^{19}\)
(176)
a. iHalx catax!
just Im-go
‘¡Vete!’
Go! RMH_08-24-07_62a
b. \(\quad \underset{\text { ATten }}{\text { Halx }} \quad\) càtáax \({ }^{20}\) Im-go+Atten
‘¡Pues vete!
Just go! RMH_08-24-07_62b

\footnotetext{
\({ }^{18}\) This example is especially interesting because it shows that the sequence \(\mathbf{t t}\) that results from the juxtaposition of a root-final \(\mathbf{t}\) and a suffix-initial \(\mathbf{t}\) is functioning as a cluster, as one would expect from the morphological analysis. The pronunciation of the word caattim (SN-cook.in.coals-IMPF) is [' k a at im ], which is indistinguishable from a word that might be analyzed as caat-im, since the lengthening of the \(\mathbf{t}\) is induced by the stress on the first syllable (see §28.5.1).
\({ }^{19}\) The lengthening is written but it probably is a result of the intonational contour. The vowel written as \(\mathbf{0 o}\) in the word ihyoosí is slightly shortened phonetically, but it is written long to preserve some visual relationship with the word ihyoosi and avoid confusion with ihyosii I smelled it with which it contrasts phonetically.
\({ }^{20}\) The grave-accented vowel, such as à, is meant to indicate that the vowel is slightly long as if it were somewhat stressed.
}

\author{
(177)
}
a. *;Halx ihyoosi! just 1SGS.Tr-Dt-drink
a. \(\quad \underset{\text { just }}{\text { Halx }} \quad \begin{aligned} & \text { yiipe. } \\ & \text { DT-good }\end{aligned}\)
a. iHalx caho!
just Im-see
‘¡Míralo no más!'
Just look at it! RMH_08-24-07_62c
(180)
a. \(\quad \begin{aligned} & \text { Halx } \\ & \text { just } \\ & \text { cacat } \\ & \text { SN-salty/bitter }\end{aligned}\) DCL
a. * Halx imcozim.
just Px-hot.weather
b. iHalx càhóo!

Atten Im-see+Atten
‘¡Pues míralo un poco!
Just take a look at it! RmH_08-24-07_62d
b. iHalx ihyoosíi!

Atten 1SGS.Tr-Dt-drink+Atten
‘¡Casi lo tomé!’
I almost drank it! RMH_08-24-07_62e
b. Halx yiipée.

Atten Dt-good+Atten
'Se mejoró un poco.'
S/he got a bit better. RMH_08-24-07_62f

'Está un poco salado/amargo.'
It is kind of salty/bitter. RMH_08-24-07_629
b. Halx imcòzíim.

Atten Px-hot.weather+Atten
'Está haciendo un poco de calor.'
It is kind of hot (weather). Rмн_08-24-07_65
a. Mitrooqui quij halx ano hpsijj aha.

2P-vehicle the.Cm just 3P.in 1SGS.In-Ir.Id-sit AuX-Dcl
'Me voy a sentar en tu carro por un rato.' RMH_-88-13-07_14e
I am going to sit in your car for a while [like perhaps a half hour].
b. Mitrooqui quij halx ànóo hpsiij aha.

2P-vehicle the.Cm Atten 3P.in 1SgS.In-Ir.Id-sit AuX-Dcl
'Me voy a sentar en tu carro por un ratito.' RMH_ \(08-13-07\) _14f
I am going to sit in your car for a short while [shorter time than a half hour].
\begin{tabular}{|c|c|c|}
\hline \(\underline{\text { Halx }}{ }^{\circ}\) hìmóoz yomeeet \({ }^{\circ}\). & (118) & Halx \({ }^{\circ}\) ìisáax hant yaait \({ }^{\circ}\). \\
\hline Atten 1P-heart Dt-? & & Atten 3P-? land DT-arrive \\
\hline 'Yo estaba un poco triste.' & & 'Estaba un poco feliz.' RMH_05-20-08_80 \\
\hline I was a bit sad. RMH_05-20-08_79 & & S/he was a little bit happy. \\
\hline
\end{tabular}

When neither of those conditions (consonant cluster or trochee) is found and the nucleus of the stressed syllable is one or two moras, the suffix -a is added to the verb.
(182)
a. inalx hiim!
just Im-sleep
‘¡Duérmete!’
Just sleep! RMH_08-24-07_63a
b. iHalx hiim-a!
Atten Im-sleep-Atten
'Duérmete un poco, pues.'
Just sleep a while! RMH_08-24-07_63b
\begin{tabular}{|c|c|c|c|c|}
\hline (183) & a. & \[
\begin{aligned}
& i \frac{\text { Halx }}{\text { just }} \begin{array}{l}
\text { as! } \\
\text { ‘‘Canta!' } \\
\text { 'Just sing! }
\end{array} \\
& \text { RMH_08-24-07_63c }
\end{aligned}
\] & & \begin{tabular}{l}
iHalx as-ą! \\
Atten Im-sing-Atten ' \(i\) Canta un rato!' Sing a bit! RMH_08-24-07_63d
\end{tabular} \\
\hline (184) & a. & * Halx yoheel. just DT-red & b. & \begin{tabular}{l}
Halx yoheeel. \\
Atten Dt-red.Atten 'Es un poco rojo.' It's reddish. RMH_05-20-08_81
\end{tabular} \\
\hline (185) & a. & * Halx yaxp. just DT-white & b. & \begin{tabular}{l}
Halx yaxap. \\
Atten Dt-white-Atten \\
'Es un poco white.' \\
It's whitish. RMH_05-20008_82
\end{tabular} \\
\hline (186) & a. & ¡Halx hii! just Im-hear ‘¡Óyelo no más!' Just hear it! RMH_05-20-08_83 & b. & \begin{tabular}{l}
¡Halx hiii! \\
Atten Im-hear-Atten '¡Oye un poco!' \\
Hear it a bit! RмH_05-20-08_84
\end{tabular} \\
\hline (187) & a. & ¡Halx ihqueecöl! just Im-listen ‘¡Escúchalo no más! Just listen to it! RMH 05-20-08_85 & b. & \begin{tabular}{l}
¡Halx ihqueecöal! \\
Atten Im-listen-Atten ‘'Escucha un poco!’ \\
Listen a bit! RMH_05-20-08_86
\end{tabular} \\
\hline
\end{tabular}

When none of the preceding conditions holds - essentially only when there is a three mora nucleus in the stressed syllable - the difference between the two meanings contrasted above is detectable only by a slightly longer nucleus in the case of attenuation (indicated here with two acute accents on the relevant syllable).


The adverb halx can be modified by the attenuating adverb xah (§24.6) and the result is an intensifying adverbial phrase that means (unexpectedly) something like so (very).
\begin{tabular}{|c|c|c|c|c|}
\hline (190) & Halx xah maapl. & (191) & Halx xah & mcozim. \\
\hline & just Atten Px-cold & & just Atten & Px-hot.(weather) \\
\hline & 'Hace tanto frío.' & & \({ }^{\text {¢ }}\) Hace tanto c & alor!' \\
\hline & It is so cold! (DS2005, halxxah < halx) & RMH_08-24-07_64b & It is so hot (w & eather)! RMH_08-24-07_64c \\
\hline
\end{tabular}

\subsection*{24.3.1.4 hanso just}

The adverb hanso limits the action in some way. It is glossed just here, as it is with its uses with nominals (§24.1.1), but it has the idea of just anyway (despite objections, despite negative consequences, etc.).
(192)
¡Hanso cacatx!
just Im-release
‘¡Déjalo!’ RMH_10-16-07_18a
Just let him/her/it go anyway. (Don't try to do anything to detain him/her/it).
(193) ¡Hanso catax!
just Im-go
‘¡Vete!’
Just go anyway! (e.g. over my objections) RMH_10-16-07_18b
\begin{tabular}{llllllll} 
a. & \begin{tabular}{lllll} 
Zixcám \\
fish
\end{tabular} & \begin{tabular}{l} 
ixamataj \\
3P-broth
\end{tabular} & \begin{tabular}{l} 
cop \\
the.VT
\end{tabular} & hass & nsiisi & 2SGS-IR.ID-drink & aha. \\
AUX-DCL
\end{tabular}
'Debes tomar el caldo de pescado de todos modos.'
You should drink the fish broth anyway. RMH_10-16-07_18c
(195) Hanso moopol.
just Px-black
'Es negro/a.'
It's just black. RMH_10-16-07_19a
(196) Hanso miteejöc.
just Px-thin
'Está flaco/a.' \({ }^{\text {RMH_10-16-07_19b }}\)
It/she/he's just thin.

This adverb combines with the intensifying adverbs áa (§24.4) and hax (§24.3.1.1) to give the intensified expression hansáa hax.
(197) Hehe cop hansáa hax maacoj áa yax, ... tree the.VT just Intns Px-big Intns since
'El árbol es MUY grande ...'
The tree is VERY big ... (DS2005, áa) RMH_10-16-07_19c

\subsection*{24.3.1.5 Intensifier mos áno}

The expression mos áno indicates a superior degree and most felicitously collocates with less agentive predicates. The expression mos áno anẍ̈, a phrase constructed on the intensifier anx \(\ddot{\boldsymbol{o}}\)
(see §24.3.1.6 for examples), is most easily used with more agentive predicates. Some of the examples below show specifically that the use of mos áno anxö is inappropriate. \({ }^{21}\)
\({ }^{\circ}\) Mos áno \({ }^{\circ} \quad(*\) *anxö) siipe caha.
superior.degree InTNS Ir.ID-good Aux.SN-DCL
'Va a ser excelente.'
It's going to be excellent. (DS2005, áno) RMH_08-24-07_67b RMH_08-04-07_114a
(199) \({ }^{\circ}\) Mos áno \({ }^{\circ}\) (*anxö) sheel caha.
superior.degree Intns Ir.ID-red Aux.SN-Dcl
'Va a ser muy rojo.'
It's going to be extremely red. RMH_08-04-07_114b
(200) He \({ }^{\circ}\) mos áno \({ }^{\circ}\) (*anxö) hpyocám.

1Pro superior.degree Intns 1 SGS.In-Dt-full
'Soy el que está más lleno.'
I'm the fullest. RmH_08-04-07_114c
(201) \({ }^{\circ}\) Mos áno \({ }^{\circ}\) yoheemt.
superior.degree DT-stink
'Olió muy mal.'
It really stank. RMH_08-04-07_114e
(202) \({ }^{\circ}\) Mos áno \({ }^{\circ}\) scozim caha.
superior.degree Ir.Id-hot.(weather) Aux.SN-DCL
'Va a hacer mucho calor.'
It is going to be really hot (weather)! RMH_08-04-07_114f
..., \({ }^{\circ} \underline{\underline{m o s} \text { áno }}{ }^{\circ}\) hiicp hac \({ }^{\circ}\) iti masiistox \({ }^{\circ}\) aha. superior.degree 1P-place.next.to the.LC you.(pl.).will.believe.in Aux-DCL
‘..., me creerán en mí aún más.'
... you (pl.) will really believe in me. (Jn 11:15) RMH_05-20-08_92
Despite the tendency for the predicates to use one intensifying expression or the other, some predicates allow both, with slightly different interpretations, as shown below. The phrase mos áno anxö indicates a greater degree with respect to some (unexpressed) standard of comparison.
(204) \({ }^{\circ}\) Mos áno \({ }^{\circ} \quad\) yoopca.
superior.degree DT-rain
(205) \({ }^{\circ} \underline{M o s ~ a ́ n o ~}^{\circ} \quad\) anxö yoopca.
'Llovió fuertemente.'
superior.degree Intns Dt-rain

It rained hard! RMH_08-04-07_114d RMH_11-28p-07_28 \(\rightarrow\) 'Llovío aún más fuertemente.'
It rained even harder!

\footnotetext{
\({ }^{21}\) It is unclear to me how or why this expression came to be written as two words. One consultant quite idiosyncratically, but consistently, pronounces this expression monsano.
}
(206) \({ }^{\circ} \underline{\text { Mos áno }}^{\circ} \quad{ }^{\circ}\) iisax yoheemt \(^{\circ}\).
superior.degree 3P-? DT-stink
'Estaba muy enojado/a.'
S/he was very angry. RмH_08-04-07_115i
(207) \({ }^{\circ} \underline{\text { Mos áno }}{ }^{\circ} \quad\) anxö \({ }^{\circ}\) iisax sheemt \({ }^{\circ}\) caha. superior.degree Intns 3P-? Ir.Id-stink Aux.SN-DCL
'Va a estar muy enojado.'
S/he's going to be very angry. RMH_08-04-07_115h
(208) \({ }^{\circ}\) Mos áno \({ }^{\circ}\) yeenj.
superior.degree DT-UO-yell.at
'Gritó fuertemente.'
S/he yelled hard.
(209) \({ }^{\circ}{ }^{\text {Mos áno }}{ }^{\circ}\) anxö seenj caha. superior.degree Intns Ir.Id-UO-yell.at Aux.SN-DCL
'Va a gritar con más fuerza.'
S/he is going to shout more energetically. RMH_08-04-07_115f
The use of the expression mos áno with verbs such as Vapaisx clean (trans.) Vahooxp make white (both morphological causatives) is grammatical but refers to the result and not to the action itself.
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{4}{*}{(210)} & \({ }^{\circ}\) Mos áno \({ }^{\circ}\) & isapaaisx & ah \\
\hline & superior.degree & 3:3-Ir.ID-cause.be.clean & n Aux-Dcl \\
\hline & 'Lo va a hacer m & muy limpio.' & \\
\hline & S/he is going to & make it really clean. Rm & RMH_08-04-07_1149 \\
\hline \multirow[t]{4}{*}{(211)} & \({ }^{\circ}\) Mos áno \({ }^{\circ}\) & isahooxp & ha. \\
\hline & superior.degree & 3:3-Ir.ID-cause.white A & Aux-Dcl \\
\hline & 'Lo va a hacer m & muy blanco.' & \\
\hline & S/he is going to & make it really white. Rмн & MH_08-04-07_114 \\
\hline
\end{tabular}

\subsection*{24.3.1.6 Intensifier anxö}

The syntax of the adverb anxö much, with force is discussed in §5.1. It is established there that it is a VP adverb and not a quantifier in the nominal phrase. However, as the following examples illustrate, the interpretation commonly is relative to the quantity of the subject or direct object.
(212) Cpoot quih anxö popén, mackerel the.Fl Intns Ir.Dp-Pv-carry.items
'Si muchas sierras se toman, ...'
If lots of mackerel are taken, ... RMH_08-24-07_66b
(213) Ziicalc quih anxö \({ }^{\circ}\) hacx immiihtoj \({ }^{\circ}\).
bird-Pl the.Fl Intns they.have.died
'Muchas aves han muerto.'
Many birds have died. RMH_08-24-07_66c
(214) Tiix tootar heecto quih anxö inyáa.

DDS chicken(s) juvenile-Pl the.fl Intns 3:3-Px-own
'Ya posee muchos pollitos.'
S/he has lots of baby chicks. RMH_08-24-07_67a
(215) Zixcám quih anxö xoheemt.
fish the.Fl Intns Em-stink
'La mayoría de los peces huelen mal.'
Most of the fish stink. RMH_-05-20-08_91
It is not known why this adverb cannot modify an impersonal verb such as \(\sqrt{ }\) cozim (be) hot (weather).
(216) * Anxö scozim caha. Intns Ir.Id-hot.(weather) Aux.SN-Dcl
('¡Hará mucho calor!’) (It will be very hot weather!)
Anxö can be modified by the intensifier mos áno even more (§24.3.1.5) to give the phrase mos áno anxö. In some situations that are not well understood, this phrase may modify a nonagentive expression. \({ }^{22}\) (See also other examples in §24.3.1.5 that are contrasted with mos áno.)
(217) \({ }^{\circ}\) Ox tpacta ma \({ }^{\circ}\), Juan quij \({ }^{\circ} \underline{m o s ~ a ́ n o ~}^{\circ}\) anxö \({ }^{\circ} \mathbf{i m o z}\) tmeet \({ }^{\circ}\), toc cömiij. then the.Cm even.more Intns \(s / h e . w a s . s a d\) there 3IO-Px-sit 'Entonces Juan estaba aún más triste.'
Then John was even sadder. RмH_05-20-08_93
(218) \({ }^{\circ} \underline{M o s ~ a ́ n o ~}^{\circ}\) anxö sim caha
superior.degree Intns Ir.ID-sleep Aux.SN-DcL
'Va a dormir even more.'
S/he is going to sleep even more. RMH_08-04-07_115b
(219) \({ }^{\circ} \underline{M o s ~ a ́ n o ~}^{\circ} \quad\) anxö ihyoaa.
superior.degree Intns 1SGS.Tr-Dt-know
'He aprendido más.'
I have learned more. RMH_08-04-07_115c

\footnotetext{
\({ }^{22}\) It doesn't collocate with a verb such as \(\sqrt{ }\) cozim be hot weather, for example, nor with \(\sqrt{ }\) aapl cold.
}
\({ }^{\circ}\) Mos áno \({ }^{\circ}\) anxö ihyoyaa.
superior.degree Intns 1SGS.Tr-Dt-own
'Tengo (poseo) más que tenía antes.'
I have (own) more (now than I had). RMH_08-04-07_115c
Most commonly, however, this expression collocates with kinetic, agentive predicates.
(221) \({ }^{\circ} \underline{\text { Mos áno }}{ }^{\circ}\) anxö yopanzx.
superior.degree Intws DT-run
'Corrió muchísima intensidad.'
S/helit ran really hard. RMH_08-04-07_115a (Unacceptable without anxö.)
(222) \({ }^{\circ} \underline{M o s ~ a ́ n o ~}^{\circ} \quad\) anxö \(\quad\) saticpan caha.
superior.degree Intns Ir.ID-work Aux.SN-Dcl
'Va a trabajar más.'
S/he is going to work more. RMH_08-04-07_115d (Unacceptable without anxö.)
The morphologically causative verbs meaning clean and make white have a different interpretation when used with this expression rather than mos áno (compare the following with examples (210) and (211) in §24.3.1.5).
\({ }^{\circ}\) Mos áno \({ }^{\circ}\) anxö isapaaisx aha.
superior.degree Intns 3:3-IR.ID-cause.be.clean Aux-DcL
'Va a limpiar muchos.'
S/he is going to clean even more of them. RMH_08-04-07_115e
(224)
\({ }^{\circ}\) Mos áno \({ }^{\circ}\) anxö isahooxp aha.
superior.degree Intns Ir.ID-cause.white Aux-Dcl
'Va a blanquear a muchos más.'
S/he is going to make more of them white. RMH_08-04-07_115g

\subsection*{24.3.1.7 coox completely, entirely}

The adverb coox indicates that the entirety of something is involved as a unit. This is seen most clearly by the following pairs, the (a) examples with coox and the (b) examples with the quantifying predicate \(\sqrt{\mathbf{c o o o}}\) all:
a. Me coox masiilx aha.

2Pro entirely 2PlS-Ir.Id-go.Pl Aux-Dcl
'UDS. deben irse como un grupo.'
You should go as a group. RMH_05-20-08_94
b. Me mapocooo masiilx aha.

2Pro 2PlS-Ir.Dp-all 2PlS-Ir.Id-go.Pl Aux-Dcl
'Todos UdS. deben irse.'
ALL OF YOU should go. RMH_05-20-08_95
a. iCoox intahooxp? entirely 2SGS-RL-cause.white '¿Lo pintaste completamente blanco?' Did you paint it all white? RMH_08-24-07_68f
b. ¿Tcooo ma, ntahooxp?

RL-all DS 2SGS-RL-cause.white
'Lo(s) pintaste todo de blanco?'
Did you paint it/them all white? RMH_05-20-08_96
(227) Coox tiijc, ...
entirely RL-wet rmi_08-24-07_68a
'Se mojó completamente, ...'
S/he/it got completely wet, ... (DS2005, coox)
¿COOXX itqués? RMH_08-24-07_68b entirely 3:3-RL-cover
‘¿Lo cubrió completamente?'
Did it cover it completely?
¿Coox intisxö?
entirely 2SGS-RL-hide
‘¿Escondiste todos?’ Rмн_08-24-07_68d
Did you hide all of them?
(231) \(\quad i^{\circ}\) Xiica ccamotam \({ }^{\circ}\) quih coox intaho?
animals the.Fl entirely 2SGS-Rl-see
‘¿Viste a todos los animales?'
Did you see all of the animals? RMH_08-24-07_68e

\subsection*{24.3.2 Location adverbs}

VP-initial adverbs that indicate location include: aamo far (see also \(\S 24.3 .3\) for its use as a time adverb; its antonym is hantaxl), cola \({ }^{23}\) high, colx way up high (antonym of hantx), haa there, hacx apart, alone, hantaxl near (antonym of aamo), hantx at the base (antonym of colx), hapx out, \({ }^{24}\) haquix there, himo elsewhere, \({ }^{25}\) hiza elsewhere, towards elsewhere, hizx aside, iicp towards, iicx near, iij elsewhere, differently, toii toward somewhere else, toox far. These adverbs appear to be all of the class presented in Table 5.3. See also the ways in which they may be modified by the attenuating adverb xah (§24.6.1).

Other VP-initial adverbs are obviously conflations of an adverb and a postposition or a noun and a postposition: coleequi \({ }^{26}\) upwards, paquiiqui backwards.

\footnotetext{
\({ }^{23}\) The antonym is the expression hant ihiipi (land 3P-PON-stand).
\({ }^{24}\) This word is also a location noun; see §5.4.
\({ }^{25}\) This word has the form him before a vowel. It is presumably the etymological source of the distal element him in the distal demonstrative adjectives (§21.3). Furthermore, this adverb is presently limited to use with only a few verbs.
\({ }^{26}\) The antonym is the expression hant iiqui (land 3P-toward).
}
(232) Trooqui quij cói aamo oo miij. vehicle the.CM still far DL Px-sit
'Todavía está un poco lejos.'
It is still a bit in the distance. (DS2005, aamo) RMH_08-24-07_69a
Ziic quij cola quiij iha. (234) Cola nsiixquim aha. bird the.Cm high SN-sit DcL
'El ave está sentada arriba.'
The bird is sitting up high. RмH_08-24-07_-69b
high 2SGS-Ir.Id-put.Hz Aux-Dcl 'Debes ponerlo en alto.' You should put it up high. RMH_08-24-07_69c
\({ }^{\circ}\) Hehe iti icoohitim \({ }^{\circ}\) com coleequi hqueetx. table the.Hz upwards Im-raise
‘¡Levanta la mesa!’
Raise the table! RNH_08-24-07_69d
(236) Ziic tintica colx xeectim.
bird Md-Aw way.up.high Em-travel
'El ave está volando muy alto.'
The bird is flying way up high. RMH_08-24-07_70a
... haa mota ma, ... there Twd-Rl-move DS
‘... venía allí, ...'
... it was coming there (Conejo_Puma_15)
(238) Caay cop hacx caap oo ha.
horse the.VT apart SN-stand DL DCL
'El caballo está suelto.'
The horse is loose. (DS2005, hacx) RMH_05-20-08_97
(239) Haxz cop hahoot hac hantaxl cöcaap iha.
dog the.Vt Abs-entrance the.Lc near 3IO-SN-stand Dcl
'El perro está cerca de la entrada.'
The dog is near the doorway. RmH_08-24-07_70b
(240) Hantx xeectim.
at.base Em-travel
'Está pasando muy bajo.'
It's traveling very low to the ground. RмH_05-20-08_98
(241) Hita quih cafee ooztoj quij hapx itaca, 1P-mother the.Fl coffee 3P-ON-cook.in.water the.Cm outside 3:3-RL-put.LQ
iyoozaj, isahaapl ta.

3:3-DT-do.back.and.forth 3:3-Ir.ID-make.cold Aux.RL
'Mi madre vertió el café de un contenedor a otro para enfriarlo.'
My mother poured the coffee back and forth to cool it down. (Ds2005, quiza) RMH_07-11-07_40f

(246) Hax hapasi hizcap iicp me hsaaix aha. water SN-Pv-drink Px-Vt towards 2IO 1SGS.Tr-Ir.ID-carry Aux-DcL
'Te llevaré esta agua para que la bebas.'
I will take this water to you to drink. (DS2005, iicp) RMH_05-20-08_103
(247) ¡Hantx iicx hoom! at.base near Im-lie
‘‘Agáchate!’
Stoop down! (DS2006, iicx) RMH_05-20-08_104
(248) \({ }^{\circ}\) Iii hant iyooh \({ }^{\circ}\).
differently land 3:3-Dt-put.FL
'Lo/la volteó.'
S/he turned it over. RMH_08-24.07_700
(249) Cmaacoj tintica paquiiqui yootax.
old.man Md.Aw backwards Dt-go
'El viejo se retrocedió.'
The old man moved backwards. RMH_05-20-08_105
(250) Toii ntimat.
elsewhere Aw-Px-move-PL
'Fueron hacia otro lugar.'
They went away. Rмн_05-20-08_106
(251) Toox miihca.
far Px-be.located
'Está lejos.'
It is far away. (DS2005, toox) RMH_05-20-08_107

\subsection*{24.3.3 Time adverbs}

Adverbs and adverb phrases that indicate time include: aamo long time (see also its use as an adverb indicating distance), cmaax now, cói still,,\({ }^{27}\) haptco already, haptco mos once again, \({ }^{28}\) hax cmaapa just now, xaa soon, and zimjöc long time ago. Some of these adverbs may cooccur. Some of them also easily occur before the DPs of a clause; when they do, an example is included here. The interrogative adverb zímjöc when? is presented in §24.7.

\footnotetext{
\({ }^{27}\) The adverb cói almost always occurs with the adverb \(\mathbf{0 0}\) (§24.4.4) or, when the clause is negative, the adverb ipi (§24.2.11).
\({ }^{28}\) The expression haptco mos itacl 00 (already also 3P-surface DL) for once again is also used.
}


Cmaax eenim ihyaa \({ }^{\circ}\) zo cohpscmaasot haa hi.
now knife mine a 3IO-1SGS.In-Ir.Id-N-lend Aux DcL
'Ahora no prestaré mi cuchillo.'
Now I won't lend my knife. RMH_07-20-07_40e
(255) Trooqui quij cói aamo oo miij. vehicle the.CM still far DL Px-sit
'Todavía está un poco lejos.'
It is still a bit in the distance. (DS2005, aamo) RMH_08-24-07_69a
(256) Cói haaco cop toox oo tap ma, ...
still Abs.house the.Vt far Dl Rl-stand DS
'Mientras la casa estaba todavía lejos, ...'
While the house was still far away, ... (Lk 15:20) RMH_05-20-08_108
(257) Minl coi cói zixcám oo yasii.

2P-finger-Pl the.Pl still fish DL DT-smell.like
'Tus dedos todavía huelen a pescado.'
Your fingers still smell like fish. RNH_09-28-07_121b
(258) Juan xah Pedro xah cói pti iyonípatim oo. (* pti cói) Crd Crd still RCPR 3:3-Dt-hit-Impf Dl
'Juan y Pedro están todavía pegando uno al otro.'
Juan and Pedro are still hitting each other. RMH_11-20-07_118
(259) Cói ziix chaa oo z itcmaa, teete, ...
still thing SN-EQ DL a/one 3:3-RL-N-know RL-say
'Dijo que todavía no lo reconocía...'
He said that he still didn't recognize him, ... (Apostador_235) RMH_05-20-08_109
(260) Cocazni \({ }^{\circ}\) com ilít quij cactim iha xo rattlesnake the.Hz 3P-head the.Cm SN-be.cut Dcl but
\begin{tabular}{lllllll} 
isoj & com & cói & csiijim & oo & ha. \\
3P-body & the.Hz & still & SN-move & DL & DCL RMH_08-21-07_86
\end{tabular}
'La cabeza de la víbora de cascabel se cortó, pero el cuerpo todavía se movía.'
The head of the rattlesnake was cut off, but its body was still moving. (DS2005, isoj)
(261)
\({ }^{\circ}\) Ziix is cooil \({ }^{\circ}\) quij cói tooil \(\quad 00\) ma \(x\),
watermelon the.CM still Rl-blue/green DL DS UT
\begin{tabular}{lll} 
ipahit & \({ }^{\circ}\) iic cöimiipe \({ }^{\circ}\) ha. \\
3P-PON-PV-eat & not.beneficial & DCL
\end{tabular}
'Si la sandía está todavía verde, no es bueno comerla.'
If the watermelon is still green, it isn't good to eat it. (DS2005, coi) RMH_05-20-08_110
Cöitacozxot ma, haptco tátaxim, ...
3IO-3:3-Rl-give DS already Rl-go-ImpF
'Se lo entregó, ya estaba andando, ...'
He gave it to him, he was already walking, ... (Gigante_Comelon_118-119)
(263) Haptco emiique caii quih chaa ha. already person mature the.FL SN-EQ DCL
'Ya es adulto.'
He is already an adult. (Jn 9:21) RMH_05-20-08_111
(264) Me haptco mos cmoqueepe -ya?

2Pro once.again SN-sick QM
'¿Estás enfermo/a otra vez?’
Are you sick again? (DS2005, mos) RMH_05-20-08_112
(265) , ,.. haptco mos hast pac itexaj, once.again stone some 3:3-RL-take-PL
' \(\ldots\). otra vez tomaron piedras, ...'
...once again they took stones, ... (Jn 10:31) RMH_05-20-08_113
(266) Xaa xixonla.
soon Em-lose.liquid
'Pronto perdió líquido [la jaiba].'
It [crab] quickly lost liquid. RMH_08-24-07_70e
(267) He zimjöc oo min icaafp quimzo ha xo ... 1Pro long time DL 2P-in Inf.In-arrive SN-Tr-want Dcl but 'Desde hace mucho tiempo he querido llegar a ustedes pero ...'
For a long time I have wanted to arrive to you (pl.) but ...(Rm 1:10) RMH_05-20-08_114

\subsection*{24.3.4 Manner adverbs}

VP-initial adverbs and expressions that indicate manner (broadly speaking) are: cooc almost (see §5.1), ihaamac alone (unaccompanied), miizj well (see §5.1) and \(\mathbf{0 x}\) thus (see §5.1). The adverb cooc almost sometimes occurs in two distinct prosodic patterns with a difference in meaning, as illustrated by examples (268)-(269): one with a reduced stress (indicated by a breve) and one with a more even stress (indicated by an acute accent here).
(268) Cŏoc áno ntama ho. almost 3P.in Aw-Rl-N-move DCL
'Tarda en salir de él/ella.'
It takes a long time to come out of it. RMH_08-13-07_220
Cóoc áno ntama ho.
almost 3P.in Aw-Rl-N-move DcL
'Casi no sale.'
It almost doesn't come out. RMH_08-13-07_22p
(270) ¿Me hoox oo ihaamac poop, siitax quee -ya?

2Pro Intns Dl alone Ir.Dp-stand Ir.Id-go Aux.SN QM
‘¿Vas sin acompañante?'
Are you going unaccompanied? (DS2005, háamac) RMH_05-20-08_115
(271) Miizi ihmiya.
well 1SGS.Tr-Px-know
'Lo sé bien.'
I know it well. (DS2005, miiz) RMH_09-28-07_118d
The idiomatic phrase hax hamaco little by little is also attested.
(272) ... \({ }^{\circ}\) hax hahmaco \({ }^{\circ 29}\) hax com contima. \({ }^{30}\)
little.by.little water the.Hz 3IO-Twd-Px-move
‘ ... poco a poco se hundió.'
Little by little it sank. RMH_05-20-08_116
Many manner-like notions are expressed as independent clauses using a verb; see §24.8.

\subsection*{24.4 VP-final adverbs}

Some adverbs are found in a position following the verb (before the Different Subject markers, §3.6.1) and also before emphatic xo (§20.4.3).

\subsection*{24.4.1 Intensifying adverbs áa and aapa}

The adverbs áa very, really and aapa very intensify some aspect of the verb.
The adverb áa commonly occurs in conjunction with some other indicator of intensity in the sentence as well.

\footnotetext{
\({ }^{29}\) Speakers vary on the pronunciation of this expression, some using hax hamaaco and some using hax hahmaaco.
\({ }^{30}\) The word hax fresh water could be replaced by xepe sea in the case of a ship in the water, but it need not be; hax is still appropriately used there. If the article com the. Hz were replaced by cap (or cop) the.VT the situation described would be one in which the water is entering the container.
}
(273) Poyaai áa, hax yoma.

Ir.Dp-expensive Intns Intns Dt-N-be
'No fue muy caro.'
It wasn't very expensive. (DS2005, àa) RMH_05-20-08_117
(274) Ziix chaa áa zo htemaa ho.
thing SN-EQ Intns a 1 SGS.Tr-Rl-N-know DCL
'No sé quién es.'
I don't know what/who it really is. RMH_05-20-08_118
(275) Hehe cop hansáa hax maacoj áa yax, plant the.Vt just Intns Px-big Intns since
'Como el árbol es muy grande, ...'
Since the tree is very big, ... (DS2005, áa) RMH_05-20-08_119
(276) Hammotómanoj áa.
(277) i[Saticpan áa ] xo!

1PLS-Px-weak-PL very
'Estamos muy débiles.' RMH_05-20-08_120
Ir.ID-work Intns Emph

We are very weak. (DS2005, áa)
(278) [ Hax toox toom áa ] ... Intns far Rl-lie Intns
'Estaba muy lejos., ...'
It was very far away, ... RMH_05-20-08_122
(279) [ Siifp ta teepe áa ] siifp aha. Ir.Id-arrive Aux.RL Ir.Dp-say Intns Ir.Id-arrive Aux-Dcl
'Si de veras dijo que vendría, entonces vendrá.'
If s/he really said s/he was coming, s/he will come. RMH_05-20-08_123
(280) Soqueht áa que immís.

Ir.Id-bouncy Intns Aux.SN 3:3-Px-resemble
'Parece que será flexible.'
It appears that it will be flexible. Rмн_05-20-08_124
The intensifier aapa has two major conditions on its usage. First, the verb must be in the socalled proximal realis form ( \(\S 17.1 .1 .7\) ) and second, the verb must be an impersonal or stative verb (and most commonly a scalar predicate). If both conditions are not met, aapa is not appropriately used.

\footnotetext{
a. Maziim aapa.

Px-pleasant Intns
'Es demasiado hermoso.'
It is absolutely beautiful. (DS2005, apa) RMH_05-20-08_125
}


Other kinds of verbs or other moods have alternative ways of indicating a high degree of intensity.
\begin{tabular}{llll} 
a. & Hansaa hax mozt & áa. & It got completely loose. \\
b. & Hansaa hax miim & áa. & S/he is fast asleep. \\
c. & Hansaa hax miipxölim & áa. & It broke completely apart. \\
d. & Hansaa hax imcón & áa. & It really stinks. \\
e. & Hansaa hax moaatjö & áa. & It is too sweet. \\
f. & Hansaa hax yaticpan áa. & ar has really worked! RMH_05-20-08_127
\end{tabular}
(285)
a. Ctoozi ha xo cmaax hansaa hax moqueht áa. SN-stiff DCL but now Intns Intns Px-bouncy Intns
b. Ctoozi ha xo cmaax moqueht aapa.

SN-stiff DCL but now Px-bouncy InTNS
'Estaba tieso pero ahora está flexible.'
It was stiff but now it is flexible. RMH_05-20-08_128

\subsection*{24.4.2 Other postverbal adverbs}

Three other postverbal adverbs are: iiqui even; is (s following a vowel) \({ }^{31}\) of course, sure; and ipi yet. \({ }^{32}\)
(286) \({ }^{\circ}\) Iti cminol \(^{\circ} \quad \underline{\text { iiqui ipi. }}\)

3P-on Im-N-have-finger even yet
'Ni lo/la toques.'
Don't even touch it/her/him! Rмн_05-20-08_129
(287) Moxima cmaacoj quih isooit iiqui haa ha xo ... yesterday old.man the.FL 3P-Ir.ID-dance even SN.EQ DcL but 'Ayer el anciano debería de haber bailado, pero ...'
Yesterday the old man should have danced, \({ }^{33}\) but ... (DS2005, iqui) RMH_05-20-08_130
(288) Saato is.

IR.ID-fight of.course
'Por supuesto peleará.'
Sure he'll fight. RMH_05-20-08_131
(290) Hin ntcmapátjc is.

1 SGDO 2SGS-Ir.Sb-untie of.course
'Bien, suéltame.'
Okay, untie me! RMH_05-20-08_133
(289) Moteja \(\underline{\text { s. }}\)

Px-stagger of.course
'Por supuesto está tambaleando.'
Of course s/he staggers! RMH_05-20-08_132
(291) Ihsiihit is.

1SGS.Tr-Ir.ID-eat of.course
'Lo/la comeré.' RмH_05-20-08_134
I'll just have to eat it. (DS2005, is)
(292) ¡Ihsiihit \(\quad\) xo !

1SGS.Tr-Ir.Id-eat Emph of.course XXXqqq CHECK CERT
‘¡Por supuesto lo comeré!’
Of course I will eat it! RMH_05-20-08_135
The adverb ipi commonly follows negative verbs that also have the preverbal adverb cói still, but it also occurs with a similar meaning of (not) yet when cói is not present.

\footnotetext{
\({ }^{31}\) The conditions for the distribution of the allomorphs are not entirely clear. The allomorph is is the only one that occurs after consonants, but both allomorphs occur after some vowels. Perhaps is occurs after vowels that are stressed or which occur immediately after the stressed vowel. This adverb has not been adequately studied.
\({ }^{32}\) Some examples of the adverb ipi following nominals are given in \(\S 24.2 .11\). It also follows an adverb, as in this example:
(vi) Iizax quij hapx ipi tmap ma, miilx. moon the.CM outside INTNS RL-N-stand DS PX-go.PL 'Antes de que saliera la luna, se fueron.' / Before the moon came up, they went. RMH_05-20-08_137
\({ }^{33}\) The meaning here is deontic.
}
(293) \({ }^{\circ}\) Eenm haacni \({ }^{\circ}\) com itcmexl ipi, ... rifle the.Hz 3:3-RL-N-take yet
'Antes de tomar el rifle, ...'
Before taking the rifle, ... (DS2005, ipi) RMH_05-20-08_136
(294) Ihtemiim ipi ma, miizcam.

1SGS.Tr-Rl-N-sleep yet DS Px-arrive-Pl
'Antes de que yo hubiera dormido, llegaron.'
Before I had slept, they arrived. RmH_05-20-08_138

(297) Cói hptemiim ipi, hpmoohitim.
still 1SGS.In-Rl-N-sleep yet 1SGS.In-Px-UO-eat-ImpF
'Antes de dormir (lit., mientras todavía no había dormido), yo comía.'
Before sleeping (lit., while I still hadn't slept), I was eating. (DS2005, coil) RMH_08-13-07_63b
(298) Coqué coi cói imheel ipi ha.
chili the.Pl still SN-N-red Intns Dcl
'Los chiles no están rojos todavía.'
The chilies aren't red yet. (ALIM 77) RMH_05-20-08_142
(299) \({ }^{\circ}\) Eenm haacni \({ }^{\circ}\) com itcmexl ipi, haaco cap imiiix. rifle the.Hz 3:3-Rl-N-take yet Abs.house the.Vt 3:3-Px-go.away.from 'Antes de agarrar el rifle, salió de la casa.'
Before taking the rifle, he left the house. (DS2005, ipi) RMH_08-13-07_63c
(300) Hax cap ihpomasi ipi, he soos caha.
water the.Vt 1SGS.Tr-Ir.Dp-N-drink yet 1Pro Ir.Id-sing Aux.SN-DCL
'Antes de tomar el agua, voy a cantar.'
Before drinking the water, I am going to sing. (DS2005, ipi) RMH_08-13-07_63d
(301) He cói smaahit ipi caha.

1Pro still Ir.Id-N-fish yet Aux.SN-DcL
'No iré a la pesca todavía.'
I'm not going fishing yet. RMH_05-20-08_143

\subsection*{24.4.3 Time adverbs}

Two small words that relate to time follow the verb. The adverb íi first is also found modifying deverbal nouns. It precedes the Different Subject marker (§3.6.1) when one is present.


The adverb \(\mathbf{x}\) occurs mainly on the verbs of dependent clauses and seems to indicate that the specificity of the time at which the event has taken or will take place is either not relevant or not known. In realis dependent clauses, the lack of \(\mathbf{x}\) generally allows a translation After ..., or When ..., and the presence of \(\mathbf{x}\) allows a translation Whenever .... In irrealis dependent clauses, the lack of \(\mathbf{x}\) generally allows a translation When ... and the presence of \(\mathbf{x}\) allows a translation If .... This adverb follows the Different Subject marker (§3.6.1) if one is present. No other element of a clause ever follows it.
(307) a. Txtamt max, pac ihyoomjc.

RL-abundant DS UT some 1 SGS.TR-DT-bring
'Cuando hay muchos. traigo algunos.'
When there are many, I bring some. RMH_05-20-08_150
b. (example without \(\mathbf{x}\) )

Txtamt ma, pac ihyoomjc.
RL-abundant DS some 1 SGS.TR-Dt-bring
'Porque había tantos, traje algunos.'
Because there were so many, I brought some. RMH_05-20-08_151
(308) a. XXX Cuando se casa, va a estar feliz.

Si se casa, va a estar feliz.
Cuando se pinta la casa, va a ser bonita.
Si se pinta la casa, será bonita. qqq
b. xxx
(309) Minl quih pozatx ta \(x\), insooha ha.

2P-finger-Pl the.Fl Ir.Dp-with.glochids DS UT 2SGS-Ir.Id-cry Aux-Decl
'Si tus dedos se llenan de alguates, llorarás.'
If your fingers get glochids in them, you will cry. RмH_05-20-08_152
More examples of \(\mathbf{x}\) at the end of dependent clauses are given in §3.6.3.
This enclitic may also occur following the postposition iti ( \(c f . \S 22.2 .5\) ) or the focus article cah (cf. §24.2.2) when a clause is nominalized.

Hihiim iti \(\underline{x}\), ihpatj \(x\), hasiilx aha.
1P-PON-sleep 3P-on UT 1SGS.In-Ir.Dp-arise DS UT 1PlS-Ir.Id-go.Pl Aux-DCL
'Cuando he dormido, cuando me levanto, iremos.'
When I have slept, when I get up, we'll go. RMH_05-20-08_153 RRR not dear
(311) Ox ipacta, ox ipacta cah \(\underline{x}\), ...
thus 3P-PON-be.in.appearance thus 3P-PON-be.in.appearance the.Fl-Foc UT
'Era así, era así (por mucho tiempo), ...' RMH_05-20-08_154
It was like that, it was like that ...; i.e., It was like that for a long time, ...

\subsection*{24.4.4 Delimiter 00}

The word \(\mathbf{0 0}\) occurs after verbs (and other words, §24.1.1), most commonly in conjunction with another adverb such as hax (§24.3.1.1), cói still (§24.3.3), and mos also (§24.2.6). See the referenced sections for examples. It does not have any obvious meaning and it is proposed that its primary purpose is to indicate the scope of another adverb. \({ }^{34}\) In some cases it must occur after a word in the VP that precedes the verb (see (313), for example). It obligatorily occurs with the verb for do continually (see \(\S 12.3\) for examples).

\footnotetext{
\({ }^{34}\) This morpheme does not interact phonologically with the verb stem, which is some evidence that it is not a suffix. There is paradigmatic evidence that the final \(\mathbf{i}\) of the stem \(\sqrt{ }\) neepni stooped is inserted because the deletion of the root vowel before \(\mathbf{n}\) (the underlying form of the root is \(V\) neepen) resulted in a final consonant cluster that is disallowed syllable-finally. The epenthesis of \(\mathbf{i}\) is not blocked by the presence of the adverb oo: Cói cneepni oo ha. (still SN-stooped DL DCL) S/he is still stooped. Similarly, Cói cnexöni oo ha. (still SN-hold.in.lap DL DCL) S/he is still holding it/her/him in his/her lap. (The underlying form of the root in this case is \(\sqrt{ }\) nexon.)
}
(312) Cói cpanzx oo ha. still SN-run DL DCL
'Todavía está corriendo.'
S/he is still running. RмН_05-20-08_155
(314) ¡Mos camx oo! also Im-say DL
‘¡Dilo otra vez!’
Say it again! RMH_05-20-08_157 RMH_05-20-08_158 \(\rightarrow\)
(313) ¿Cói toox oo tahca? still far DL Rl-be.located
‘¿Está todavía lejos?’
Is it still far away? RMH_05-20-08_156
(315)
¡Hax hiim oo! just Im-sleep DL
' \(\mathrm{iCiérrate}\) los ojos un poco!'
Just close your eyes a bit!
(316) ¡Haxz ctam cop poozoj oo ta, he camje! dog male the.Vт Ir.Dp-alone DL DS 1IO Im-bring ' \(T\) Tráeme solamente el perro macho!'
Bring me only the male dog! (DS2005, cazo) RMH_08-13-07_63a
(317) Ctam fariséo quih chaa cop tfit \(\underline{\text { o0, toc cötap, ... }}\) man Pharisee the.Fl SN-EQ the.Vt Rl-stand DL there 3IO-Rl-stand
'El fariseo estaba de pie, ...'
'The Pharisee stood there, ... (Lk 18:11) LHc_2-06-07_193
(318) Iisax iizc \({ }^{\circ}\) com hax mooxp oo.

3P-breast the.Hz Intns Px-white Dl
'Su pechuga es muy blanca.'
Its breast is very white. (Es2007, acaam_ccaa 03)

\subsection*{24.4.5 liha only}

The adverb iiha only, just has a semantic relationship to the direct object or indirect object rather than to the subject unless there is no object.
(319) Quisiil ctam z isiiho iiha ha.
child male a 3:3-Ir.Id-see only DCL
'Tendrá sólo un niño varón.'
S/he will have only a male child. RMH_05-20-08_159
(320) Ctam ih imiiho iiha. male Foc 3:3-Px-see only
'Tiene sólo un hijo varón.'
S/he has only a son. RMH_05-20-08_160
(321) Quisiil ctam zo hasiiht iiha ha.
child male a 1 PlS-Ir.Id-see-Pl only Dcl
'Tendremos (lit. Veremos) sólo un niño varón.'
We will only have a male child. RMн_05-20-08_161
(322) Hap yaao tazo hamiiht iiha.
mule.deer 3P-PON-UO.pass.by one 1PLS-Px-see-PL only
'Vimos la huella de un venado bura y nada más.'
We saw a mule deer's tracks and nothing else. (DS2005, ina) RMH_05-20-08_162
Tii toc cöquiij iiha ha.
DDS there 3IO-SN-sit only DCL
'Es el único / la única.'
It's the only one. RMH_05-20-08_163

\subsection*{24.5 Sentential adverbs}

Sentential adverbs, which are not numerous, are presented according to the category of meaning that they have. Their position in the sentence shows some flexibility.

\subsection*{24.5.1 Epistemic adverbs matix and poho}

The (infrequently used) epistemic adverb matix perhaps occurs clause-initially in finite clauses with a verb inflected for emphatic realis but interpreted (very interestingly) as a supposition about the immediate future.
(324) Matix áno tooit \({ }^{\circ}\) ma, hpxoofp. perhaps 3P.in Rl-arrive DS 1SGS.In-Em-arrive
'Posiblemente llegaré en la tarde.'
Maybe I'll arrive in the afternoon. RMH_05-20-08_164
a. Juan quih matix hap \(z\) ixoocö. the.Fl perhaps mule.deer a 3:3-Em-kill
b. Matix Juan quih hap \(z\) ixoocö.
c. * Juan quih hap zo matix ixoocö.
'Posiblemente Juan matará un venado bura.'
Maybe Juan will kill a mule deer. (a) (modified from DS2005, matix) RMH_05-20-08_165 (b) RMH_05-20-08_166
Juan quih Hezitmisoj quij iti siih caha.
the.Fl Hermosillo the.Cm 3P-on Ir.Id-be.Fl Aux.SN-Dcl
Matix \({ }^{\circ}\) ziix hapámalim \({ }^{\circ} z\) ixooho.
perhaps clown a 3:3-Em-see
'Juan estará en Hermosillo. Tal vez verá un payaso.'
Juan will be in Hermosillo. Perhaps he will see a clown. RMH_05-20-08_167
(327) Juan xah Pedro xah Hezitmisoj quij iti soii caha. Crd Crd Hermosillo the.Cm 3P-on Ir.Id-be.Fl.Pl Aux.SN-Dcl

\section*{Pedro quih matix \({ }^{\circ}\) ziix hapámalim \({ }^{\circ} \mathbf{z}\) ixooho. \\ the.FL perhaps clown a 3:3-Em-see RMH_05-20-08_168}
'Juan y Pedro estarán en Hermosillo. Posiblemente Pedro verá un payaso.'
Juan and Pedro will be in Hermosillo. Perhaps Pedro will see a clown.
The counterpart to matix in irrealis clauses, which is poho, is very common; it occurs following the inflected irrealis form (see §20.5), commonly eliminating the need for a modal.
\begin{tabular}{llll} 
(328) & Cofteecöl himcap cöhasitooij & poho. \\
& San.Esteban.Island DT-VT & 3IO-1PLS-Ir.ID-go.to-PL & DOUBT \\
& 'Tal vez debemos regresar a la isla San Esteban.' \\
& Maybe we should return to San Esteban Island. & \\
& & RMH_05-20-08_169
\end{tabular}

The word poho is also used in lieu of a simple affirmative modal on realis deverbal nouns.
(329) Zozni haa \begin{tabular}{rlll} 
poho & x, & Coniic haa poho. \\
SN.EQ & \begin{tabular}{l} 
DOUBT
\end{tabular} or & SN.EQ DOUBT
\end{tabular}
'Tal vez era Zozni, o tal vez era Coniic.'
Maybe it was Zozni, or maybe it was Coniic. (Gigante_Comelon_181-182) RRRecording
(330) Tiix taax czaxö poho. - ox yaza.

DDS DDP SN-Tr-discuss Doubt thus Dt-speak.Pl
'Tal vez está hablando de eso - dijeron.'
"Maybe he's talking about that," they said. (MA 16:7) RMH_05-20-08_170

\subsection*{24.5.2 Attitudinal adverbs mos and hacöa}

The adverb mos, which usually has the meaning also (see §24.2.6), sometimes occurs sentencefinally with the meaning so, then. \({ }^{35}\)
¿Zaah ihyaa \({ }^{\circ}\) quih imhaa -ya \(\quad \underline{\text { mos }}\) ?
watch mine the.FL SN-N-EQ QM
'Pues no es mi reloj?'
So it's not my watch?
```

The somewhat uncommon adverb hacöa indicates surprise or sadness. It occurs sentencefinally following a clause that has the main verb in the realis form with $\mathbf{t}$ - and a clause with the rare and otherwise undescribed adverb a.

[^146](332) Tacohot a, hacöa.

RL-marvelous ? (surprise/sadness)
‘¿Qué maravilloso!’
How wonderful! (Offered) RMH_05-20-08_172
(333) Taax oo cötquimjöc, ox tcooza a, hacöa, DDP DL 3IO-RL-US-think thus RL-US-speak.PL ? (surprise/sadness)

$$
\begin{array}{lll}
\text { ox xah } & \text { yee, } . . . \\
\text { thus } & \text { DT-say }
\end{array}
$$

'Dios mío, dicen que así están pensando, ...'
Oh my, they say they are making such plans, ... (Coyote_Pinacate_19_20a)

### 24.5.3 Exocomparative matix xah

The phrase (hax) matix xah (Intns perhaps Atten) occasionally is an adverbial phrase that modifies the sentence.

b. Tootar quih hax matix xah hyoohit.
'De vez en cuando como pollo.'
I occasionally eat chicken. (a) (DS2005, matix) RMH_05-20-08_173 (b) RMH_05-20-08_174
(335) ${ }^{\circ}{ }^{\circ}$ Matix xah ${ }^{\circ}$ xepe quih iteel com iti siifp ta $\quad$, ... occasionally sea the.Fl 3P-edge the.Hz 3P-on Ir.Id-arrive Aux.RL UT
'De vez en cuando llega a la orilla del mar, ...'
Once in a while it comes toward shore, ... (ES2007_caanj 3.1)

### 24.6 Adverb phrase adverbs

Some adverbs may be modified by other adverbs.

### 24.6.1 Attenuator $x a h$

The unstressed word xah is used as an attenuating modifier with certain adverbs. The effects of its use with these adverbs - both semantically and also morphologically - are presented in Table 24.1. The first group in the table do not show any morphological change when used with xah, and halx is unusual in this respect both semantically and morphologically when one compares what happens with other adverbs that have a consonant cluster.
(336) iXaa xah he camjc! soon Atten 1IO Im-bring
‘‘Tráemelo bastante pronto!’ RMH_05-20-08_176 Bring it to me fairly soon. (Offered)
(338) Toox xah cayaxi ha.
far Atten SN-measure Dcl
'No ha pasado mucho tiempo.
It wasn't a long time ago.
(Offered) RMH_05-20-08_178
(340) Halx xah maapl.
just Atten Px-cold
'Hace tanto frío.'
It is so cold! (DS2005, halx xah < halx) RMH_08-24-07_64b
(337) Toox xah caahca ha. far Atten SN-be.located DCL 'Está bastante lejos.'
It is fairly distant. (Offered) RMH_05-20-08_177
... toox xah tayaxi ma,... far Atten Rl-measure DS
'... por no mucho tiempo, ...'
... not for a long time, ...
(Gigante_Comelon_127)
Halx xah mcozim.
just Atten Px-hot.(weather)
‘ Hace tanto calor!'
It is so hot (weather)! RMH_08-24-07_64c
(342) Aamóo xah yoohca.
lejos+Mod Atten Dt-be.located
'Está un poco lejos.'
It is fairly far away. (DS2005, aamo) RMH_05-20-08_179
(343) Zimajöc $\underline{\text { xah }}$ yoofp.
long.ago+Mod Atten Dt-arrive
'Llegó hace bastante mucho tiempo.'
S/he arrived quite a while ago. (Offered) RMH_05-20-08_180
This adverb sometimes follows other words in the clause.
(344) a. Juan quih hacx xah zo ntica ha.
the.Fl apart Atten a Aw-SN-move Dcl
b. Juan quih hacx xah zo cazquim iha. the.Fl apart Atten a SN-enter DCL
'Juan debe estar lejos ahora.'
Juan must be far away now. RMH_08-24-07_58
The phrase cmaa iiquíi xah recently is a combination of the attenuator xah with the phrase cmaa iiqui (not easily translated nor clearly understood).
(345) Cmaa iiquíi xah ${ }^{\circ}$ Hant Ihiin ihyoyaai. recently Baja.California 1SGS.Tr-Dt-go.to
'Hace poco viajé a Baja California.'
I recently went to Baja California. (DS2005, cmaa) RMH_05-20-08_181

| Table 24.1: Adverbs modified with attenuating modifier xah |  |  |  |
| :--- | :--- | :--- | :--- |
| xaa | soon | xaa xah | fairly soon |
| toox | far | toox xah | fairly far |
| halx | just | halx xah | so |
| aamo | far | aamóo xah | fairly far |
| cola | high | coláa xah | fairly high |
| colx | high | colax xah | fairly high |
| zimjöc | long time ago | zimajöc xah | fairly long time ago |
| anxö | INTNS | anaxö xah | fairly InTNS |
| hantáxl | near | hantáxal xah | fairly near |
| miizj | well, carefully | miizaj xah | fairly well, fairly carefully |

Other combinations of adverbs are given in (346). The modifying adverb precedes the head, consistent with the head-final structure of the language.

|  | Modifier | Base <br> cmaa now |
| :--- | :--- | :--- |
| a. | hax InTNS | cooc almost |
| b. | halx just | mos also |
| c. | haptco already | miizj well |
| d. | hoox InTNS | anxö INTNS |
| e. | hoox InTNS | anxö InTNS |
| f. | zóo how much! |  |

Combination
hax emaa right now
halx cóooc soon
haptco mos again already
hoox miizj precisely
hoox anxö so much ${ }^{36}$
zóo anxö (not) so much
© $^{\circ}$ Zó tpacta ma ${ }^{\circ}$ hoox anxö intoohit? why? Intns Intns 2SGS-Rl-UO-eat
¿¿Por qué comes tanto?'
Why do you eat so much? RMH_05-20-08_182
(348)
¡Zóo anxö casi! coox insiisi xo tax.
how.much! Intns Im-drink all 2SgS-Ir.Id-drink Em Sbrd
¡No bebas tanto! ¡Vas a tomar todo!’
Don't drink so much! You're going to drink all of it! RmH_05-20-08_183
The intensifying adverb ipi, however, follows the adverb that it modifies. This adverb is discussed in more detail in §24.2.11.

[^147](349) Cói miizj ipi icaatax iyomaa. still well Intns Inf.In-go 3:3-Dt-N-know
'Todavía no puede caminar muy bien.'
S/he still can't walk very well. RMH_05-20-08_184

### 24.7 Interrogative adverbs

Two interrogative adverbs occur in questions: zímjöc when? and zó how? These are discussed in §6.2.1.4 and §6.2.1.6.

### 24.8 Periphrastic adverbial expressions

Besides simple adverbs, there are common but complicated ways to modify verbs using clausal expressions.
(350) without permission

Hans ${ }^{\circ}$ isoj itcazit ${ }^{\circ}$, haaco cop án cöyoozquim. just 3P-self 3:3-Rl-grab Abs.house the.Vt 3P.interior 3IO-Dt-enter
'Entró la casa sin permiso.'
S/he entered the house without permission. RMH_05-20-08_185
(351) surreptitiously
${ }^{\circ}$ Misoj intcooz ${ }^{\circ}$, án conyoozquim.
2P-self 2SGS-RL-rob 3P.interior 3IO-2SGS-DT-enter
'Entraste la casa sin ser detectado.'
You entered the house surreptitiously. RMH_05-20-08_186
(352) surreptitiously
${ }^{\circ}$ Isoj itcooz ${ }^{\circ}$, án cöyoozquim.
3P-self 3:3-RL-steal 3P.interior 3IO-Dt-enter
'Entró sin ser detectado.'
S/he entered the house surreptitiously. RмH_05-20-08_187
(353) quickly
${ }^{\circ}$ Hax íiqui pajoz ${ }^{\circ}$ ta $\mathbf{x}$, spaxi caha.
Intns 3P-toward Ir.Dp-flee DS UT Ir.Id-Pv-finish Aux.SN-DcL
'Se terminará rápido.'
It will be finished quickly. RMH_05-20.08_188
Other expressions of this type include: Tinzaait, ... (Rl-do.with.care) Carefully...; Hax tmaai oo, ... (Intns Rl-silent DL) Silently, ...; Hax taafzx oo, ... (Intns Rl-fast Dl) Quickly / Suddenly....

Expressions for always and never are more complicated.
(354) always

He hax taticpan oo, hant zo cöquiij iha.
1Pro Intns Rl-work Dl place a 3IO-SN-sit Dcl
'Siempre estoy trabajando.'
I am always working. RMH_05-20-08_189
never
He hicmiiquet cah ${ }^{\circ}$ hant ihyomaamac ${ }^{\circ}$.
1PRo 1P-PON-be.person the.Fl-Foc I. have.not.cooked.century.plant
'Nunca he cocido maguey.'
I have never cooked maguey. (DS2005, caamac) RMH_07-11-07_25e
Adverbial notions may also be expressed with postpositional phrases or main verbs, as the following examples illustrate.
quickly
Hai cop intooit ma, cöihaafzx hac iti
air the.VT Twd-RL-arrive DS 3IO-3P-PON-fast the.LC 3P-on

| hoocala | cötaanim ma, hant com tcooo, yicopol. |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| cloud | 3IO-RL-covered | DS | land | the.HZ RL-all | DT-dark RMH_05-20-08_190 |

'Cuando vino el viento, muy pronto se puso nublado y toda la tierra se oscureció.'
When the wind came, it quickly got cloudy and all the earth became dark. (DS2005, caafx)
(357) Hast quij cöiixquim hac imacaaixaj.
stone the.CM 3IO-3P-PON-throw the.Lc 3:3-Px-make.strong
'Arrojó la piedra con fuerza.'
S/he threw the stone hard. RмH_05-20008_191
The idea of seldom is expressed with a negative main verb and dependent clause that has the verb intipa or intita (each followed by the appropriate Different Subject marker, §3.6.1) and each usually with reduced stress. These are evidently forms of the verb meaning go, Aw-Ir.Dpmove and Aw-RL-move, respectively. The negation usually requires the irrealis form, but if it is not immediately adjacent, the realis form may appear, as in (358). These verb forms do not change for person in this construction.
(358) He ${ }^{\circ}$ ziix ccam ${ }^{\circ}$ intita mapaho zo he imhaa ha.

1Pro animal Aw-Rl-move DS SN-Pv-see a 1Pro SN-N-EQ Dcl
'Soy un animal que raramente se ve.'
I am an animal that is seldom seen. (Lagartijas 02)
Intìpa ta nyompaho.
Aw-Ir.Dp-move DS 2SGS-Dt-N-Pv-see
'Raras veces te ves.'
You are seldom seen. RMH_05-20-08_192
(360) Intìpa ta ma hyomaho.

Aw-Ir.Dp-move DS 2SGDO 1SGS.Tr-Dt-N-see
'No te veo con frecuencia.'
I don't see you very often. RMH_05-20-08_193
(361) Intìpa ta hpyomiim. (362) Intìpa ta nyomiim.

Aw-Ir.Dp-move DS 1SGS.In-Dt-N-sleep Aw-Ir.Dp-move DS 2SGS-Dt-N-sleep
'No duermo con frecuenca.'
I seldom sleep. RMH_05-20-08_194
'No duermes con frecuencia.' You seldom sleep. RMH_05-20-08_195
(363) Intipa ta yomiim. Aw-Ir.Dp-go DS Dt-N-sleep 'No duerme con frecuencia.'
S/he seldom sleeps. Rмн_05-20-08_196

## (364) Intìpa ta yomcozim.

Aw-Ir.Dp-go DS Dt-N-hot.weather 'Casi nunca hace calor.' RMH__05-20-08_197 It is hardly ever hot (weather).
(365) He ziix intìpa ta quiim $z$ imhaa ha. 1Pro thing Aw-Ir.Dp-go DS SN-sleep a SN-N-EQ DCL
'Soy uno que no duerme con poca frecuencia.'
I am one who seldom sleeps. RMH_05-20-08_198

## 25. Coordinators and subordinators

Three coordinators exist: nominal coordinator xah and, or $(\S 25.1)^{1,2}$ and clausal coordinators adversative $\mathbf{x o}$ but (§25.2) and alternative $\mathbf{x}(\sim \mathbf{t x})$ or (§25.3). A few clausal subordinators (§25.4) exist although, as demonstrated in chapter 3, most subordinate clauses are presented without any subordinator.

### 25.1 Nominal coordinator xah

The word xah (sometimes pronounced xaha) coordinates nominals, whether names, determiner phrases (including pronouns) or clauses headed by deverbal nouns. It is an unstressed word that is pronounced in the same intonational phrase with the word that precedes it. Four simple examples are given in (1)-(4); examples with common determiner phrases are presented later.
(1) Names

(2) Pronouns


[^148](3) Pronouns
Tiix $\quad \underline{\text { xah }}$, he $\quad \underline{\text { xah }}, ~$ he $\quad$ smalx
DDS $\quad$ CRD
2Pro
'Aqd
CRDél(la) y yo (o nosotros) no iremos.'
S/he and I/we will not go.
(4) Clauses headed by deverbal nouns

'Toda la gente lo vieron andar y alabar a Dios.'
All the people saw him walking and praising God. (NTT, Ac 3:9)
The coordination is typically polysyndetic, with xah following each coordinated phrase, as depicted in Figure 25.1 for coordinated pronouns. ${ }^{3}$ The coordinated phrases are quite often in initial position and followed by a focal demonstrative pronoun (§16.2.4), as shown in examples (5)-(8), or followed by the quantifying pronoun coox all (§16.3), as in (9).

## Figure 25.1: Coordinated pronouns



[^149](5) Comitin xah, haas xah, taax ah iti hamom. ironwood CRD mesquite CRD DDP Foc 3P-on 1SGS.In-Px-lie 'Estoy en el PALO FIERRO y el MEZQUITE.'
I am on the IRONWOOD tree and the MESQUITE tree. (Lagartijas_28)
(6) Juana $\underline{x}$, Roberto $\underline{x}$, tah, tax cöhacailajc.
CRD CRD DDP 3IO-Im-make.strong-PL
‘‘Saluden a Juana y Roberto!’
Greet (pl.) JUANA and ROBERTO! (DS2010, xah)
(7) ... hantíp xah, icaaisx ${ }^{\circ} \underline{\text { xah, taax }}$ mos tom cah cöhamaaipt. salt CrD soap CrD DDP also money the.Fl-Foc 3IO-1PlS-Px-pay-Pl '... SAL y JABÓN - los compramos también con dinero.' ... we also pay for SALT and SOAP with money. (HE_167)
 red.snapper CRD spotted.cabrilla CRD Gulf.grouper CRD
taax immís iha, ...

DDP SN-Tr-N-resemble DCL
'... no se parece a la del HUACHINANGO, la CABRILLA o la BAYA.'
... does not resemble that of the RED SNAPPER, the SPOTTED CABRILLA or the GULF GROUPER. (ES2007, xpeezoj)
(9) Xaasj xah, ool xah, coox oo cmiique ${ }^{4}$ ha. sahueso CRD pitaya CRD all DL person DCl 'El sagueso y la pitaya, eran todos personas.'
The sahueso and the pitaya, they were all people. (Hipocampo_22)
The coordinated nominal may be right-dislocated (§3.12), as in (10).
(10) Ano siizcam aha, Łzixcám ${ }^{\circ}$ cacöla」 xah, caanlca xah. 3P.in Ir.ID-arrive-Pl Aux-DCL totoabas CRD Gulf.grouper-Pl CRD 'Las totoabas y las bayas llegarán entre ellos.'
Totoabas and Gulf groupers will arrive among them (other fish). (Fishing_26)
Examples like (5) above demonstrate that the coordinator must be interpreted pragmatically since the coordination is not necessarily universal. In this case, a particular lizard is not simultaneously in both kinds of trees but as a species it is found in both kinds.

Example (8) illustrates that the coordinated phrases may relate to a negative verb and then actually be a disjunctive set rather than a conjunctive set. This type of interpretation is developed

[^150]a bit more later in this section.
When the coordinator occurs at the absolute end of a coordinated element, as discussed below and shown in (11), it often has the phonetic form [ $\chi \mathrm{a}$ ?a] and some writers prefer to spell it with the final vowel in those cases.
 beds CRD mat(s) CRD DDP 3P-on 3:3-DT-put.Hz-PL-ImPF
'Los pusieron en CAMAS y CAMILLAS.'
They put them on BEDS and MATS. (NTT, Ac 5:15)
A coordinated phrase that is to be interpreted as a conjunction (the and meaning) requires plural agreement on the relevant predicate. Note that in (2-3), for example, the verb has a plural stem. Example (12) demonstrates the ungrammaticality of using a singular stem.

```
* Me xah he xah sitax caha.
    2Pro Crd 1Pro Crd Ir.Id-go Aux.N-DCL
('Tú y yo iremos.') (You and I will go.)
```

As is shown later in this section, the coordinator may be interpreted disjunctively, but special clues are typically given in the sentence to indicate that meaning. ${ }^{5}$ For example, in examples (13)-(14) the words háqui quij which one? and zo one are used. In these situations the verb is singular, agreeing with the singular subject.

| ¿He $\mathbf{H a h}$, | me | xah, | háqui quij | siitax | queeya? |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1PRO | CRD | 2PRO | CRD | which? | the.CM | Ir.ID-go | AUX.N-QM | ‘¿Cuál de tú y yo va a ir?'

Which of us (you or I) is going to go? RRR 10May2010

| He | xah | me | xah | zo | haa | piij | $\mathbf{x}$, | siitax | caha. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1PRO | CRD | 2PRO | CRD | a/one | there | IR.DP-sit | UT | Ir.Id-go AUX.N-DCL |  |
| 'Uno de nosotros (tú o yo) va a ir.' |  |  |  |  |  |  |  |  |  |
| One of us (you or I) will go. | RRR 10May2010 |  |  |  |  |  |  |  |  |

Indefinite determiner phrases are not coordinated syntactically. There are no acceptable sentences with the coordinator xah that contain an indefinite determiner: ... zo xah, ... pac xah, ... xah zo, or ... xah pac. ${ }^{6}$ See ungrammatical example (15).

[^151](15) * Miist xah zo haxz ${ }^{\circ}$ xah zo toc cötoii, ... cat Crd a dog CRD a there 3IO-RL-stand.PL
('Había un gato y un perro, ...') (There was a cat and a dog, ...)
To express an $X$ and $a Y$, entirely different constructions are used that do not involve coordination. One construction that is used when indefinite DPs are involved, as well as in some other situations discussed below, is essentially $A n X$ was with a $Y$, they .... This construction is illustrated by examples (16)-(17).
(16) Haxz ${ }^{\circ}$ heeque zo ziix canaao heeque zo cötiih (*ma), dog juvenile a cat juvenile a 3IO-RL-be.FL DS Łhehe zamij」com án hac ano moii. box the.Hz 3P.place.inside the.Lc 3P.in Px-be.Fl.PL
'Un perrito y un gatito están en la caja.'
A puppy and a kitten are in the box. More literally, A puppy is with a cat, they are in the box.
(17) Moxima ctam zo cmaam zo cötiih (*ma), yesterday man a woman a 3IO-RL-be.FL DS
xepe an hant yahjcooil.
sea 3P.in land Dт-fall.PL
'Ayer un hombre y una mujer se cayeron al mar.'
Yesterday a man and a woman fell into the sea. ${ }^{7}$
Example (18)-(19) show that this same construction may be used with definite nominals.
Juan quih haxz ${ }^{\circ}$ iixz quih cötiih (*ma), miilx.
the.Fl dog 3P-pet the.Fl 3IO-Rl-be.Fl DS Px-go.Pl
'Juan se fue con su perro.'
Juan went with his dog.
Ł Zixcám ${ }^{\circ}$ coospoi」 quih, caanlca quih,__zixcám ${ }^{\circ}$ caacöll $\lrcorner$ quih spotted.cabrilla the.FL Gulf.grouper-PL the.FL giant.sea.basses the.FL
cötiih, iti moii, xatj quij.
3IO-Rl-be.Fl 3P-on Px-be.Fl.Pl reef the.CM
'Cabrilla pinta, bayas y pescadas estaban en el tepetate.' Spotted cabrillas, Gulf groupers and giant sea bass were in the fishing spot.

The construction is interesting and a bit opaque. As becomes clear when other examples are examined, the subject of the dependent clause is the first nominal -X is with $\mathrm{Y}-$ although

[^152]morphologically it could just as well be the opposite ( Y is with X ). Note that in (21) the dependent clause is inflected for first person singular subject. The dependent clause has a singular verb but the main clause has a plural verb. Nevertheless, and despite usual expectations about Different Subject marking (§3.6), DS marking does not occur on the dependent clause in these examples.

This biclausal construction is also sometimes used with the coordinator xah. The first nominal (and sometimes the second nominal as well - see (29) below) is presented with the coordinator xah as the subject of the dependent clause. See examples (20)-(22).
(20) Canoaa $\underline{x a h}^{8}$ com cyaa quih cötiih, Xnapofc ano moii. boat $\quad$ CRD the.Hz SN-Tr-own the.Fl 3IO-Rl-be.Fl 3P.in Px-be.Fl.Pl 'La panga y su dueño están en Xnapofc.'
The boat and its owner are at Xnapofc.
(21) He xah Pedro quij iiqui cohpiih, ${ }^{9}$ 1Pro Crd the.Cm 3P-toward 3IO-1SgS.In-Ir.Dp-be.Fl
hasaanipxat aha.
1PLS-Ir.ID-return.home AUX-DCL
'Pedro y yo regresaremos a casa.'
Peter and I will return home.
(22) Heecot hatìihtoj, toc conthamat, cmiique Roberto desert 1PlS-Rl-be.Fl-Pl.ImpF there 3IO-Aw-1PlS-Px-go-Pl person/Seri

'Andábamos de cacería en el monte - Roberto, Pedro, Juan y yo.' We hunting in the desert - Roberto, Pedro, Juan, and I.

Another construction is used in other circumstances to express coordination. This construction simply puts each noun phrase in a separate clause. See examples (23)-(24).


[^153]'Mañana compraré una cama y una cobija.'
Tomorrow I will buy a bed and a blanket.
(24) Canoaa com ihtemaho, cyaa quij mos ihtemaho ho. boat the.Hz 1 SGS .Tr-Rl-N-see $\mathrm{SN}-\mathrm{Tr}-\mathrm{own}$ the.Cm also 1 SGS .Tr-Rl-N-see Dcl 'No encontré ni la panga ni el dueño.'
I didn't find either the boat or its owner.

### 25.1.1 Position of the coordinator

When the coordinator occurs with a determiner phrase, the coordinator obligatorily occurs to the left of the article, as illustrated in examples (25)-(26) and depicted in Figure 25.2. Any other position for the coordinator is unacceptable.

```
\iotaXiica quih quiistox^quih &hantx mocat」 xah,
people the.FL ancestors CRD
    \iotaxiica quih quiistox^quih \iotacmaa quiih }\lrcornerquih chaa xah com, ...
    people the.FL new the.FL SN-EQ CRD the.Hz
'Los ancestros y la gente de hoy en día ...'
The ancestors and the people of today ... (ES2007, xpeezoj_11)
```


# Jesús xah quij, Łxiica ziix quih cöiyacoaatim」 xah coi cötiih, 

``` CRD the.Cm her/his.disciples CrD the.Pl 3IO-Rl-be.Fl
\[
\begin{array}{lllllll}
\text { Mateo } & \text { quih } & \text { yaaco cop ano toii, } & \text {... } \\
& \text { the.FL } & \text { 3P-house the.VT in } & \text { RL-be.FL.PL }
\end{array}
\]
'Jesús y sus discípulos estaban en la casa de Mateo, ...'
Jesus and his disciples were in Matthew's house, ... (NTT, Mt::10)
```

When the coordinator follows a determiner phrase that ends in a demonstrative adjective that is structurally a combination of a locative plus article (see §21.3), the coordinator interposes between the locative and the article (the result written here as a single word); see examples (27)(29). Any other position for the coordinator is unacceptable.

Zaah hipxahcop, thant ifii xah cop, hant $z$ iic hapitooij, ... sun/day Px-Crd-Vt tomorrow Crd the.Vt place a 3P-toward 1PlS-Ir.Dp-go.Pl 'Hoy o mañana viajaremos a algún lugar, ...'
Today or tomorrow we will travel somewhere, ... (Ja 4:13)
Cmiique
person/Seri
coox 0 cöicaahit hac ...
all DL 3IO-3P-PON-US-fish the.LC

'Tanto Roberto como Martín, con respecto a la pesca ...' Both Roberto and Martin, with respect to fishing ...

'... ese niño y su madre’
... that child and his mother ... (adapted from Mt $2: 14 \mathrm{NTT})$

### 25.1.2 Existential interpretation

The coordinator may have an existential (or) interpretation rather than a universal interpretation when the situation would require it pragmatically, as in examples (30)-(33) and also example (8) above.
(30) ¿Háqui quij me siihit quee -ya? which.one? the.Cm 2Pro Ir.Id-eat Aux.SN QM

| ¿Sahmees <br> orange | $\underline{\text { xah }}$ | quij, | Lxonj itaast cmis $\lrcorner$ | $\underline{\text { xah }}$ | com? |
| :--- | :--- | :--- | :--- | :--- | :--- |
| the.CM | banana |  |  |  |  |

¿¿Cuál vas a comer? - ¿La naranja o el plátano?’
Which are you going to eat? - The orange or the banana?

[^154]'... por tres o cuatro días, ...'
... for three or four days or so, ... (ES 2007, oot hant máaquim_1)

Łxiica quih quiistox $\lrcorner$ quih $\llcorner$ cmaa quiih $\lrcorner \frac{\text { xah }}{C R D}$ com cöpaticpan, ipoocötoj, cöimitalhaajö iha. 3IO-Ir.Dp-work 3:3-Ir.Dp-kill-PL 3IO-SN-Tr-N-buy/sell.PL DcL
'Ni los ancestros ni esta generación lo "trabaja", ni lo mata, ni lo vende.'
Neither the ancestors nor the people of the present generation fish for it, kill it or sell it. (Es2007, xpeezoj_11)
(33) ¡Sahmees quih coocj $\underline{\text { xah }}$ capxa $\underline{\text { xah, }}$ camjc! orange(s) the.FL SN-two Crd SN-three Crd Im-take/bring
‘‘Traiga dos o tres naranjas (más o menos)! ’
Bring two or three (viz., a few) oranges!
In some examples with an existential interpretation the final coordinated nominal is not followed by xah and in fact cannot be followed by xah. In these cases the lack of a final coordinator implies exactness. This is expecially clear when numbers (in a denominal form) are involved and which are modifying a single noun. See examples (34)-(37), and especially compare (34) with (33) above.

```
¡Sahmees quih coocj xah capxa camjc!
    orange(s) the.Fl SN-two CrD SN-three Im-take/bring
    ``Traiga (exactamente) dos o tres naranjas!'
    Bring two or three (no more and no less) oranges!
```

(35) Hasaamilc ${ }^{\circ}$ czooxöc $\underline{\text { xah }}$ cooitom xah เisnaap cazoj」 quih
limberbush.rolls SN-four $\overline{\text { CRD }}$ SN-five $\overline{\text { CRD }}$ six the.FL

```
tpazyax,
RL-Pv-saw-ImP
```

'Cuando se han cortado cuatro, cinco o seis rollos (exactamente) de torote, ...'
When four, five, or six bundles (exactly) of limberbush have been cut, ...

```
... hant tazo xah hant coocj itaao ma, ...
    year one CRD year SN-two 3:3-RL-pass.by DS
    `... viajó por uno o dos años,...
    ...he traveled for one or two years, ... (Apostador_29, edited)
```

Ziix quih hasaii hapáh quih, tiix
thing the.Fl SN-Pv-remove.with.pole SN-Pv-say the.Fl DDS

'Lo que se llama "hasaii" es lo que uno saca con un pollero o un palo largo, ...' What is called "hasaii" is what the thing is called when one takes it out with a fishing spear or a long pole, ... (ES2007, satoj_hasaitit_18)

In example (38) the conjoined nominals with an or interpretation are followed by the indefinite pronoun zo that is the subject of the singular verb $\sqrt{\text { yaai. In (39) the conjoined }}$ nominals are the direct object of the verb.
(38) Xavier xah, Pedro xah, zo Hezitmisoj syaai caha. CRD CRD a/one Hermosillo Ir.Id-travel.to Aux.SN-Dcl
'O Xavier o Pedro viajará a Hermosillo.' Either Xavier or Pedro will travel to Hermosillo.
Zixcám $^{\circ} \underline{\text { xah, ziix }}$ ipxasi $\underline{\underline{\text { xah }}}$, zo nsiihit poho.
fish Crd thing 3P-flesh Crd a/one 2SGS-Ir.Id-eat Doubt
'Tal vez comerás pescado, o tal vez comerás carne.'
Maybe you will eat fish, or maybe you will eat meat.
Modifiers of a noun may be coordinated: simple noun phrases, as in (40), or deverbal noun phrases in a relative clause construction (see Figure 8.5), as in (34) above. See Figure 25.3.

Icaaitom ${ }^{\circ}$ quih imiipe quih เiti miiha」 cmaam xah ctam xah quij word the.Fl SN-N-good the.Fl his/her.parent female and male Crd the.Cm

| coczaxö | zo | haquix | piih | $\mathbf{x}$, | $\ldots$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $3 I O-S N-T R-d i s c u s s ~$ | a | Somewhere | IR Dp-be.FL | UT |  |

'Si hay alguien que maldiga a su madre o a su padre, ...'
If there is someone who curses his mother or father, ... (NTT, мk7:10)
In example (41) the coordination is inside the possessor phrase. ${ }^{11}$ (The asterisked material in parentheses indicates an addition that would be ungrammatical.)

[^155](41) [ Tosni xah honc (*xah)] ina quih เano cötahníp」 ma $\mathbf{x}$, ... pelican CRD gull CRD 3P-feather the.FL 3P.in 3IO-RL-Pv-hit DS UT
'La pluma de un alcatraz o de una gaviota se le fue insertado, ...'
A pelican or gull feather was put into it, ... (ES2007, haxolinaaic_8b)
If the situation requires an absolutely clear and unambiguous or interpretation, the sentence is usually cast in a different way, as in (42)-(43).
(42) Hant tintica cömihaait hac,
land MD-Aw 3IO-2P-PON-pass.by.PL the.LC

| tom | cooxp | zo | mapomoonec, |
| :--- | :--- | :--- | :--- |
| money | SN-white | a | 2PLS-IR.DP-N-carry.items-PL |

hooro zo mapomoonec,
gold a 2PLS-Ir.Dp-N-carry.items-PL
tom cheel zo mascmoonec aha.
money SN-red a 2PLS-Ir.ID-N-carry.items-Pl Aux-Dcl
'Cuando viajan, no lleven plata ni oro ni cobre.'
When you (pl.) travel, don't carry any silver or gold or copper. (NTT, Mt 10:9)
(43) Miist zo toc cötiij (*ma), haxz ${ }^{\circ} \operatorname{mos}$ zo toc cötiij, yoque. cat a there 3IO-RL-sit DS dog also a there 3IO-RL-sit DT-US-say 'Había un gato y un perro.'
There once was a cat and a dog.

Figure 25.3: Coordinated NP modifier in (40)


### 25.2 Clausal coordinator xo

The only common clausal coordinator is the adversative xo but. It occurs between two structures, each of which could be an independent sentence and could contain multiple clauses by the principles outlined in chapter 3. See examples (44)-(47).
(44) Misil $\underline{\text { xo }}$ maziim.

Px-small but Px-pleasant
'Es pequeño/a pero es bonito/a.'
It is small but it is pretty. (DS2010, xo)
(45) Cmaacoj iha $\underline{x} 0$ hoox oo misil.
old.man Dcl but Intns Dl Px-small
'Era un adulto pero era muy pequeño.'
He was an adult man but he was very small. (edited version of Muerte_Cöquimaxp_56)
(46) ..., eenim ih ititaamt, yoque xo tascax, yoque.
metal Foc 3:3-Rl-have-sandal(s) Dt-US-say but Rl-tear.Pl Dt-US-say
'..., llevaba huaraches de metal, se dice, pero se desintegraron, se dice.'
..., he wore metal sandals, it is said, but they ripped, it is said. (Apostador_31-32)
Xapoo quih imiiitoj $\underline{\text { x } 0}$
sea.lion the.FL 3:3-Px-eat-Pl but


| tojocam, hast | ihmaa | himcap | iiqui | mitooij. |
| :--- | :--- | :--- | :--- | :--- |
| RL-flee-PL mountain | other | DT-VT | 3P-toward | Px-RL-go.PL |

'Comían lobo marino, pero acabaron con los lobos marinos que había, huyeron [los lobos marinos que quedaban] y fueron hacia ese otro cerro.'
They were eating sea lions, but they depleted the sea lions that were there, they [the remaining sea lions] fled and went toward that other mountain. (Muerte_Cöquimaxp_5)

This coordinator has been observed being pronounced more closely with the first sentence (with a slight pause after $\mathbf{x o}$ ) in some cases, ${ }^{12}$ and with the second sentence (with a slight pause before $\mathbf{x o}$ ) in others. This phonetic evidence, plus the lack of clear syntactic evidence that the coordinator actually forms a syntactic structure with either the first sentence or the second, may indicate that a structure such as in Figure 25.4 is appropriate.

While examples with $\mathbf{x o}$ at the beginning of a sentence have not been seen or overheard, an elicited example such as (48) was judged a grammatical response to a statement such as Your car

[^156]is little. However, as a consultant explained, this utterance is given as if one were completing the utterance that another person has started.
(48) Xo miixaj.
but Px-strong
'Pero es fuerte.'
But it's strong.

### 25.3 Clausal coordinator $\mathbf{x}$ (tx)

Two independent clauses may be coordinated by the relatively uncommon word, which always has the meaning or. ${ }^{13}$ This word is the modern version of what was $\mathbf{t x}$ in the speech of a previous generation (still recognized but generally considered old-fashioned). ${ }^{14}$ The coordinator may appear after both coordinated clauses or it may appear only after the first one. It is pronounced as an enclitic to the preceding word, which is always the last part of an independent clause. The syntax of coordination with this coordinator is presumed to be as shown in Figure 25.5. See examples (49)-(53).
(49) $\left\llcorner\right.$ Hai xepe imac quiij ${ }_{\wedge}$ xah quih immooit $\underline{\mathbf{x}}$;

| west.wind | - | the.FL | TWD-PX-arrive | or |
| :---: | :---: | :--- | :--- | :--- | :--- |
| $\left.\begin{array}{lllll}\text { haapa } & \text { xah } & \text { quih } & \text { immooit } & \underline{\mathbf{x}} . \\ \text { northwest.wind } & - & \text { the.FL } & \text { TWD-PX-arrive } & \text { or }\end{array} . \begin{array}{llll} & & \end{array}\right)$ |  |  |  |  |

Figure 25.4: Adversative coordination with xo


[^157]'El viento del oeste llega o el viento del norte llega.'
The west wind comes or the northwest wind comes. (ES2007, hant_quxoaa_07)
(50) Cmiique caii quij isiihit ta $\mathbf{x}$, person/Seri mature the.Cm 3:3-IR.Id-eat Aux.Rl UT

| imamaai | $\underline{\mathbf{x}}$, | imiiznij | $\underline{\mathbf{x}}$. |
| :--- | :--- | :--- | :--- |
| 3:3-Px-roast | or | 3:3-Px-stew | or |

'Para comerlo, el adulto lo cocina con lumbre encima o lo guisa.'
To eat it, an adult cooks it with a fire on top or stews it. (ES2007, satoj_hasaitiaj_08)
(51) Ihpsiitax poho tx, ihpscmatax poho.

1SgS.In-Ir.Id-go Doubt or 1SGS.In-Ir.Id-N-go Doubt
'Tal vez iré, o tal vez no iré.'
Maybe I'll go or maybe I won't go.
(52) iMe nsiitax haa -ya tx? ¿Juan quih siitax haa -ya?

2Pro 2SGS-Ir.Id-go Aux QM or the.Fl Ir.Id-go Aux QM
‘¿Vas a ir tú o va a ir Juan?’
Are you going or is Juan going?

```
    ¿Hipcom haa -ya tx? ¿Himcom haa -ya?
    Px-Hz Aux QM or Dt-Hz Aux QM
    `¿Es éste o es ése?`
    Is it this one or is it that one?
```


### 25.4 Subordinators

While adverbial clauses commonly do not have any overt subordinator (see §3.8), some clauses occur with overt subordinators. The clauses with subordinators may be headed by finite verbs (§25.4.1) or by deverbal nouns (§25.4.2).

[^158]

### 25.4.1 Subordination of independent or finite clauses

Three subordinators are commonly used with clauses headed by finite verbs: yax because, since, tax (no good translation - glossed here with Sbrd), and xox although.

The subordinators yax and tax subordinate independent clauses to the main clause. (Actually, since the independent clauses may have one or more dependent clauses associated with them, these subordinators potentially relate one complex set of clauses to another set.)

A clause subordinated by yax generally gives the circumstances that are a reason for the situation described in the independent clause. Some examples are given in (54)-(57).
(54) Cmiique cmaam quij haptco moos yax, hant $z$ iiqui miin. person/Seri woman the.Cm already Px-sing because place a 3P-toward Px-go 'Porque la mujer seri ya había cantado, se fue.'
Because the Seri woman had already sung, she left.
(55) Hipi hyaa ${ }^{\circ}$ ha yax, ihmexl.

Intns mine Dcl because 1SgS.Tr-Px-take
'Como era mío, lo tomé.'
Since it was mine, I took it. (DS2010, yax)
(56) Caay cop catol iha yax, hehe iiqui yahahizj. horse the.VT SN-wild DcL because plant/post 3P-toward DT-Pv-cause.tied.up 'El caballo fue amarrado al poste porque es bronco.'
The horse was tied to the post because it is wild. (DS2010, caniz)
Roberto quih siifp caha yax, the.Fl Ir.Id-arrive Aux.SN-Dcl because
comcaac coi hax ¿caaha iyoaaj $\lrcorner$.
person.Seri.Pl the.Pl InTNS they.get.ready
'Desde que Roberto llegará, la gente se está preparando.'
Since Roberto will arrive, the people are getting ready.

The subordinate clause is occasionally postposed to sentence-final position, as in (58).
(58) Tiix iiquet ${ }^{\circ}$ quih itaho, เiisax cöxooptxö ${ }_{\lrcorner}$, DDS her.child the.FL 3:3-RL-see $\mathrm{s} /$ he.is.gleeful
cooc imaho ha yax.
almost SN-Tr-N-see DCL because
'Cuando vio a su hija/hijo, estuvo muy contenta porque hacía mucho que no la/lo había visto.'
When she saw her child, she was very happy because it had been a long time since she had seen her/him. (DS2010, captxö)

The syntactic properties of the subordinator tax are similar to those of yax, but it does not indicate any clear semantic relationship between the two clauses. The two clauses are in fact not tightly bound phonetically when the clause with tax follows the other. See examples (59)-(65).
¡Xcoomoj quij ihsáp! xomiipla tax.
fly the.Cm Im-shoo Em-bad SBRD
'Quita la mosca! ¡Es tan fea!'
Shoo away the fly! It's so ugly!
(60) Hamaticpan tax, tom coi he quiizitoj iha.

1PlS-Px-work Sbrd money the.Pl 1Pro SN-Tr-defeat/earn-Pl Dcl
'Trabajamos y ganamos dinero.'
We work and earn money.
(61) Hai quih taaixaj, halx xah xajoeene tax, wind the.Fl Rl-strong Intens Atten Em-raise.dust Sbrd
haaco cop ano scoii.
Abs.house the.VT 3P.in Ir.Id-1Em.S.In-be.Fl.Pl
'El viento está fuerte y levanta mucho polvo; quedémonos en la casa.' The wind is strong and is raising lots of dust; let's stay in the house.
(62) Hácalca quih anxö imxanoocaj tax, Abs.clothing the.Fl Intns 2SGS-Em-carry.in.arms Sbrd
pac mahsaconxot.
some 2SGDO 1SGS.Tr-Ir.Id-help.carry
'Estás llevando mucha ropa; te ayudaré a llevarla.'
You are carrying lots of clothing; I will help you carry it. (DS2010, caconxot)
(63)

```
Zixquisiil }\mp@subsup{}{}{\circ}\mathrm{ quij hizac iti hcaaix, saalim,
    child the.Cm Px.LC 3P.on Im-put.Cm Ir.Id-play
```


## him xomasnaapitim tax.

1SgDO Em-N-bother-Impf Sbrd
'Pon el niño aquí para jugar, no me molesta.'
Put the child here to play since s/he doesn't bother me. (DS2010, casnaapit)
(64) Xazoj ilít zo toc cöyiij tax, hapx ihcaaitajc.
puma 3P-head a there 3IO-Dt-sit Sbrd outside Im-put.Cm-Pl
'Hay una cabeza de puma allí, ¡sáquenla!'
There is a puma's head there, take it out! (Conejo_Puma_12)
(65) Intisil, haquix immiih tax, ¿áz haxehe chaa -ya 2SGS-RL-small somewhere 2SGS-Px-be.FlSbrd what? Intns SN-EQ QM

## ntahit?

2SGS-Rl-eat
‘Cuando eras niño/a, ¿qué comías?'
When you were a child, what did you eat?
The subordinator xox although generally follows clauses that are in the dependent realis mood rather than independent verb forms, unlike the other subordinators and coordinators discussed in this chapter. ${ }^{15}$ The clause that is subordinated with xox expresses circumstances for unexpected results that are expressed in the main clause. See examples (66)-(70).
(66) Anxö toohit xox, miteejöc.

Intns Rl-UO-eat although Px-thin
'Aunque come mucho, es flaco/a.'
Although s/he eats a lot, s/he is thin.
(67) Tisil xox, yiipe.

RL-small although Dт-good
'Aunque es pequeño/a, es bueno/a.'
Although it was small, it was good.
(68) Quiho cop itemeque xox, hipi caaitom í quih SN-Tr-see the.VT 3:3-RL-N-give.gift although InTNS SN-speak first the.FL

```
haa ntita x, tiix oo yaa }\mp@subsup{}{}{\circ}\mathrm{ ha.
```

    there Aw-Rl-move UT DDS Dl his/hers Dcl
    'Aunque el que lo halla no se lo dé, el primero en hablar - es suyo.' Although the finder doesn't give it to him/her, the first to speak (claiming it) - it is his/hers.

[^159](69) Intiim $\underline{\text { x } 0 x}$,

2SGS-RL-sleep although
iquiim miimzo quih matemácatx iho. Inf.In-sleep 2P-PON-want the.Fl 2SGDO Rl-N-release Dcl
'Aunque ya habías/has dormido, todavía tenías/tienes sueño.'
Although you had/have already slept, you were/are still sleepy.
(70) Hatasjoj xox, hatemasjoj, thacx miih .

1PLS-RL-paddle.PL although 1PLS-RL-N-paddle.PL it.was.occasionally
'A veces remamos; a veces no remamos.'
Sometimes we paddled; sometimes we didn't paddle.
Example (71) illustrates the less common situation in which this subordinator follows a clause headed by a deverbal noun.
LOx cöiiha $\quad$ hizac $\quad \frac{\mathbf{x o x}, \quad \ldots}{\text { although }}$
thus 3IO-3P-PON-be Px-LC
'Aunque es así hoy día, ...'
Although that's the way it is nowadays, ... (Mosca_Humo_5.1)

Examples with the xox-marked subordinate clause postposed to sentence-final position were all judged ungrammatical.

### 25.4.2 Subordinate clauses with deverbal nouns

The subordinators isax and piquix occur primarily with clauses headed by deverbal nouns. ${ }^{16}$

### 25.4.2.1 Concessive isax

A concessive clause is presented with isax; the clause typically has a realis proposition/obliqueoriented deverbal noun as head even when the action is unrealized. See examples (72)-(75).
(72) Itápolquim isax, ¡camjc!

3P-PON-broken CNCSV Im-take/bring
'Aunque sea que esté quebrado, ¡tráelo!'
Although it may be broken, bring it! (DS2010, isax)
Poosj quih xepe an hant inscmácatx aha,
line the.Fl sea 3P.in land 2SGS-Ir.Id-N-release Aux-Dcl
inyaahit isax.
2P-PON-fish Cncsv

[^160]'No debes dejar la piola en el mar aunque estés pescando.'
You shouldn't leave the line in the sea, even if you are fishing.
Mihacaacat isax, insiisi aha.

| 2P-PON-find.salty |
| :--- |
| 'Aunque te parezca salado, lo deberá tomar.' |

Although you may find it salty, you should drink it.
Miica mpoomzo $\quad$ x, immisa aha xo Twd-Inf.In-move 2SGS-Ir.Dp-want Ut Twd-2SgS-Ir.Id-move Aux-Dcl but

| miixaj | quih | ihinej | isax, |
| :--- | :--- | :--- | :--- |
| 2P-ON-strong | the.FL | 3P-PON-empty | CNCSV |

cmiique zo ma sconsacj aha.
person a 2SGDO Ir.ID-N-carry.on.hip Aux-DCL
'Puedes venir si quieres, pero aunque sea que te canses, nadie te va a llevar.'
You can come if you want, but even if you get tired, no one is going to carry you.
In some sentences, such as (76), the meaning is less strongly concessive and seems to be more simply temporal.
(76) Xepe ano nyaalim isax, sea 3P.in 2P-PON-play CNCSV
mazcz ano nscontiis aha.
2P-ygr.brother.ME 3P.in 2SGS-Ir.Id-N-push.under.water Aux-Dcl
'Cuando juegues en el mar, no empujes a tu hermanito abajo del agua.'
When you play in the sea, don't push your little brother under the water.
Isax also takes irrealis complements with a verb in the dependent irrealis followed by $\mathbf{h}$ or ih (about which little is known); see (77)-(78). This construction is far less common, and reportedly connotes much more emotion than the construction using deverbal nouns.

## Impomoos ih isax,

2SGS-Ir.Dp-N-sing ? CNCSV
'Aun si no cantas, ...'
Even if you don 't sing, ...

## Juan quih canoaa $z$ ipooxi $h$ isax, he hpsemaahit aha.

the.Fl boat a 3:3-Ir.Dp-finish? Cncsv 1Pro 1SGS.In-Ir.Id-N-fish Aux-Dcl
'Aun si Juan hace una panga, NO IRÉ a la pesca.'
Even if Juan makes a boat, I WILL NOT go fishing.
The examples in (79) are considered near paraphrases, although (as just pointed out), the construction with the finite verb in (79a) is much more emotive - in this case, for example, it
would imply that it is a question of life or death and that the person will go despite the rain for that reason. (79c) is unusual in that it has an irrealis deverbal noun.

| a. | Poopca $h$ | isax, | cói | hpsiitax | 00 | aha. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | IR.Dp-rain ? | Cncsv | still | 1SGS.In-Ir.Id-go | DL | Aux-DCL |
| b. | Iipca <br> 3P-PON-rain | isax, | cói | hpsiitax | 00 | aha. |
| c. | Isiipca <br> 3P-Ir.ID-rain | isax, | cói | hpsiitax | 00 | aha. |

'Aunque llueva, iré.'
Although it may be raining, I will go.

### 25.4.2.2 Hypothetical or contrafactual piquix

The word piquix subordinates a clause that is highly hypothetical and usually (but not necessarily) contrafactual. That clause is typically headed by a realis proposition/oblique-oriented deverbal noun (§14.4) but it may also be headed by a subject-oriented deverbal noun (§14.1) if the time is more remote. This is illustrated by examples (80)-(86).
[Siimet zo hiyaa piquix, ma hsiye aha. bread a 1P-PON-own Нүротн 2SgDO 1SGS.Tr-Ir.Id-give.food Aux-Dcl 'Si tuviera pan, te daría algo.'
If I had any bread, I would give you some. (DS2010, piquix)
[ He siimet zo cyaa ] piquix, ...
1Pro bread a SN-Tr-own Hypoth
'Si hubiera tenido pan, ...'
If I had had any bread, ...
[ Icaticpan zo hiz cöiihca ] piquix, 3P-PON-US-work a here 3IO-3P-PON-be.located Нуротн
ihpsaticpan aha.
1SGS.In-IR.ID-work Aux-Dcl
'Si hubiera trabajo, yo trabajaría.'
If there were work, I would work.
[ Icaticpan zo hiz cöcahca] piquix, ihpsaticpan aha. 3P-PON-US-work a here 3IO-SN-located Нуротн 1SGS.In-Ir.Id-work AUX-DcL
'Si hubiera habido trabajo, hubiera trabajado.'
If there had been work, I would have worked.
(84) [ Hiiho ] piquix, eenim caacoj cop cohsmiiit aha. 1P-PON-see Hypoth knife SN-big the.Vt 3IO-1SGS.Tr-ask Aux-Dcl
'Si lo viera le pediría el machete.'
If I were to see him/her, I would ask him/her for the machete. (ALIM_176)
[ Pedro quih iifp]
piquix,
the.Fl 3P-PON-arrive Нүротн
sahmees coi anxö isiimjc aha.
orange(s) the.PL Intns 3:3-Ir.Id-take/bring Aux-DCL
'Si Pedro viene, traerá muchas naranjas.'
If Pedro comes, he will bring lots of oranges. (but we don't know he is coming)
(86) [ Pedro quih iifp] piquix, sahmees coi the.Fl 3P-PON-arrive HyPOTH orange(s) the.PL
anxö isiimje aha xo yomafp.
Intns 3:3-Ir.Id-take/bring Aux-DCL but Dt-N-arrive
'Si Pedro hubiera venido, hubiera traído muchas naranjas, pero no vino.'
If Pedro had come, he would have brought many oranges, but he didn't come. (adapted from DS2010, piquix)

## 26. Interjections

Most of the words discussed in this chapter are treated as interjections since they do not combine phrasally with other words or phrases in their normal usage. In §§26.1-26.7, a few expressions are discussed that are words or phrases used in exclamations with meanings that are quite different from their lexical content. $\S 26.8$ presents the number words that are used in counting but not otherwise, and $\S 26.9$ presents some lexical words that are used as interjections in special circumstances. In $\S 26.10$ the use of the rhetorical enclitic a with nouns to express sarcasm is discussed.

### 26.1 Interjections to express awareness of mis-speaking

The adverb haxehe (see §24.3.10) is used to indicate that the speaker is aware of the fact that the preceding word or phrase was a mistake, even without making the correction, as in (1).

| Juan - haxehe | hant $\mathbf{z}$ iiqui <br> place a 3P-toward | Px-go |
| :--- | :--- | :--- | :--- | :--- |

'Juan -quiero decir, otra persona-se fue.'
John -I mean, someone else - went away. (DS2010, haxehe)
If the speaker knows that the error has been made, the mistake can be repeated with the rhetorical enclitic a (see §26.10) after it before the corrected sentence is given, as in (2).

| Juan $\underset{R}{\text { a. }}$ | Pedro | cah | hant | $\mathbf{z}$ | iiqui |
| :--- | :--- | :--- | :--- | :--- | :--- |
| the.FL-FOC land | a | 3P-toward | PX-go |  |  |

'No era Juan. Pedro se fue.'
Not John. PEDRO went away.
Another way to indicate one's error, without an interjection, is by using the word xoocyo (Em-US-say.Pl) they (unspecified) said with a special rising intonation, as in (3). This is especially unusual because non-interrogative words like xoocyo do not occur with interrogative intonation in standard clauses.
(3) ¿Juan, xoocyo? Pedro cah hant $z$ iiqui miin.

Em-US-say.Pl the.Fl-Foc land a 3P-toward Px-go
‘¿Se dijo Juan? (Me equivoqué.) Pedro se fue.'
Did one say Juan? (I was wrong.) PEDRO went away.

### 26.2 Interjections to gain attention

A few interjections are used primarily to gain someone's attention. See the examples in (4)-(9).


### 26.3 Interjections to induce action

Some interjections are primarily used to indicate the desire of the speaker that another person or animal move or do something. Men may use the interjection hoca when ready to do a joint effort in some activity such as moving a boat, as in (10).
(10) iHoca!
'¡Ahora todos juntos!’
All together now! [men] (DS2010, hoca)
The most commonly used interjection of this group is the one used for indicating to a small animal that it should go away from the speaker or from some obvious referent (such as a plate of food) because the speaker does not want it to be present. See example (11).
(11) $\boldsymbol{i H i z t}$ ! $\boldsymbol{i H i z t}$ !
¡Vete! ¡Vete!’
Scram! Scram! (overheard often)
The interjection leque, used to call a dog, as in (12), utilizes the voiced lateral approximant, which is quite rarely used in the language. It has been suggested that this interjection is derived from the word quisil (SN-small) small, with the replacement of the voiceless lateral fricative with the voiced lateral approximant in a way reminiscent of speech used by adults toward small children. The vowel is also a bit more centralized than in common words.

[^161](12) Leque, leque, leque, leque.
‘'Ven, perro!'
Come here, doggie! (overheard offen)
The interjection used to encourage a dog to chase some other being also uses the rare voiced lateral approximant. See example (13).
(13) ¡Hoozila! ¡Hoozila!
‘¡Persíguelo!’
Sic 'em. (DS2010, hoozila)
The interjection used for calling a cat is onomatopoetic and is also the root of the common expression for cat: ziix canaao (thing SN-cause.meow). See example (14).
(14) Naao, naao.
'Ven, gato.'
Come here, kitty! (overheard often)

### 26.4 Interjections to express feelings

A few interjections primarily indicate emotions or feelings of the speaker, including mild surprise or admiration, as in (15)-(17); sudden surprise at something unexpected, as in (18)-(19); happiness, as in (20); ridicule, as in (21); and grief, as in (22). Some of them are limited to the speech of one sex or the other.
(15) iHaah! Ziix cmiipla zo toc cöyiih.
hey! thing SN-bad a there 3IO-Dt-be-Fl
'Hay algo malo!'
Hey, there's something bad! (Vignettes, Burgos \& Romero)
(16) Haaah, ;taziim ih!
oh! RL-beautiful DCL
‘¡Qué bonito!'
Oh, how cute! [women's speech] (DS2010, haaah)
(17) Haaah yoo, ;haptco xoozcam!
oh! hey! already Em-arrive.PL
‘YYa llegaron!’
Oh, they arrived! [women's speech] (DS2010, haaah)
(18) ¿Hocáh!
‘Epa!’
Whoops! (indicating one's inadvertent action or an unexpected accidental action of an object) [Used by men.] (DS2010, hocáh)
(19) Hina hina hina, ;cooc hant ihpxahjiit! whoops almost land 1SGS.In-Em-fall
'Epa, ¡casí me caí!'
Whoops, I almost fell! [Used by women.] (DS2010, hina)
(20) iHii na, hii na, hii na!
(compasión o alegría)
(compassion or happiness) [women's speech] (offered)
(21) Ta ca ta ca ta ca.
‘¡Ja ja ja! (burla (mujeres) de acciones fuera de lo normal)
Ha ha ha! (indication of derision, by women, regarding some out-of-the-ordinary action) (overheard)
(22) iHii na paa!
(Indicación de compasión con respecto a una tragedia.)
(Indication of grief with respect to a tragedy.) [Used by women.] (DS2010, hii na paa)
The following combinations of words that indicate amazement contain some identifiable parts (tamoz, Rl-think s/he thinks, xah Attenuator, and perhaps forms of the verb be), but the phrases are virtually frozen: saa ha tamoz ah, saa xah ha tamoz ah, and saa xah ha ta. Furthermore, they require a phrase with a denominal verb as head to follow them. See the examples in (23)-(25).
(23) ŁSaa ha tamoz ah」- ihaacoj áa xah hac.
(wow!) 3P-PON-big true Atten the.LC
‘¿Qué grande es!’
Wow! How big it is! (DS2010, saa ha tamoz ah)
(24) เSaa xah ha tamoz ah $\lrcorner$ - xaa iifp áa xah hac.
(wow!) soon 3P-PON-arrive true Atten the.LC
‘¿Qué rápido llegó!’
Wow! How quickly s/he arrived!
(25) เSaa xah ha tamoz ah」- anxö miihit áa xah hac. (wow!) IntNS 2P-PON-eat true ATtEN the.LC
‘¡Cuánto comes!’
My, you eat a lot!

### 26.5 Interjections to express agreement or disagreement

Two interjections indicate an affirmative answer to a question, as shown in (27)-(28). ${ }^{2}$ The word

[^162]asa seems a bit more informal and typically more enthusiastic than the word yohaa. Because of the intonation that one hears with these, both of these words seem to be most appropriately viewed as stand-alone sentences and not as part of other sentences.
> (26) Yohaa. Yoofp.
> yes DT-arrive 'Sí, vino.'
> Yes, s/he arrived.
(27) Asa. Yoofp.
sure! Dt-arrive
'Sí, vino.'
Yes, s/he arrived.
(28) Asa. Ihpsiitax xo.
sure! 1SGS.In-Ir.Id-go Em
'Sí, por supuesto iré.'
Sure, of course, I'll go.
One interjection indicates a negative answer to a question: saat $\sim$ saate. ${ }^{3}$ Like the affirmative words, it seems to be a complete sentence. See examples (29)-(30).
(29) Saate. Icaatax ihxomamzo.
no Inf.In-go 1SGS.Tr-Em-N-want
'No, no quiero ir.'
No, I don't want to go. (DS2010, saat, saate)
(30) Saat. Pedro quih smatax caha.
no the.Fl Ir.ID-N-go Aux.SN-Dcl
'No, Pedro no irá.'
No, Pedro will not go. (DS2010, saat, saate)
The word cotas indicates one's ignorance of a correct answer, as shown in (31). ${ }^{4}$ (It is not uttered with interrogative intonation.)
(31) Cotas.
¿¿Quién sabe?'
Who knows?
The final items in this section are a bit more unusual in their pronunciation and, much like the non-lexical expressions of agreement and disagreement in English, are unusual phonetically. The first two, in (32) and (33), have slightly nasalized vowels.

[^163](32) Iihah. ['̃̃̃a?]
(Aceptación de alguna propuesta.)
(Expression of confirmation.)
(33) Jiii. ${ }^{5}$ ['xĩ1̃1̃]
(Expresión que uno está siguiendo la conversación; no necesariamente indica acuerdo.)
(Expression that one is following the conversation; it does not necessarily indicate agreement.)

The interjection haanh, shown in (34), is used by children to indicate their unwillingness to do something. The syllable ends with a complicated gesture that includes glottal closure as well as a velar nasal.
(34) ¡Haanh! [?aa?ŋ]
$=$ 'No lo quiero hacer.'
$=I$ don't want to do it. [children's speech]

### 26.6 Interjection to express wishes

The interjection faa, typically repeated, is commonly used when addressing the new moon and making a wish. ${ }^{6}$

### 26.7 Interjections to indicate pain

A few interjections are used to indicate pain, the one in (35) by women and the one in (36) by men as well.
(35)
¡Haa ni ni ni!
‘¡Ay!’
Ouch! [used by women]
(36) ¡Hax ax áx!
‘¡Ay!’
Ouch! [used by men and women]

The interjection haa ni ni is also used when something is going to accidentally fall from one's hands.

### 26.8 Numbers for counting

The number expressions in the center column of Table 26.1 were used when counting. ${ }^{7}$ They all are stressed on the first syllable and thus can be pronounced with a cadence that is appropriate

[^164]Table 26.1: Counting words compared with modern predicates

|  | Interjection | Modern predicate |
| :--- | :--- | :--- |
| one | toojom | $V_{\text {azoj (and adjective tazo) }}$ |
| two | cajcom | $V_{\text {oocj }}$ |
| three | pxaahom | $V_{\text {apxa }}$ |
| four | zoxcom | $V_{\text {zooxöc }}$ |
| five | xöaitom $\sim$ xöaaitom | $V_{\text {ooitom }}$ |
| six | napzoj | isnáap $\sqrt{ }$ azoj |
| seven | cajcöi | tomcoj $\sqrt{ }$ iih |
| eight | pxajcöi | $V_{\text {zooxolcam }}$ |
| nine | csooxhanl | csoi $\sqrt{ }$ hanl |
| ten | xohnal $\sim$ xohanl | $V_{\text {hanl }}$ |

for counting items. These words have some relationship to the modern words used for these numbers, as shown in the table. Today they are considered obsolete although older people remember them. They could be used for counting larger quantities by presenting multiples in each group. ${ }^{8}$ Therefore if pairs were counted, one could arrive at twenty and if triples were counted, one could arrive at thirty.

### 26.9 Some other expressions used as interjections

Some words and phrases are used in ways that might be viewed as interjection-like since the lexical meaning of the word is subsidiary to the effect that the word has. Examples include the (non-negative) imperative forms of $\sqrt{ }$ oocta look at: singular hoocta (Im-look.at), plural hooctam (Im-look.at.Pl). These are used in discourse as a way of drawing attention to an important point. Examples in the translation of the New Testament are numerous, and they are also heard in many other contexts.

It is often remarked that women have colorful speech when it comes to the expressions that they use as interjections in addition to those in the preceding sections of this chapter.

Women may repeat the expression hiiquet ${ }^{\circ}$ aapa (my.child.FE strong) my strong (?) child in response to news of a mortal tragedy. ${ }^{9}$ (See the discussion of the meanings of aapa in §23.1.2.)

[^165]Women may use the expression hapaz cooxi (Abs-father's.father SN-die) dead paternal grandfather as an expression of surprise. The word cooxi would normally be offensive to describe a person since it collocates with animals in normal speech.)

Other expressions are considered more vulgar and may reference the anus and other parts of the body.

### 26.10 Rhetorical a and the infix -a-

The same enclitic morpheme that is used in some rhetorical questions (§6.3) is also used to express a rhetorical effect in certain other contexts. It is primarily used with nouns. Furthermore, it requires the use of the infix -a- under certain conditions, as explained below. This morpheme is written as a here although sometimes it may be pronounced ha (with an initial glottal stop).

A primary context for the use of the rhetorical a is as part of a response to a statement that has just been made.

If one makes a statement that incorrectly mentions a name, one might follow up by a clarifying "statement" that mentions the correct name. See the examples in §26.1.

Someone who hears a statement may utter the same nominal, however, with a different, sarcastic intonation to express a sense of rejection, as in (37).
a. ¡Pedro $\begin{aligned} & \text { a! } \\ & \text { RHET }\end{aligned}$
'Pedro, ija!' Pedro, ha!
b. iMarta a!

RHET
'Marta, ija!'
Marta, ha!
c. i $^{\mathbf{H a x z}}{ }^{\circ} \mathbf{a}$ ! RHET
'Perro, ija!'
Dog, ha!

Finally, if one wishes to express incredulity with sarcasm, the same rhetorical word is used, but in this situation in combination with the infix -a- (written as à) if phonological conditions are met (more details are given below). See example (38).

```
i^Pedàro a!!
            RHET
    ``Pedro! (`Lo dudo!)'
    Pedro! (I doubt it!) RRR 10May2010
```

The intonation pattern used with such responses is unique. The major stress is pronounced at a low pitch and the syllables that follow it continues to drop in pitch. Some simple nouns that may appear without other complication in such responses are shown in (39), with the consonant -vowel pattern of each word shown to the left of the word.

| a. | CVC | iiNop a!! | bobcat |
| :--- | :--- | :--- | :--- |
| b. | CVV | iHee a!! | antelope jackrabbit |
| c. | CVVC | iZZap a!! | roadrunner |
| d. | CCVC | iiCtam a!! | man |

Disyllabic words
e. CVCV
f. CVCVC
g. CVVCV
h. CVVCVC

| iiCosi a!! | thorn |
| :--- | :--- |
| ¡Hapaj a!! | octopus |
| iHHaaho a!! | road |
| ißSeenel a!! | butterfly |

Deverbal nouns may also be used in this kind of sarcastic expression, as in (40).

| a. | caziim | $i ¡$ Caziim a!! | pretty (SN-pleasant) |
| :--- | :--- | :--- | :--- |
| b. | quisil | $i$ iQuisil a!! | small (SN-small) |
| c. | cmasol | $i i$ Cmasol a!! | yellow (SN-yellow) |

When the stressed nucleus has only one or two moras and is also followed by a consonant cluster, the infix -a- must be used as well. The infix appears after the first post-tonic consonant of these clusters, as shown in (41) for words with short vowels and (42) for words with long vowels. ${ }^{10}$

| (41) | a. | hast | i¢Hasàt a!! | stone |
| :---: | :---: | :---: | :---: | :---: |
|  | b. | zamt | iiZamàt a!!. | swimming crab |
|  | c. | coftj | iCCofàtj a!! | western coral snake |
|  | d. | hapxöl | ¡Hapàxöl a!! | corn |
|  | e. | ptcamn | iiPtcamàn a!! | lobster |
|  | f. | Tahejöc | iiTahejöàc a!! | Tiburon Island |
|  | g . | cmasl | iiCmasàl a!! | yellow (pl.) ${ }^{11}$ (SN-yellow.PL) |
|  | h. | tosni | i¢Tosàni a!! | pelican |

[^166]

Words with three-mora diphthongs are treated in different ways, ${ }^{13}$ and for some of them there is disagreement among speakers as to how the sarcastic form is expressed. A consonant cluster following the "true" three-mora diphthongs is generally not split up by this infixal a. See the esamples in (43).

|  | cpaaisx | $i i$ Cpaaisx a!! | SN-clean (intr.) ${ }^{14}$ |
| :--- | :--- | :--- | :--- |
| a. | cpaainj | $i i$ Cpaainj a!! | SN-roll/tumble.over (intr.) |
| b. | cooisnan | $i i$ Coiisnan a!! | SN-slouch |
| d. | cmooilc | $i i$ Cmooilc a!! | SN-grouped.PL |
| e. | cmaaitx | $i i$ Cmaaitx a!! | SN-tender |
| f. | icaaisx | $i i$ Icaaisx a!! | $3 P-P O N-U S-c l e a n ~($ soap $)$ (b-f) RRR 10May2010 | XMH's version

However, a consonant cluster following the three-mora diphthongs that may be due to the "diphthong effect" (§28.3.4) — perhaps underlyingly or more recently two-mora diphthongs are typically split up, as shown in (44).

| a. | coaanj |
| :--- | :--- |
| b. | coaatjö |
| c. | aaitz |
| d. | cooipj |
| e. | ctooicj |

$i i$ Coaanàja!!
$i i$ Coaatàjöa!!
$i i$ Aaitàz a!!
$i i$ Cooipàj a!!
$i i$ Ctooicàj a!

SN-poisonous
SN-sweet
3P-father's.younger.brother
SN-oval
zebra-tailed lizard ( $(-\mathrm{e})$ RR 10May2010

[^167]
## 27. Allomorphy in verb inflection

This chapter discusses the allomorphy of the mood prefixes found in finite verb forms (§17.3.1). (Allomorphy directly related to other aspects of the verb inflection is discussed in the sections in which the morphemes in question are presented.) The mood prefixes are discussed first in their simplest morphological context: with third person subject and, if the verb is transitive, with third person direct object. Third person subject and third person direct object are both morphologically unmarked (see $\S 17.3 .2 .1, \S 17.3 .2 .3$ ), but when a verb is inflected for both, the $3: 3$ prefix ioccurs (see $\S 17.3 .2 .1$ ). Examples are given in (1):

(1) | surface | yopanzx | iyopii |
| :--- | :--- | :--- |
| translation | s/he/it ran | s/he tasted it |
| underlying | yo-panzx | i-yo-pii |
| morphemes | DT-run | 3:3-DT-taste |
| features | Past, $3^{\text {rd }}$ subject | Past, 3 $3^{\text {rd }}$ subject, $3^{\text {rd }}$ direct object |

The verbs are cited in the form appropriate for singular subject and perfective aspect (§17.3.3) unless otherwise noted. This stem usually is not the underlying form if the entire verb paradigm is taken into consideration, but all that is in focus here is the allomorphy relating to the mood prefixes.

### 27.1 Consonant-initial stems

The verb forms in Table 27.1 have consonant-initial stems. They are therefore helpful to view the underlying forms of certain mood prefixes. But for some mood prefixes, these are not the forms that best reveal the underlying forms, as explained below.

The nasal assimilation observed in the Subjunctive Irrealis tm- and Proximal Realis miforms is explained in §28.5.2 and therefore it is not reviewed here. It is worth pointing out, however, that the practical orthography used here does not show that the nasal $/ \mathbf{m} /$ is phonetically [ y ] before the velars and [ N ] before the uvulars although it does reflect the assimilation before coronals by writing the underlying $\mathbf{m}$ as $\mathbf{n}$ in these cases. To make this entirely explicit, partial paradigms of two verbs are given in (2) in phonetic form.

| (2) |  | pinch |  | lookfor |  |
| ---: | :--- | :--- | :--- | :--- | :--- |
| itcontiip | [itkon'ti:p] | itcomcaa | [itkoŋ'ka:] |  |  |
| mi- | intiip | [in'ti:p] | imcaa | [iŋ'ka:] |  |

The special characteristics that are observed in the forms of "empty consonant"-initial verbs are discussed in §27.5. The verb forms are included in Table 27.1 because they are additional examples of consonant-initial stems.

| Table 27.1: Mood forms of consonant-initial verbs |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Obstruent |  |  | Empty Consonant |  |
|  | $\checkmark$ panzx | $V_{\text {tiip }}$ | $\checkmark$ caa | $\sqrt{ } \mathbf{C a m j o ̈}$ | $\checkmark$ Cactim |
|  | run | pinch | look for | shiny | use |
| t- | tpanzx | ittiip | itcaa | ttamjö | ittactim |
| tm- | tompanzx | itcontiip | itcomeaa | tommamjö | itcommactim |
| po- | popanzx | ipotiip | ipocaa | poaamjö | ipoaactim |
| yo- | yopanzx | iyotiip | iyocaa | yoaamjö | iyoaactim |
| xo- | xopanzx | ixotiip | ixocaa | xoaamjö | ixoaactim |
| si- | spanzx | istiip |  | ssamjö | issactim |
| mi- | (i)mpanzx | intiip | imcaa | (i)mmamjö | immactim |
|  | Nasal Co | onant | Palatal Ap | oximant | Glottal Stop |
|  | $\checkmark$ masol | $\checkmark$ mis | $\checkmark$ yaai | $\checkmark$ yaa | $\checkmark$ heel |
|  | yellow | resemble | expensive | own | red |
| t- | tmasol | itmís | tyaai | ityaa | theel |
| tm- | tommasol | itcommís | tonyaai | itconyaa | tomheel |
| po- | pomasol | ipomís | poyaai | ipoyaa | poheel |
| yo- | yomasol | iyomís | yoyaai | iyoyaa | yoheel |
| xo- | xomasol | ixomís | xoyaai | ixoyaa | xoheel |
| si- | smasol | ismís | syaai | isyaa | sheel |
| mi- | (i)mmasol | immís | (i)nyaai | inyaa | (i)mheel |

### 27.1.1 Epenthesis of $\mathbf{i}$

The parenthesized $\mathbf{i}$ found in various intransitive forms in Table 27.1 is an epenthetic vowel that appears when the verb form is not preceded by a vowel with which the nasal or glottal stop in these forms can syllabify (see the syllable structure constraint in §28.3.1). It is assumed here that this is done by an appropriate view of syllabification, insertion of a vowel position, and the filling of that vowel position by the features of $\mathbf{i}$. ${ }^{1}$

This epenthetic vowel contrasts phonologically with the underlying vowel $\mathbf{i}$ that is the morpheme 3:3, which also commonly occurs word-initially, illustrated by various forms in Table 27.1. This $\mathbf{i}$ does not "come and go", unlike the epenthetic $\mathbf{i}$, based on context, although if it is

[^168]preceded by a word-final $\mathbf{i}$, it is not perceived separately. ${ }^{2}$
Clear evidence of the difference between the two vowels is seen by examining the allomorphy of the indefinite article. The indefinite article is $\mathbf{z o}$ before consonants and $\mathbf{z}$ before vowels. It is $\mathbf{z}$, of course, before 3:3 $\mathbf{i}$-, but it is $\mathbf{z o}$ elsewhere since "elsewhere" means "before a consonant" in all these cases. The $\mathbf{o}$ of $\mathbf{z o}$ enables the sonorants to syllabify, making the epenthesis of $\mathbf{i}$ unnecessary and unacceptable. ${ }^{3}$ Contrast the examples in (3) that have the $3: 3$ prefix $\mathbf{i}$ - (with a transitive verb) and those in (4) that do not have an epenthetic vowel in this context.
(3) a. $\mathrm{Haxz}^{\circ} \mathbf{z}$ imcaa.
$\operatorname{dog}$ a 3:3-Px-look.for [vowel of zo deletes before underlying vowel i-]
b. * Haxz ${ }^{\circ}$ zo imcaa.
[incorrect use of full form zo before a vowel]
'Un perro lo(s)/la(s) está buscando.'
A dog is looking for it/her/him/them.
(4) a. $\mathrm{Haxz}^{\circ}$ zo mpanzx.
$\operatorname{dog}$ a Px-run
[no epenthetic vowel because of the vowel $\mathbf{o}$ before the consonant cluster]
b. * Haxz ${ }^{\circ}$ zo impanzx.
[incorrect use of full form zo with an epenthetic vowel $\mathbf{i}$ at the beginning of the verb]
c. ${ }^{*} \mathbf{H a x z}^{\circ} \mathbf{z}$ impanzx.
[incorrect use of short form $\mathbf{z}$ with an epenthetic vowel $\mathbf{i}$ at the beginning of the verb]
'Un perro corrió.'
A dog ran.
An i is also inserted between a subject agreement prefix and the Proximal Realis prefix. Underlying \{hp-mi-panzx\} (1SGS.In-Px-run) I ran loses the $\mathbf{i}$ of mi- by the rule discussed in the following section (§27.1.2). The sequence pmp therefore provides the environment for epenthesis; the surface form is (i)hpimpanz. Other examples: \{hp-mi-hac\} (1SGS.In-Px-blind) is

[^169](i)hpimhác I am blind and \{m-mi-hac\}(2SGS-Px-blind) mimhác you are blind. ${ }^{4}$

The rule inserting i is used in contexts besides before the Proximal Realis prefix; see $\S 17.3 .2 .1$ (before subject inflection prefixes) and $\S 17.3 .6$ (before the directional prefixes).

### 27.1.2 i-Deletion

The vowels of the prefixes mi- and si- are always dropped before consonants. In fact, from looking at the forms given in Table 27.1, one would not know that the underlying forms of these prefixes even contain an $\mathbf{i}$. The motivation for this vowel in these prefixes is amply provided in later sections of this chapter. Informally, the rule is as shown in (5).

$\square$
C i C
$\varnothing$

Of course, this rule does not apply morpheme-internally. ${ }^{5}$ It also affects the Transitive prefix i- that occurs in subject-oriented deverbal nouns (see §14.1.1). ${ }^{6}$

### 27.1.3 o-Epenthesis

The underlying form of the Subjunctive Irrealis prefix is $\mathbf{t m}$-; this is clear when vowel-initial stems are examined (see later sections of this chapter such as §§27.2-27.3). The allomorph tomoccurs before consonant-initial stems. While one might expect an $\mathbf{i}$ to be epenthesized in the formation of the Subjunctive Irrealis forms of the consonant-initial verbs in Table 27.5 because
${ }^{4}$ The sequence $\mathbf{m h}$ is pronounced as if the sounds were metathesized. See $\S 28.5 .10$.
${ }^{5}$ Structure Preservation (Kiparsky 1982) arguably prevents this rule from applying to morpheme-internal sequences.
${ }^{6}$ This deletion rule only applies when the $\mathbf{i}$ occurs between consonants. The relevance of the first consonant is seen by the fact that the word-initial prefix $3: 3 \mathbf{i}$ - (§17.3.2.1) does not delete in any of the forms shown in this chapter. But this same $\mathbf{i}$ also does not delete when it occurs after the third person indirect object prefix, cö(which is underlyingly co-). The fact that it does not delete in words such as cö-i-t-exl (3IO-3:3-RL-take) is probably best explained by the fact that the indirect object agreement prefix is in other ways demonstrably outside of the domain of some basic phonological rules of the language. See $\S 17.3 .2 .4$.
The phonologically-identical (and presumably etymologically-related) Transitive prefix i- (§14.1.1) does delete in the subject nominalized form when it occurs between two consonants: ctiip who pinches it/him/her (from underlying $\{\mathbf{c}$-i-tiip $\}$. See $\S 14.1 .1$ for evidence that this prefix is present in these verb forms.
The second consonant in the context need not be a root-initial consonant; it may be the negative prefix or the passive prefix, for example. But it does need to be part of a verb. The i of mi-lít your head/hair does not delete; the root is a noun root. The $\mathbf{i}$ of a possessive prefix also does not delete before a nominalized verb; see mi-tiip your pinching it, which is structurally ${ }_{N}\left[\mathbf{m i}-_{\mathrm{N}}\left[\varnothing-_{\mathrm{V}}[\mathbf{t i i p}]\right]\right]$ (2P-PON-pinch). The verbalizer $\mathbf{i}$, which occurs in denominal verbs such as titaamt is s/he wearing sandals?, does not delete between consonants. Again, the morphological structure appears to be relevant: $[\mathbf{t}-\mathrm{V}[\mathbf{i}-\mathrm{N}[\mathbf{t a a m t}]]]$ (RL-HAVE-sandal).
of the epenthesis rule presented in §27.1.1), this does not happen. Instead, an $\mathbf{0}$ is epenthesized. Consider the word tompanzx, for example, from underlying $\{\mathbf{t m}-\mathbf{p a n z x}\}$.

The context in which $\mathbf{0}$ rather than $\mathbf{i}$ appears (to permit syllabification) is when three consonants $\mathrm{C}+$ Sonorant +C would otherwise appear word-internally. The first consonant is usually one of the mood prefixes, but it may also be another consonant, such as the subject nominalizer c(§14.1), as shown in (6b).

The sonorant in the context $\mathrm{C}+$ Sonorant +C may either be from the prefix tm- (as shown in the tables in this chapter), the negative prefix (see $\S 17.3 .4$ ), or the stem-initial nasal of the verb $\{-\mathrm{msisiin}\}$ pitiable, cute. See the partial paradigm in (6). Example (6e) is a situation where the prefix has a vowel that makes the insertion of an epenthetic vowel unnecessary and making it clear that the stem does not begin with $\mathbf{0}$ since if it did, the a of the prefix would have deleted (see §27.2.1 and §17.4.1).
(6)

| a. | tomsisiin | is s/he/it cute? | Underlying Form \{t-msisiin\} | RL-cute |
| :---: | :---: | :---: | :---: | :---: |
| b. | comsision | who is cute | \{c-msisiin\} | SN-pitiable |
| c. | momsisiin | s/helit is cute | $\{\text { mi-msisiin }\}^{7}$ | Px-pitiable |
| d. | somsisiin | s/helit will be cute | \{si-msisiin\} | Ir.ID-pitiable |
| e. | icamsisiin | to be cute | \{ica-msisiin\} | Inf.In-pitiable |

The epenthesis of $\mathbf{o}$ is also seen in other contexts, including negative imperatives (see §17.4.2). ${ }^{8}$ Underlying $\{\mathbf{c}-\mathbf{m}-\mathbf{p a n z x}\}$ becomes companzx Don't run!

The rule is given informally in (7). The prose restriction is necessary to prevent this rule from applying in the situation where the first consonant is part of a subject agreement prefix (as in ihpimpanzx discussed above in $\S 27.1 .1) .{ }^{9}$ This formulation makes the features of the inserted vowel entirely explicit, although it may not be coincidental that the nasal in these contexts is always underlyingly $\mathbf{m}$ (which arguably is, however, the unmarked nasal in the language, as shown in §28.5.2). ${ }^{10}$ This epenthesis rule is like the i-Epenthesis rule discussed in §27.1.1 in that

[^170]it relates to syllabification; it applies in a more inner domain than the i-Epenthesis rule, a fact that is hinted at indirectly by the prose restriction in (7).
(7)
o-Epenthesis:
$\mathrm{C}_{\mathrm{a}} \quad \mathrm{C} \quad \mathrm{C}$
$\uparrow$ [+son]
0
where $C_{a}$ is not part of a person prefix
The forms in (8) are presented to make explicit that some instances of $\mathbf{o}$ are not due to epenthesis at all.
(8) Epenthetic $\mathbf{0}$ : $\mathbf{t o m s i s i i n}($ RL-...), $\underline{\text { somsisiin (IR.ID-...), momsisiin (PX-...) }}$
o from prefix: pomsisiin (Ir.Dp-...), yomsisiin (DT-...), x xomsisiin (EM-...)

### 27.1.4 c-Epenthesis

A c (that is, $/ \mathrm{k} /$ ) is inserted in a very particular context that is only partially illustrated by the paradigm in Table 27.1. ${ }^{11}$ The context for the rule inserting $\mathbf{c}$ has three important conditions.

First, a nasal consonant must be present; this nasal always happens to be underlying $\mathbf{m}$.
Second, that nasal must be a prefix and not a root-initial consonant. This is clear since in forms such as itmís (3:3-RL-resemble) s/he resembled him/her, from underlying \{i-t-mis $\}$, cEpenthesis does not apply.

Third, the nasal consonant must be preceded by two elements, a consonant (which happens to always be a coronal, but this may not be relevant), and something else (a vowel or a consonant) preceding that. Two prefixes, however, do not provide the context for the rule: the directional prefixes (§17.3.6) and the indirect object inflection prefixes (§17.3.2.4). These prefixes are the outermost layer of the verb inflection, and apparently outside the domain of this rule.

The velar stop is inserted before the nasal. This rule is shown informally in (9), where X indicates that either a consonant or a vowel must precede the second element (the C), and the left bracket indicates a morpheme boundary.

[^171]| X C | C |
| :---: | :---: |
|  | [+nas] |
| c |  |

$\uparrow$ [+nas]
be a consonant or vowel
In the examples in Table 27.1, this rule always interacts with $\boldsymbol{o}$-Epenthesis, but the vowel-initial stems ( $\S 27.2$ and Table 27.2; $\S 27.3$ and Table 27.3) show that it is an independent rule.

### 27.2 Long vowel-initial stems

Verb roots that begin with long vowels are very stable in their interaction with the prefixes, and so they are presented before other vowel-initial roots are presented. The forms in Table 27.2 are entirely representative. ${ }^{12}$

One can see that $\mathbf{c}$-Epenthesis (§27.1.4) applies in the Subjunctive Irrealis forms of the transitive verbs, exactly as expected. Therefore underlying \{i-tm-ii\} (3:3-Sb-hear) becomes itcmii.

### 27.2.1 Vowel Elision

It is not possible to motivate the presence of the vowels of the prefixes by these forms. Since we know that the prefix vowels exist because of other facts - the o's from the consonant-initial stems shown in Table 27.1 and the i's from the short low vowel-initial roots in Table 27.3 - the loss of the prefix vowel before the long vowel-initial roots must be accounted for. This may be motivated by a lack of hiatus since one can argue (but not easily) that non-initial syllables in Seri disfavor the lack of an onset. At any rate, word-internal vowel sequences across morpheme boundaries are extremely special (see §27.5). The rule is something like (10). ${ }^{13}$
(10) Vowel elision:


The elision of a vowel before a vowel is seen in various other contexts as well. The $\mathbf{0}$ of the directional prefix mo- (§17.3.6 and §27.7) deletes before a vowel, for example: miica to come from underlying \{mo-ica-a\} (Twd-Inf.In-move).

[^172]
### 27.2.2 o-Coalescence

Something rather curious very regularly happens when an o-final prefix (po-, yo-, or $\mathbf{x o}$ ) immediately precedes an o-initial root. Rather than simply drop out, as happens when the root is transitive (such as with $\sqrt{ }$ oocta look at), the sequence $\mathbf{o}^{+}+\mathbf{0} \mathbf{~ - ~ a n d , ~ a s ~ i s ~ s e e n ~ b e l o w , ~ a l s o ~} \mathbf{0}^{+} \mathbf{0}$ is replaced by short $\mathbf{a}$. Furthermore, when this happens to the $\mathbf{0}$ of the Emphatic prefix $\mathbf{x} \mathbf{0}$-, the $\mathbf{x}$ is simultaneously labialized. Anticipating the facts from the following section, the rule is presented in (11). The presentation is very informal; the presence of the uvular fricative is not required for the rule to apply, obviously.

$$
\text { (11) o-Coalescence: } \begin{aligned}
& \text { (x) } \mathbf{0} \mathbf{o}(\mathbf{0}) \\
& \vdots \\
& \text { (xö) } \downarrow \\
& \\
& \text { if and only if the verb form is intransitive }
\end{aligned}
$$

One exception to this rule is known: the forms of the positional verb $\sqrt{ }$ oom lie; see poom (Ir.Dp-lie), yoom (Dt-lie), xoom (Em-lie).

### 27.2.3 Low Vowel Harmony

The rule of $\mathbf{o}$-Coalescence feeds a rule that harmonizes a stressed a with an e that follows immediately or in the next syllable. See the forms of $\sqrt{\text { looseta in Table 27.2. Underlying \{po- }}$

| Table 27.2: Mood forms verbs with initial long vowel |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | $V_{\text {aacoj }}$ | $V_{\text {eetol }}$ | Vii | Voos | Vooseta | Voocta |  |
|  | big | push | hear | sing | jiggle | look at |  |
| t- | taacoj | iteetol | itii | toos | tooseta | itoocta |  |
| tm- | tmaacoj | itcmeetol | itcmii | tmoos | tmooseta | itcmoocta |  |
| po- | paacoj | ipeetol | ipii | pas | peseta | ipoocta |  |
| yo- | yaacoj | iyeetol | iyii | yas | yeseta | iyoocta |  |
| xo- | xaacoj | ixeetol | ixii | xöas | xöeseta | ixoocta |  |
| si- | saacoj | iseetol | isii | soos | sooseta | isoocta |  |
| mi- | maacoj | imeetol | imii | moos | mooseta | imoocta |  |

ooseta\}, for example, becomes intermediate (paseta) by o-Coalescence and then peseta by Low Vowel Harmony.
(12) Low Vowel Harmony:
á $\mathrm{C}_{0} \mathbf{e}$
$\downarrow$

A root such as Voeepx flap illustrates the harmony as well. The forms corresponding to those in Table 27.2 are toeepx, tmoeepx, peepx, yeepx, xöeepx, soeepx, moeepx. The presence of the rounded consonant $\mathbf{x} \boldsymbol{0}$ in $\mathbf{x} \boldsymbol{0} \mathbf{e e p x}$ shows that $\mathbf{0}$-Coalescence has applied. It is assumed here that some rule (not formulated here) adjusts the vowel length of the resulting cluster of vowels (to account for why it seems to be yeepx and not yeeepx, for example). ${ }^{14}$

There are derived verbs such as $\sqrt{ }$ o-queeex (UO-cut.hair) that show the need to specify that the harmonizing vowel must be stressed. The forms corresponding to those in Table 27.2 are toqueeex, tmoqueeex, paqueeex, yaqueeex, xöaqueeex, soqueeex, moqueeex. While oCoalescence has obviously applied, there is no vowel harmony in these forms.

### 27.3 Short vowel-initial stems

Roots that begin with short vowels vary in their behavior in rather regular ways. Table 27.3 presents the standard patterns with vowel-initial roots that have prosodic stress on the initial vowel.

It becomes clear from this table that the vowels in the prefixes po-, yo- and xo- are wellmotivated. The evidence is also seen here for the vowels of the prefixes si- and mi-. The conjugation of the roots that begin with $\mathbf{i}$ or $\mathbf{o}$ look no different than their counterparts with long vowels, thus providing additional evidence of Vowel Elision (10), o-Coalescence (11), and Low Vowel Harmony (12). The roots that begin with the vowels a and e are those where all of the action happens. (Roots beginning with $\mathbf{e}$ are rare except when the second syllable also has $\mathbf{e}$, as in $\sqrt{ }$ emen toss into the air (as to winnow), iiqui $\sqrt{ }$ emetx screw, $\sqrt{ }$ epeza lick lips, $\sqrt{ }$ eque give as a gift, $\sqrt{ }$ eselax pick at (something teensy), Vete cure (by healer). Even the preceding list may be exhaustive.)

[^173]

The data in Table 27.4 show that roots without prosodic stress on the first vowel conjugate for mood in the same way as the roots that begin with long vowels. The crucial points of comparison are the short low vowels. They do not undergo the assimilation/deletion that is characteristic of stressed short low vowels. The relevant rules for the allomorphy displayed are Vowel Elision (§27.2.1) and o-Coalescence (§27.2.2).

### 27.3.1 Short Low Vowel Assimilation

In these forms the sequences $\mathbf{i}+\mathbf{a}$ and $\mathbf{i}+\mathbf{e}$ become $\mathbf{i i}$ (long $\mathbf{i}$ ) and the sequences $\mathbf{0}+\mathbf{a}$ and $\mathbf{o}+\mathbf{e}$ become $\mathbf{0 0}$ (long $\mathbf{0}$ ). In one possible analysis, the short low vowels assimilate to the preceding vowel. In another possible analysis, the short low vowel loses its distinctive feature(s) and the feature of the preceding vowel spreads to it. ${ }^{15}$ With either analysis there is some complication, as is shown below.

It is unclear whether there is assimilation of a short low vowel to a low vowel. The pertinent examples are found in forms such as the infinitives (§17.4.1) where it is, however, unclear whether the length in infinitives is due to assimilation or to underlying length in the prefix. (The latter is, as a matter of fact, an option that is also possible in the cases under consideration here.)

The long vowel that results is not distinguishable from an underlying long vowel. As a result, many paradigms contain words that are phonetically identical to words in other paradigms. The word imiim s/he swallows/swallowed it, from underlying \{i-mi-am \} (3:3-Pxswallow), is homophonous with imiim who does not sleep, from underlying \{i-m-iim\} (SN-N-

[^174]sleep). The word imiih $s / h e$ did $i t$, from underlying $\{\mathbf{i}-\mathrm{mi}-\mathrm{ah}\}$ (3:3-Px-do/put.FL/say), is homophonous with imiih $s / h e / i t$ is, from underlying \{i-mi-iih $\}$ (3:3-Px-be.FL).

There is a complication with the formulation of this rule that is evident when diphthonginitial roots are examined (see §27.4). Setting aside these complications, a simple formulation of the rule is given in (13).
(13) Short Low Vowel Assimilation

A short low vowel assimilates to the features of an immediately preceding vowel.

### 27.3.2 Stems of derived verbs

Table 27.5 presents a sampling of the possible types of derived verb stems and shows how the verbs conjugate for mood. It is seen that derived verbs do not conjugate differently from those shown in Tables 27.1, 27.2 and 27.4. To be more specific, the consonant-initial derived verb stems conjugate just like consonant-initial roots. Derived verb stems beginning with long vowels conjugate just like roots beginning with long vowels. Derived verb stems beginning with unstressed vowels conjugate just like roots beginning with unstressed vowels. Derived verbs do not begin with a stressed short vowel.

|  | Table 27.4: Mood forms of verbs with initial unstressed vowel |  |  |
| :--- | ---: | ---: | ---: |
|  | Vomihj | Vazaplc | Vifohzx |
|  | smooth | paralyzed in legs | cough with hacking cough |
|  | tomihj | tazaplc | tifohzx |
| t- | tmomihj | tmazaplc | tmifohzx |
| tm- | pamihj | pazaplc | pifohzx |
| po- | yamihj | yazaplc | yifohzx |
| yo- | xöamihj | xazaplc | sifohzx |
| xo- | somihj | sazaplc | sifohzx |
| si- | momihj | mazaplc | mifohzx |
| mi- |  |  |  |

### 27.4 Diphthongs

Some verb roots begin with diphthongs. Roots beginning with diphthongs such as oii are completely unproblematic as they conjugate just like normal vowel-initial roots. Diphthongs beginning with a or aa, however, appear to be of two types that correspond to the difference between short vowels and long vowels.

| Table 27.5: Mood forms of derived verbs |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\checkmark$ queejc | $\checkmark$ apasi | $\checkmark$ aapxa | $\checkmark$ inaail | $\checkmark$ iip |
|  | make explode | wrinkle | put three | have skin | have tail |
|  | $<\mathbf{q u} \mathbf{A b l}^{\text {-iije }}$ | < a-pasi | < a-apxa | < i-naail | < i-VVp |
|  | Aug-explode | AUG-wrinkled | AUG-three | HAVE-skin | HAVE-tail |
| t- | itqueejc | itapasi | itappxa | tinaail | tiip |
| tm- | itcomqueejc | itcmapasi | itcmaapxa | tminaail | tmiip |
| po- | ipoqueeje | ipapasi | ipaapxa | pinaail | piip |
| yo- | iyoqueeje | iyapasi | iyaapxa | yinaail | yiip |
| x0- | ixoqueejc | ixapasi | ixaapxa | xinaail | xiip |
| si- | isqueejc | isapasi | isaapxa | sinaail | siip |
| mi- | imqueejc | imapasi | imaapxa | minaail | miip |
|  | $\checkmark$ Vocázni | Voop |  |  |  |
|  | bite | sew basket |  |  |  |
|  | < o-cazni | < o-ap |  |  |  |
|  | UO-bite | UO-sew.basket |  |  |  |
| t- | tocazni | toop |  |  |  |
| tm- | tmocazni | tmoop |  |  |  |
| po- | pacazni | pap |  |  |  |
| yo- | yacazni | yap |  |  |  |
| x0- | xöacazni | xöap |  |  |  |
| si- | socazni | soop |  |  |  |
| mi- | mocazni | moop |  |  |  |

The simplest ones to describe are those that are clearly underlying long vowels followed by an underlying short vowel. This type is illustrated by the verbs shown in Table 27.6; they conjugate in virtually the same way as the verbs in Table 27.2. Since the word imii $s / h e$ told him/her, from underlying \{i-mi-ai\} (3:3-Px-tell) (see Table 27.6), is homophonous with imii $s / h e$

|  | Table 27.6: Mood forms of verbs with regular diphthongs |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | Vaai | Vaaipot | Vaao | Vai | Voii |
|  | make | pay | pass | tell | be.FL.PL |
| t- | itaai | itaaipot | itaao | itai | toii |
| tm- | itcmaai | itcmaaipot | itcmaao | itcmai | tmoii |
| po- | ipaai | ipaaipot | ipaao | ipoi | paii |
| yo- | iyaai | iyaaipot | iyaao | iyoi | yaii |
| xo- | ixaai | ixaaipot | ixaao | ixoi | xöaii |
| si- | isaai | isaaipot | isaao | isii | soii |
| mi- | imaai | imaaipot | imaao | imii | moii |


|  | Table 27.7: Mood forms of verbs with irregular diphthongs |  |
| :--- | ---: | ---: |
|  | Vâaiscan | Vooil |
|  | hard | blue/green |
| t- | taaiscan | tooil |
| tm- | tmaaiscan | tmooil |
| po- | pooiscan | paail |
| yo- | yooiscan | yaail |
| xo- | xooiscan | xöaail |
| si- | siiscan | sooil |
| mi- | miiscan | mooil |


|  | Table 27.8: Mood forms of verbs with empty consonants |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | VCah | $\sqrt{ }$ Caxz | Col | $\sqrt{ }$ Cotz | $\sqrt{ }$ Cihjö |
|  | vocalize | hit | argue | suck | red |
| t- | ttah | ittaxz | ttol | ittotz | ttihjö |
| tm- | tommáh | itcommaxz | tommól | itcommotz | tommihjö |
| po- | poáh | ipoaxz | poól | ipoótz | ipóihjö |
| yo- | yoáh | iyoaxz | yoól | iyoótz | iyóihjö |
| xo- | xoáh | ixoaxz | xoól | ixoótz | ixóihjö |
| si- | ssah | issaxz | ssol | issotz | ssihjö |
| mi- | immáh | immaxz | immól | immotz | immihjö |

heard it, from underlying \{i-mi-ii\} (3:3-Px-hear\}, the rule of Short Low Vowel Assimilation must be complicated slightly or some other adjustment must be made to avoid the incorrect output (for this verb) imiii.

The more difficult verbs to describe are those that are arguably historically an underlying short a followed by another vowel (long or short). See the examples in Table 27.7. Some phonetic length adjustment takes place and causes at least many in the current generation of Seri speakers to perceive vowel length to be superficially just like in verbs such as $\sqrt{ }$ aao pass by and $\sqrt{ }$ aai make, although the verbs in question conjugate entirely differently. ${ }^{16}$ They conjugate much as one would expect verbs with short a should conjugate.

### 27.5 Empty-consonant stems

A small number of verbs (under 20) display a different conjugation pattern than all of the examples described above; see Table 27.8. ${ }^{17}$ These verbs have been analyzed as beginning with a consonant position that is empty of features (represented as C in underlying forms). When this consonant follows a consonant, it assimilates completely to that preceding consonant. When it follows a vowel, it does not acquire any features and thus hiatus occurs. (The exact placement of stress on the resulting sequence of vowels seems to vary from speaker to speaker.) Various other facts in the language support this particular type of analysis; these verbs act in all ways as if they began with a consonant in underlying form. ${ }^{18}$

The verbs $\sqrt{ }$ aCa know and $\sqrt{ } \mathbf{e C e}$ give (food) are somewhat similar in that under certain conditions no consonant appears between the vowels and under other conditions the consonant $\mathbf{y}$ appears between them: itaa (3:3-Rl-know) from underlying $\{\mathbf{i}-\mathbf{t - a C a}\},{ }^{19}$ spaa (Ir.Id-Pv-know) from underlying $\left\{\mathbf{s i}-\mathbf{p}_{\text {Abl }} \mathbf{- a C a}\right\}$, iyoaa (3:3-Dt-know) from underlying $\{\mathbf{i}-\mathbf{y o} \mathbf{- a C a}\},{ }^{20}$ and isiya (3:3-Ir.Id-know) from underlying $\{\mathbf{i} \mathbf{- s i} \mathbf{- a C a}\}$. The consonant $\mathbf{y}$ that appears can be explained by

[^175]| Table 27.9: Mood forms of some irregular verbs compared with regular verbs |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | regular <br> Vacat | irregular <br> $\sqrt{\text { ācat }}$ | regular <br> Vaalim | $\begin{array}{r} \text { irregular } \\ \sqrt{\text { âama }} \end{array}$ |
|  | bitter, salty | swim | play | reside |
| t- | tacat | tacat | taalim | taama |
| tm- | tmacat | tmacat | tmaalim | tmaama |
| po- | poocat | pacat | paalim | pooma |
| yo- | yoocat | yacat | yaalim | yooma |
| xo- | xoocat | xacat | xaalim | xooma |
| si- | siicat | sacat | saalim | siima |
| mi- | miicat | macat | maalim | miima |

spreading the features of $\mathbf{i}$ to the empty consonant position in the root. This consonant is phonetically long (see §28.5.1). The features of $\mathbf{o}$ do not spread in a similar fashion; there is no phoneme /w/ nor a phonetic [w] in the word iyoaa.

### 27.6 Irregular verbs both ways

The patterns presented above are what seem to be the standard ones in the language. There are a few exceptional verbs of two different types.

First, some verbs have initial stressed short low vowels that act just as if they were long in every way (that is, all facts about their conjugation, including facts not presented in this chapter) except that they are phonetically short. See the verb for swim in Table 27.9 as an illustration. That root is marked with a macron over the vowel in the underlying form of the root to indicate this kind of irregularity. Other verbs with this kind of irregularity include $\sqrt{\mathbf{a}} \mathbf{i} i$ wake up partially, $\sqrt{\mathbf{a}}$ cötim cover oneself as with a blanket, Vāsaquim comb one's hair (as contrasted with Vasaquim brush (something)).

Second, another kind of irregularity is illustrated by the verb for reside in Table 27.9. The root conjugates in every way as if the root began with a short low vowel (including with vowel assimilation) but the low vowel is always phonetically long when it is present. This type of root is marked with a circumflex over the vowel in the underlying form of the root to indicate this kind of irregularity.

### 27.7 Highly irregular verbs

Several highly irregular verbs exist in the language which nonetheless have interesting systematic properties with respect to their irregularities. All of these are not discussed here (see the paradigms in the 2005/2010 dictionary). ${ }^{21}$ Table 27.10 presents non-negative and negative mood forms as a way to partially illustrate the facts. The key feature of these irregular verbs is the fact that, very unusually for the language, stress rarely occurs on their roots at all. ${ }^{22}$ (To make these unusual facts completely evident, stress is indicated in all of these verbs in this table.) Underlying forms of the roots are not given for these verbs.

It can be seen from the data in Table 27.10 that the presence of the prefix $3: 3 \mathbf{i}$ - $(\S 17.3 .2 .1)$ is very important in the transitive verbs since it receives the stress in these verbs (unlike anywhere else in the language). Except for the verb meaning be in this table, if there is no prefix vowel, a vowel is epenthesized and is then stressed. This epenthetic vowel is either $\mathbf{a}, \mathbf{e}$, or $\mathbf{e e}$; the vowels $\mathbf{e}$ and ee are used when the verb root has $\mathbf{e}$; this fact is related to the vowel harmony seen elsewhere (§13.6.4). In the verb meaning say, an excrescent $\mathbf{t}$ also often appears.

It is also seen that c-Epenthesis (§27.1.4) applies in these forms as it does in regular verbs.
Finally, it is typical of these highly irregular verbs that the trio of prefixes po-, yo- and xodo not pattern alike, unlike elsewhere. To be specific, forms with the prefix $\mathbf{x o}$ - look quite different than those with the prefixes po- and yo-.

[^176]| Table 27.10: Mood forms of verbs of some highly irregular verbs |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | accompany | say (intr.) | grind (dry item) | give | $b e$ |
| t- | ital | teete | ita | iite | taa |
| t-m- | itcamal | teme | itcmaha | itqueme | tama |
| tm- | itcamal | teme | itemaha | itqueme | tama |
| po- | ipal | teepe | ipa | iipe | ipa |
| po-m- | ipomal | pome | ipoma | ipome | poma |
| yo- | iyal | teeye | iya | iiye | iya |
| yo-m- | iyomal | yome | iyoma | iyome | yoma |
| xo- | ixoal | xoe | ixoa | ixoe | xoa |
| xo-m- | ixomal | xome | ixoma | ixome | xoma |
| si- | issal | teese | isa |  | saa |
| si-m- | iscamal | seme | iscama | isqueme | sama |
| mi- | imal | teeme | ima | iime | maa |
|  | come | go |  |  |  |
|  | (with mo-) | (with $\mathbf{n t -}$ ) |  |  |  |
| t- | mota | (i)ntita |  |  |  |
| t-m- | (i)ntama | ? |  |  |  |
| tm- | (i)ntama | ? |  |  |  |
| po- | mopa | (i)ntipa |  |  |  |
| po-m- | (i)mpoma | (i)ntpoma |  |  |  |
| yo- | moya | (i)ntiya |  |  |  |
| yo-m- | (i)nyoma | (i)ntyoma |  |  |  |
| x0- | (i)mxoaa | (i)ntxoa |  |  |  |
| xo-m- | (i)mxoma | (i)ntxoma |  |  |  |
| si- | mosa | (i)ntisa |  |  |  |
| si-m- | (i)nsama | (i)ntsama |  |  |  |
| mi- | moma | (i)ntima |  |  |  |

## 28. Phonology

This chapter presents the phonemes (§28.1), basic facts about stress (§28.2), syllable structure (§28.3), discussion of the minimal word (§28.4), and the phonetic details that are not usually represented in the practical orthography (§28.5). This chapter continues to use the presentation of data using the "everyday use" practical orthography (using the conventions developed since about 1952, as explained in §1.1.4), but it also presents data using the conventions of the International Phonetic Association - the technical orthography in Table 1.

### 28.1 Phonemes

There are 22 or 26 phonemes (depending on how one counts the vowels), as shown in Table 1: four vowels (which may be short or long), and eighteen consonants (four oral stops, eight fricatives, two nasals, a central approximant, a glottal stop, a lateral approximant that is uncommon in the language, and a tap that occurs only in loanwords). ${ }^{1}$ Other sounds from Spanish occur in

|  | Table 28.1: Phonemes |  |
| :---: | :---: | :---: |
|  | Technical Orthography | Practical Orthography |
| Vowels | i $\varepsilon$ o u (and length) | i e o a (ii ee oo aa) |
| Oral stops | p t $\mathrm{kk}^{\mathrm{w}}$ | p t c/qu* cör |
| Fricatives | $\Phi \mathrm{s} \ddagger \int \mathrm{xx}^{\mathrm{w}} \chi \chi \chi^{\mathrm{w}}$ |  |
| Nasals | m n | m $n$ |
| Central approximant | j | y |
| Glottal stop | $?$ | h |
| Lateral approximant | $1^{\dagger}$ | $\underline{1}$ |
| Tap | $\mathrm{r}^{\dagger \dagger}$ | r |

[^177][^178]much more recent and obvious loanwords, but these are not included in the discussion here. A few other sounds occur in highly unusual words, including [w] in cargüéyotim [kar'wejotim] (SN-wander) (from Spanish 'vagar') and [v] in yova ['jova] a breed of dog with long ears. ${ }^{2}$

These phonemes fall into two important natural classes: the obstruents (oral stops and fricatives), which are all voiceless; and the sonorants (vowels, nasals, lateral approximant, tap, and glottal stop), which are all voiced, with the exception of the glottal stop. ${ }^{3}$ The glottal stop patterns with the sonorants with respect to the sonority scale and syllabification (see §28.2).

### 28.1.1 Vowels

The four vowel qualities occur short and long: a, e, i, $\mathbf{o}$ and $\mathbf{a a}, \mathbf{e e}, \mathbf{i i}, \mathbf{o o}$. Four simple words that illustrate the short vowels are: cap ['k ap] palo blanco tree (Acacia willardiana), cof ['k o $\Phi$ ] San Juanico tree (Jacquinia pungens), set ['s ع t] magnificent frigatebird (Fregata magnifica), tis ['t Is ] catclaw acacia (Acacia gregii).
(1) Vowels


The vower a is a low central unrounged vowel: [a] and its long version have the same quality.

The vowel $\mathbf{e}$ is an open-mid front unrounded vowel: [ $\varepsilon$ ]. It is sometimes somewhat more open than the similar vowel in English and somewhat more close than the vowel [æ] of English. The long version has the same quality. It is the least frequent of the vowels, and in some cases is

[^179]demonstrably derived historically from the vowel cluster ai. ${ }^{4}$ The vowel a generally changes to e to harmonize with an $\mathbf{e}$ in the word (see §13.2.4, §13.6.4, §27.2.3, §27.7).

The vowel $\mathbf{i}$ is a close front unrounded vowel: [i]. Short $\mathbf{i}$ often varies to a somewhat more open quality, [ I ], especially in a stressed syllable that is followed by a consonant, as in ina ['in a] (3P-fur/feather) its fur/feather. ${ }^{5}$

The vowel $\mathbf{0}$ is a mid-close rounded vowel: [o] and its long version has the same quality. This vowel very occasionally varies to a slightly closer sound. This may have been more common in centuries past; some words were transcribed with [u] in earlier transcriptions; today the symbol $[\mathrm{u}]$ would be rarely used in transcribing the language although outsiders do recognize that the $\mathbf{0}$ is closer than a Spanish or English $\mathbf{0}$, for example. ${ }^{6}$

The four vowel qualities contrast phonologically on two parameters: low vs. nonlow, and front vs. back. The low vowels are $\mathbf{e}$ and $\mathbf{a}$, and the nonlow vowels are $\mathbf{i}$ and $\mathbf{0}$. The front vowels are $\mathbf{i}$ and $\mathbf{e}$, and the back vowels are $\mathbf{o}$ and $\mathbf{a}$. This phonological classification is justified in $\S 14.3 .1$ and $\S 14.4 .1$ using evidence from allomorphy of verb prefixes.

Many words show that the length of the vowel is distinctive both superficially and underlyingly. Some examples include: ${ }^{7}$
(2) Contrasting short and long a
a. hap
['9ap]
mule deer
b. haap
['3aap]
wild tepary bean
c. c-xap
[' k $\chi$ a p] one who digs it up
(SN-Tr-dig.up)
d. c-xaap ['k $\chi$ aap] one who spends the night
(SN-spend.night)
e. cacni
['kakni]
wood ibis

[^180]f. $\underset{\text { (SN-bowed) }}{\text { c-aacni }} \quad[$ kaakni] $\quad$ what is bowed
(3) Contrasting short and long e

| a. | zep | ['Scp] | golden eagle |
| :---: | :---: | :---: | :---: |
| b. | heep | [ 2 ع P p ] | mesquite sap |
| c. | zel | ['fe ${ }^{\prime}$ ] | parrot |
| d. | zeel | ['fecł] | a rock clam (Chama sp.) |
| e. | t-oqué <br> (Rl-hear.well) | [to'ke] | s/he hears well |
| f. | t-oquee <br> (RL-hear.well.PL) | [to'ker] | they hear well |

(4) Contrasting short and long $\mathbf{i}$

| a. | $\begin{aligned} & \text { qu-i-p } \\ & (\mathrm{SN}-\mathrm{TR}-\mathrm{dig})(\sqrt{ } \text { ap }) \end{aligned} \quad\left[\text { ' } \mathrm{k} \_\mathrm{p}\right]$ | one who digs it |
| :---: | :---: | :---: |
| b. | $\begin{aligned} & \text { qu-i-p } \\ & (\mathrm{SN}-\mathrm{Tr}-\mathrm{bite})(\sqrt{ } \text { ap }) \end{aligned} \quad\left[{ }^{\prime} \mathrm{k}_{\mathrm{I}} \mathrm{p}\right]$ | one who bites it (like mosquito) |
| c. | $\begin{array}{lc} \text { qu-i-ip } & {[\text { 'kiip }]} \\ \text { (SN-Tr-carry.on.head) }(\sqrt{ } \text { (ip) } \end{array}$ | one who carries it on the head |
| d. | $\begin{array}{ll} \text { qu-iip } & {[\text { 'kiip }]} \\ (\text { SN-TR-straighten }) & (\sqrt{\text { liip }}) \end{array}$ | one who straightens it |
| e. | $\begin{aligned} & \text { i-t-íp } \quad\left[i^{\prime} \mathrm{t}_{\mathrm{I}} \mathrm{p}\right] \\ & \text { (3:3-RL-carry.on.head) } \end{aligned}$ | s/he carries it on head |
| f. | $\begin{array}{ll} \text { i-t-iip } & \text { [i'tiip] } \\ \text { 3:3-RL-straighten } \end{array}$ | s/he straightens it |
| g. | $\begin{aligned} & \text { i-yo-tís } \quad\left[\mathrm{ijo}^{\prime} \mathrm{t} \text { IS }\right] \\ & \text { (3:3-DT-signal.with.finger) } \end{aligned}$ | s/he signaled to him/her |
| h. | i-yo-tiis <br> [ijo'tiis] <br> (3:3-Dт-push.under.water) | s/he pushed him/her under water |
| i. | i-t-ii <br> [ijo'tii] <br> (3:3-Rl-hear) | s/he hears it/her/him |
| j. | $\begin{array}{ll} \text { i-t-iii } & \text { [ijo o'ti i i }] \\ (3: 3-R L-h e a r . P L) ~ & \end{array}$ | they hear it/her/him |


| k | t-ix <br> RL-juicy | $[$ 'ti $\chi]$ | it is/was juicy |
| :--- | :--- | :---: | :--- |
| 1. | t-iix | $[$ 'tii $\chi]$ | it is/was inflated |
|  | RL-inflated |  |  |

(5) Contrasting short and long $\mathbf{o}$
a. co-h-a
$\left[{ }^{\prime} \mathrm{koPa}\right]^{8}$
one who is with it
(3IO-SN-be)
b. c-ooha ['koola] one who cries
(SN-cry)
c. cö-c-acozit $\left[\mathrm{k}^{\mathrm{w}} \mathrm{k} \mathrm{a}^{\prime} \mathrm{k}\right.$ o $\left.\int \mathrm{it}\right] \quad$ one who pays for it with it (3IO-SN-Tr-pay.for.with)
d. cö-c-acoozit $\left[\mathrm{k}^{\mathrm{w}} \mathrm{k} \mathrm{a}^{\prime} \mathrm{k}\right.$ oofit] one who helps him/her rob it (3IO-SN-Tr-help.rob)

Since vowel clusters exist and are very common, as in hai [' ? ail] air, haait [' Pa aít] (Abs.blood) blood, haaonam [' Pa a ŏ nam] (Abs-hat) hat, and yaolt ['jaŏ tt ] (3P-muscle) his/her/its muscle, it is logical to consider the possibility that the long vowels are simply a sequence of two identical vowels pronounced as one prolonged vowel. ${ }^{9}$ Some facts would be straightforwardly interpreted in this way: compare the following stems:

| (6) | a. | $\sqrt{ }$ ahca |
| :--- | :--- | :--- |
| b. | Vaahca | be located |
|  | cause to be located |  |
| c. | $\sqrt{ }$ eme | depleted |
| d. | $\sqrt{ }$ eeme | deplete |
|  |  |  |
| e. | $\sqrt{ }$ actim | be cut |
| f. | $\sqrt{ }$ aactim | cut |

The causative stems could be analyzed as $\sqrt{ }$ a-ahca, $\sqrt{ }$ e-eme (from underlying \{a-eme\}), and $\sqrt{ }$ aactim respectively. However, there is considerable evidence that the situation is more complex than this in the majority of cases, and that the long vowels are in some important way not simply a sequence of identical vowels. ${ }^{10}$ An analysis that tries to implement only sequences of identical vowels is much more complicated than one that posits long vowels. These facts are discussed in §§27.2-27.3.

[^181]Vowel length is distinctive in stressed syllables but not in unstressed syllables. ${ }^{11}$ Long vowels in unstressed syllables are common but are predictable; see §28.5.1.

### 28.1.2 Oral stops

The oral stops are all voiceless. One of these stops is a labialized velar. The stops vary in their pronunciation in utterance-final position, from unaspirated release, to unreleased, to nasal release, to lightly aspirated (especially following a consonant). The aspirated version of the labialized velar stop has a rounded quality to it. A velar stop may also have a glottalized variant utterance-finally. ${ }^{12}$
(7) Oral stops

| Bilabial | Dental | Velar | Labialized velar |
| :--- | :--- | :--- | :--- |
| $\mathbf{p}$ | $\mathbf{t}$ | $\mathbf{c , ~ q u}$ | $\mathbf{c o ̈}$ |
| $/ \mathrm{p} /$ | $/ \mathrm{t} /$ | $/ \mathrm{k} /$ | $/ \mathrm{k}^{\mathrm{w}} /$ |

The evidence from allomorphy strongly suggests that the labialized velar stop is a historical development from the sequence $\mathbf{c o} / \mathrm{ko} /$, usually in the syllable after the stressed vowel. (See $\S 13.2 .1$ and $\S 17.1 .3$, for example.) The allomorph cö- of the 3 IO prefix (§17.1.2.4) co- accounts for the vast majority of the cases of cö $/ \mathrm{k}^{\mathrm{w}} /$ that occur before the stressed syllable. For these reason, the distribution of $/ \mathrm{k}^{\mathrm{w}} /$ is not as broad as other stops.
(8) Initial
paaza /'paasa/ Gila monster
taca /'taka/ finescale triggerfish
caanj /'kaanx/ Gulfgrouper
cöihiin $/ k^{w} \mathrm{i}^{\prime}$ ?iin/ sanderling
(9) Medial

| xepe | $/ \chi \varepsilon \mathrm{p} \varepsilon /$ | sea |
| :--- | :--- | :--- |
| coote | $/ \mathrm{koot} /$ | teddybear cholla |
| taca | $/$ taka/ | finescale triggerfi |

taca /'taka/ finescale triggerfish
c-aacöim /lkaak ${ }^{\mathrm{w}} \mathrm{im} /$ SN-TR-prepare.reed.boat.to.carry.cargo

[^182](10) Final

| hap | /'rap/ | mule deer |
| :---: | :--- | :--- |
| xat | /'रat/ | hail |
| ziic | /'Siik/ | bird |
| sacö | /'sakw/ | toadfish |

The word-formation rules often concatenate a stop prefix before a stop-initial root, as in t-tocnij ['t:oknix] (Rl-round), i-t-tís [i't:is] (3:3-RL-point.at), and c-cap ['k:ap] (SN-fly). These geminate consonant clusters are pronounced as phonetically long consonants; the occlusion is simply held longer before release. A $\mathbf{t}$-initial suffix may also follow a $\mathbf{t}$-final root: $\mathbf{c}$ -at-tim (SN-Tr-cook.under.coals-ImPF). ${ }^{13}$ This cluster is pronounced as a long t: ['ka:t:im].

### 28.1.3 Fricatives

The fricatives are all voiceless. The labial fricative is perhaps typically and traditionally bilabial, but at least some speakers use a labiodental articulation. ${ }^{14}$ The labialized velar fricative jö is extremely lenis in the speech of most speakers and has been previously described as varying from "lightly spirant to vocoid articulation". ${ }^{15}$ The uvular fricatives "feature marked trilling of the uvula" for some speakers. ${ }^{16}$

## (11) Fricatives

|  | $\begin{aligned} & \text { 芌 } \\ & \stackrel{0}{0} \\ & \frac{y}{4} \end{aligned}$ | $\begin{aligned} & \text { ज̈ } \\ & \stackrel{0}{0} \\ & \stackrel{\Delta}{4} \end{aligned}$ |  | $\begin{aligned} & \frac{6}{5} \\ & \stackrel{5}{5} \end{aligned}$ |  | $\frac{\text { 霏 }}{3}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| f | s | 1 | z | J | jö | $\mathbf{x}$ | xö |
| / / | /s/ | A/ | /5/ | /x/ | $/ \mathrm{x}^{\mathrm{w}} /$ | / $\chi 1$ | $\chi^{\text {w }}$ |

The labialized velar and labialized uvular fricatives are quite clearly recent historical developments from jo and $\mathbf{x o}$ (respectively) after the stressed vowel, with which they sometimes alternate morphophonemically (see $\S 13.2 .1$ and $\S 17.1 .3$, for example). For that reason, their distribution is not as broad as other fricatives. The lateral fricative and the velar fricative are

[^183]very uncommon in word-initial position. The contrast between the velar fricative ( $\mathbf{j}$ ) and the uvular fricative ( $\mathbf{x}$ ) is much more obvious in intervocalic or syllable-final position.


The word-formation rule for independent irrealis (§17.1.1.3) may concatenate an $\mathbf{s}$ before an $\mathbf{s}$-initial root, as i-s-sanj (3:3-Ir.Id-carry.on.back) and s-sanj (Ir.Id-carry.on.back) (finite and deverbal forms, respectively). These geminate consonant clusters are pronounced as phonetically long consonants.

[^184]The word $\mathbf{x}$ (§3.6.3) may follow an $\mathbf{x}$-final root, although it may not be easily perceived: poháx $\mathbf{x}$ (Ir.Dp-fatty UT).

### 28.1.4 Nasals

The nasals are $\mathbf{m}$ (bilabial) and $\mathbf{n}$ (dental).
(15) Initial

| $\underline{\text { mas }}$ | /'mas/ | olive shell |
| :--- | :--- | :--- |
| $\underline{\text { nas }}$ | /'nas/ | a milkweed vine |

(16) Medial

| cama | /'kama/ | big skate |
| :--- | :--- | :--- |
| hanaj | /'?anax/ | raven |

(17) Final
xam /'xam/ squash
haan $\quad /$ Paan/ smooth Pacific venus clam
The word formation rules often concatenate a nasal prefix before a nasal, either another prefix or a root-initial consonant. The result is a phonetically long consonant. ${ }^{19}$

| a. | i-m-mís | SN-TR-N-resemble | $\left\{\begin{array}{l}\text { i-i-m-mis }\} \\ \text { b. }\end{array}\right.$ |
| :--- | :--- | :--- | :--- |
| i-m-mám | SN-N-cooked/ripe | $\{\mathbf{i}-\mathbf{m - m a m}\}$ |  |
| c. | i-n-nopin | SN-N-convex | $\{\mathbf{i}-\mathbf{m - n o p i n}\}$ |
| d. | i-m-mís | 3:3-PX-resemble | $\{\mathbf{i}-$ mi-mis $\}$ |
| e. | im-mám | PX-cooked/ripe | $\{$ mi-mam $\}$ |
| f. | in-nopin | Px-convex | $\{$ mi-nopin $\}$ |
| g. | im-m-amsisiin | 2SGS-Px-love | $\{$ m-mi-amsisiin $\}$ |
| h. | im-m-iih | 2SGS-Px-be.FL | $\{$ m-mi-iih $\}$ |

The bilabial nasal, unlike the dental, assimilates to the point of articulation of a following consonant under the proper conditions, and utterance-finally may become velar. It also assimilates to a preceding velar stop and becomes a nasalized labial-velar approximant. It should be viewed as the unmarked nasal in the language. These facts are discussed in more detail in $\S 28.5 .2$ and $\S 28.5 .4$, respectively.

### 28.1.5 Central approximant and glottal stop

The only central approximant is palatal: $\mathbf{y}[\mathrm{j}]$. It patterns with the nasals and the glottal stop, $\mathbf{h}$ [ 3 ], to form the class of sonorants referred to by certain syllable structure conditions (see §28.2). The palatal approximant generally has clear non-fricative articulation although, presumably

[^185]under the influence of regional Spanish, some younger speakers give it a slight fricative or even affricate articulation.

| (19) | Initial haso yeen | /laso/ <br> /'jeعn/ | fishing net 3P-face |
| :---: | :---: | :---: | :---: |
| (20) | Medial haaho iyas | /laa?o/ <br> /'ijas/ | road 3P-liver |
| (21) | Final zaah caay | /'Saa?/ <br> /'kaaj/ | sun <br> horse |

It is almost always predictable whether the features of [i] will be taken as a syllable nucleus (the vowel i) or as a syllable onset (the approximant $\mathbf{y}$ ), as discussed in §28.2. The word caay horse in the preceding list is an unusual example.

### 28.1.6 Lateral approximant and tap

A handful of words in the language sometimes are pronounced, or sometimes have been pronounced, with a voiced lateral, which is written as $\underline{\underline{l}}$ (with underscore) in the practical orthography. The tap is found in a few loanwords from Spanish and Uto-Aztecan languages (see Appendix A).
(22) Initial

| $\underline{\underline{l a m z}}$ | /lams/ | large goliath grouper |
| :---: | :---: | :---: |
| $\underline{\text { roocö }}$ | /'rookw/ | crazy |

(23) Medial
xalaa / $a^{\prime}$ laa/ cactus wren
pareen $/ \mathrm{pa}$ 'гєعn/ reins and bit
Final
tootar /'tootar/ chicken
It should be noted that the $\mathbf{r}$ is a tap and not a trill both in initial position (as in roocö crazy and raama ${ }^{20}$ checkers) and in medial position in the nickname Bariil (from Spanish 'barril') that a certain man had.

[^186]
### 28.2 Stress

Stress is a property associated with nouns, pronouns, adjectives, verbs, (most) adverbs, and postpositions although stress on any of these classes of words may be greatly reduced stress in normal contexts. Other word classes have stress only idiosyncratically. For example, most auxiliaries are unstressed, but some are stressed (see chapter 20).

Stress is generally limited to some syllable of the root. With the exception of a few highly irregular verbs (see $\S 27.7$ ) or as a result of vowel fusion (see $\S 27.3$ ), stress does not fall on a morpheme other than a root vowel.

Stress typically is the perceived effect of higher pitch on the vowel of the stressed syllable, greater intensity on the stressed syllable, and a lengthening effect (when conditions are met) on the following consonant and (when the conditions are met) on the vowel after that consonant (see §28.5.1).

Accents are overtly written on all stressed words in this section for the sake of explicitness. Otherwise the general practice in this grammar is to write accents following the conventions of the 2005 dictionary: when stress does not occur on the first syllable of the word, on question words (as in Spanish), and on a few small adverbs (such as cói still, to distinguish it from coi the (plural) and avoid mis-readings).

This section discusses where primary stress occurs. Few words are truly long enough to consider with respect to secondary stress, but four syllable words such as tacazáca inchworm and coziháamaj a small non-flying biting insect have detectable higher pitch and greater intensity on the first syllables: [1taka'faka] and [1kofi'?aamax]. ${ }^{21}$ In a very few cases a phonetic fact (blocking of nasal assimilation) may be related to the presence of secondary stress (see §28.5.2).

### 28.2.1 Basic trochaic pattern

The following generalization is the basic stress rule. ${ }^{22}$
(25) Stress rule:

Construct a trochaic foot on the right edge of the root.
Some representative examples are given below. These examples are all nouns; verbs are discussed in §28.2.3.

[^187]
## Four-syllable roots ${ }^{23}$

$$
\begin{array}{lll}
\text { (26) } & \text { tacazáca } & \text { inchworm } \\
\text { cascamáma } & \text { a stinkbug } \\
\text { coziháamaj } & \text { a small non-flying biting insect } \\
\text { a-catazáta } & \text { 3P-older.brother's.wife.ME }
\end{array}
$$

## Three-syllable roots

| (27) | Short penultimate vowel |  | Long penultimate vowel |  |
| :---: | :---: | :---: | :---: | :---: |
|  | coníjoj | Craveri's murrelet | jomxéeziz | ocotillo |
|  | xpasípip | dragonfly | hamquíife | a burning stick |
|  | comíma | Coulter brickell-bush | contéetxyat | stinkbug |
|  | casópaj | Panamic pearl oyster | comáanal | yerba mansa (a plant) |
|  | zicázijc | red-billed tropicbird | conzéezla | a small unidentified ant |
|  | catámax | cup-and-saucer limpet | jomxéeziz | ocotillo |
|  | xamátaj | broth | camáaina | an unidentified manta ray |
|  | hacálco | dolls and related items that are played with | catíiija | common loon in winter plumage |
|  | mojépe | sahuaro | hamiime | sky |
|  | moxíma | yesterday | xasáacoj | sina (cactus) |
|  | sayána | common olive (snail) | a-cmajéete | 3P-wife's.older.sister |
|  | canócni | Heermann's gull | a-comíique | 3P-stepchild |
|  | tozípla | side-blotched lizard | yacótni | 3P-poisonous.barb |
|  | camázjij | a venus clam |  |  |
|  | capóclim | chiton |  |  |
|  | zacápnij | ball of dirt or fruit |  |  |
|  | a-maquéte | 3P-wife's.younger.sister |  |  |
|  | i-sajápo | 3P-stomach (of mullet) |  |  |
|  | i-tamócni | 3P-chin |  |  |
|  | yahípxat | 3P-ink (from octopus) |  |  |

Two-syllable roots

| (28) | Short penultimate vowel |  | Long penultimate vowel |  |
| :--- | :--- | :--- | :--- | :--- |
|  | cáma | big skate | séeten | pen shell |
|  | cómot | a milkweed vine | nóoni | pupa |
| héhe | plant | páaza | Gila monster |  |
| cópas | Panamic pearl oyster | sáapom | purple prickly pear |  |
| cósi | thorn | téepol | black-tailed jackrabbit |  |
| héme | a century plant | nóosi | mourning dove |  |
| mójet | bighorn sheep | quéepoj | horn shark |  |
| hápaj | octopus | séenel | butterfly |  |

[^188]| Consonant-initial roots |  | Consonant-initial roots |  |
| :---: | :---: | :---: | :---: |
| with short vowel |  | with long vowel |  |
| a-cámaz | 3P-daughter-in-law | a-cáasac | 3P-son's.child |
| a-máhaj | 3P-father's.older.brother | a-cóome | 3P-younger.sister.ME |
| a-tcmáhaj | 3P-ygr.sister's.child.FE | a-quéemez | 3P-mother-in-law.FE |
|  |  | i-téepni | 3P-front.tooth |
| Roots beginning with $\mathrm{V}^{24}$ |  | Roots beginning with VV |  |
| ámaz | 3P-grandmother.ME | áacaz | 3P-ygr.brother.FE |
| ápaz | 3P-grandfather.ME | íifnij | 3P-nostril |
| ápxaz | 3P-ol.sister's.child.FE | íme | 3P-home/nest |
| áta | 3P-mother | íipajö | 3P-tail (of fish, bird) |
| ípot | 3P-calf.of.leg | íipni | 3P-forehead |
| ítac | 3P-bone | íixax | 3P-snout |
| íto | 3P-eye | íixquij | 3P-cartilage |

## Monosyllabic roots

| (29) | Short vowel |  | Long vowel or diphthong |  |
| :---: | :---: | :---: | :---: | :---: |
|  | cóf | San Juanico (tree) | háan | smooth Pacific venus clam |
|  | cós | Maytenus phyllanthoides | háap | wild tepary |
|  | pát | southern cattail | záah | sun |
|  | háp | mule deer | péen | carrying pole |
|  | stácj | a rock oyster | háait | blood |
|  | Consonant-initial roots |  | Consonant-initial roots |  |
|  | with a short vowel |  | with a long vowel or diphthong |  |
|  | a-ctám | 3P-sister's.husband.ME | a-cáac | 3P-daughter's.child.FE |
|  | i-cáp | 3P-stalk (of century plant) | a-máac | 3P-older.brother.FE |
|  | i-lít | 3P-head | a-ntáac | 3P-mother's.ygr.sister |
|  |  |  | a-quéetz | 3P-husband's.ygr.brother |
|  |  |  | i-háait | 3P-blood |
|  | Roots beginning with $\mathrm{V}^{25}$ |  | Roots beginning with VV |  |
|  | ís | 3P-seed | íif | 3P-nose |
|  | ám | 3P-father.FE | áac | 3P-father's.sister |

Exceptionally, some words have stress on the antepenultimate syllable of the root; the final syllable of each root is (exceptionally) extrametrical.

[^189]| (30) | cótotaj <br> hásotoj <br> háacala <br> háamoja <br> sóocajam <br> cáamopxa | boojum tree <br> grunt (fish) <br> bedrock mortar <br> antelope <br> winged pearl oyster <br> sphinx moth | cahícosa <br> catápora <br> Honápota <br> satómatox <br> i-táamalca <br> xahícosa | a variety of mule deer robber fly <br> (place name) <br> mesquite driftwood <br> 3P-horn(s)/antler(s) <br> Haustellum elenensis <br> (a rock shell) |
| :---: | :---: | :---: | :---: | :---: |
|  | Roots beginning with V |  | Roots beginning with VV |  |
|  | íleca | 3P-drool | íinepoj <br> íiseja <br> íipajöam | 3P-marrow <br> 3P-wing/branch <br> 3P-dry.flower.on.cactus |

Suffixes do not affect the placement of stress. Compare the stress pattern of singular nouns and their corresponding plurals; it is obvious that stress does not shift to the right. (Since the complications involved with pluralization are numerous, the hyphens given here are only suggestive; see $\S 13.2 .1$.)

(31) | Singular | Plural |  |  |
| :--- | :--- | :--- | :--- |
|  | háaho | háaho-lcam | road |
| comítin | comítij-a | desert ironwood (living tree) |  |
|  | hacázol | hacázol-cam | piece of cloth |
|  | haitámoc | haitámo-joj | a small wood-boring insect |
|  | hatépen | hatépej-a | Mexican basket with handles |
| hatxánoj | hatxánol-oj | cradle, swing |  |
|  | hazípop | hazípop-oj | immature century plant |
| cascamáma | cascamáma-toj | a stinkbug |  |
| tacazáca | tacazáca-taj | inchworm |  |
| zóozj | zóozal-ca | sack |  |
| hást | hásat-oj | stone |  |
|  | quéelx | quéelex-olca | short paddle |
|  | hamcáaxat | hamcáaxat-alca | smoke |
| hóopatj | hóopat-alca | wave (noun) |  |

### 28.2.2 Quantity-sensitivity

The stress-assignment rule is more complicated, however, in that it can be shown that stress is quantity-sensitive. If the final syllable contains a long vowel or a diphthong, stress typically occurs on the final syllable.

| comcáac | Seri people | mentoxíil | a hydrozoan |
| :--- | :--- | :--- | :--- |
| pajíi | obsidian | xomcahíift | oregano |
| maxáa | sand snake | xomcahái | a small round flounder |
| mahyáai | opposite coast | xomcahóij | Grusonia spp. (cactus) |
| conée | grass | patpayóo | juvenile zebra-tailed lizard |
| copsíij | by-the-wind-sailor |  |  |
|  | (hydrozoan) |  |  |
| a-tcmajéem | 3P-younger.sister's.husband.FE |  |  |

Similarly, stress occurs on the final syllable if the word ends in a consonant cluster. The regularity of this pattern suggests that the final consonant is usually extrametrical for the purpose of calculating syllable weight; when there are two consonants, one of them must be moraic and therefore contributes to syllable weight.

(33) \begin{tabular}{llll}

hamácj \& cliff spurge \& \begin{tabular}{l}
hanzajípj <br>
hasahcápjö́s

 \& 

plate <br>
sinita (cactus)
\end{tabular} <br>

mojéptxö \& ashylimberbush \& curve-billed thrasher \& | icocáxz |
| :--- |
| cacájöc | <br>

moxhámt \& bagworm moth \& last year \& <br>
cocásjc \& tropical beach-grass \& \& <br>
sapátx \& sweetbush \& \& <br>
conámj \& a large grasshopper \& \& <br>
xazépl \& a porpoise \& \& <br>
i-hiscácj \& 3P-scab \& \& <br>
yacácj \& 3P-gall.bladder \& \&
\end{tabular}

Words with final stress on a light syllable (no long vowel, no diphthong, no consonant cluster) are exceptional and few. The following list includes most of them.

| (34) | †coláxö | goliath grouper | hamíp | spiderling (a plant) |
| :--- | :--- | :--- | :--- | :--- |
| joját | saya (a plant) | hamác | fire |  |
| coqué | chili | haznám | a very large totoaba |  |
|  | saxáp | a bittersweet clam | a-cacám | 3P-son-in-law |
|  | xojmás | a land snail | yamác | 3P-blow (as of whale) |
|  | najmís | a desert phacelia | i-mozít | 3P-half |
| otác | frog, toad |  |  |  |

Roots with non-final stress and a final heavy syllable are exceptional and few. The following list includes most of them.

| (35) | hápats | Apache | hóopatj | wave (noun) |
| :--- | :--- | :--- | :--- | :--- |
| xnícatl | Colorado snapper | íiholx | 3P-cud |  |
| tajísipl | Panamic sergeant major | xpaléemelc | olive shell; cone shell |  |
|  | xpanómalc | octopus (coyote's speech) | xpasíticl | Harris' antelope squirrel |
| tojquítajc | great horned owl |  |  |  |
| zicázijc | red-billed tropicbird |  |  |  |
| yasámict 3P-tail (of sea turtle)  |  |  |  |  |
| ítizx | 3P-penis |  |  |  |

### 28.2.3 Stress on verbs

The stress pattern on verbs is similar to that of nouns: typically trochaic and quantity-sensitive.
As with nouns, the prefixes and suffixes on verbs - whether derivational or inflectional do not affect stress placment except for a handful of highly irregular verbs (see §27.7). For example, the monosyllabic root $\sqrt{ }$ zam put (vertical item), attack will always bear the stress no matter what affixes occur. ${ }^{26}$

| in-t-con-zám | 2SGS-Rl-N-put.VT |
| :--- | :--- |
| i-t-zám-lcam | 3:3-RL-put.Vt-Pl |
| mazi t-zám-lcam | 2PLDO-RL-put.Vt-PL |
| mazi t-con-zám-lcam | 2PlDO-RL-N-put.VT-PL |

Some plural suffixes on verbs are disyllabic; they are never stressed and their presence never affects the placement of stress. Consider the plural stem of $\sqrt{ }$ cázit take away forcibly, $\sqrt{ }$ cázit-olca, which has penultimate stress on the root despite the syllables that the number marking introduces.

Verb roots are often multisyllabic. Many lose a posttonic vowel as part of the formation of the singular or plural stem (see $\S 17.1 .3$ ) and as a result the length of the root varies within the paradigm. Nevertheless, stress remains on the same vowel in all of the paradigm.

### 28.2.3.1 Trochaic pattern

Trisyllabic stems have either final stress (not common, but due to a heavy syllable) or penultimate stress.
(37) Final stress

Vihicóomzj have a kind of skin lesion
Vitalháa buy/sell
$\checkmark$ ihicáai have abcess

[^190]| Penultimate stress |  |  |  |
| :--- | :--- | :--- | :--- |
| Vapámiz | rock | Vacáaso | see (by power of shaman) |
| Vamátis | put to burn in the fire | Vatáaca | send |
| Vasápot | knock out of one's hand | Valáahi | want to have |
| Vozáca | move a boat with a pole | Vacáatol | dangerous |
| Vmozíme | drunk | Viháasoj | have pocket |
|  |  | Vihíiha | pure |
|  | Vihíihyo | pretend |  |
|  | Vimáaxat | gray-brown |  |
|  | Vimóoni | dance victory dance |  |
|  |  | Voquéepe | comfortable |
|  |  | Vmoquéepe | sick |

No tryllabic stems clearly have antepenultimate stress, suggesting that there is no extrametricality in the verbs, unlike that which appears occasionally in nouns. Three verbs appear to have antepenultimate stress, but comparison with the plural forms suggests that the last syllable of the singular stem is actually a suffix. If this is not the correct analysis, stress must be lexically marked in these cases.

| Singular | Sing. Imperf. | Plural |  |
| :--- | :--- | :--- | :--- |
| Vopísi-ca |  | Vopísij-oj | unusually small [opening] |
| Votísin-an | Votísin-im | Votísij-am | babble |
| لimónalc-a |  | Vimónalc-oj | become tangled up with feet |

Many roots in the language actually appear to be disyllabic, and most have penultimate stress. The list here is only representative, as they are very numerous.

| Vátax | go | Váaco | build house |
| :--- | :--- | :--- | :--- |
| Vamzo | want | Váacoj | big |
| Vásim | laugh | Vtóojoj | grow in one place |
| V cánaj | chew with back teeth | Vpéetij | circular |
| Vémen | shake from side to side | Vítíj | curve upwards |
| Vímoz | think | Víixaz | make clinking sounds |
| Vmásij | burst open | Vméesom | intact |
| Víxoz | scrape (to clean hide) | Vóopol | black |

Some of these verbs have a final consonant cluster and yet still have penultimate stress.

| (41) Vémetx | turn with screwing motion |  |
| :--- | :--- | :--- |
| Vácatx | abandon |  |
| Vésijc | probe for thorn (singular imperfective stem: Vésijqu-im) |  |
| Vátajc | vomit (singular imperfective stem: Vátalqu-im) |  |
| Vhóopatj | be wavy [sea] |  |
| Víitilc | curled up at the edges |  |
|  | $\sqrt{\text { quésejc }}$ | gnaw |

### 28.2.3.2 Quantity sensitivity

Most verbs with a final consonant cluster have final stress. Comparison with the imperfective (§17.1.8) or plural stem (§17.1.3) often shows that in these forms the stress is actually penultimate because there is an additional vowel in these forms that is dropped in the singular.
(42) Final stress (on heavy syllable, with consonant cluster)

Vacóml pierce (plural stem: لacómal-oj)
$\sqrt{\text { acoxl }} \quad$ tend (singular imperfective stem: $\sqrt{ }$ acóxal-im)
$\sqrt{ }$ ahntáxl be near (plural stem: Vahntáxax)
$\checkmark$ ahpízl have projection (singular imperfective stem: Vahpízal-im)
Vahzínz immature [mesquite pod] (plural stem: Vahzínaz-oj)
$\sqrt{\text { ajcápt }} \quad$ shoot at close range (singular imperfective stem: $\sqrt{\text { ajcápot-im) }}$
$\sqrt{ }$ ajöázp mushy [fruit] (singular imperfective stem: Vajöázip-im)
$\sqrt{ }$ apópt throw off sparks (singular imperfective stem: Vapópat-im)
Vapxázl cover (singular imperfective stem: Vapxázal-im)
$\sqrt{ }$ atáxl catch up with (singular imperfective stem: Vatáxal-im)
Vazáplc paralyzed (in the legs) (singular imperfective stem: Vazápalqu-im)
$\sqrt{ } \mathbf{i c o ́ t j} \quad$ rancid (singular imperfective stem: Vicótal-im)
$\sqrt{\mathbf{i f a ́ h}} \quad$ make a short sob to indicate unhappiness
(singular imperfective stem: Vifáhazx-im)
$\sqrt{ } \mathbf{f}$ óhzx cough with hacking cough (plural stem: $\sqrt{ } \mathbf{i f o ́ h a z x}-\mathbf{0 j}$ )
Vihízj connected (singular imperfective stem: $\sqrt{ }$ ihízal-im)
Vihízlc $\quad$ dirty (singular imperfective stem: Vihízalqu-im)
$\sqrt{ }$ ihócl protrude (singular imperfective stem: $\sqrt{ } \mathbf{i h o ́ c a l - o j}$ )
Vijcácz form ball on bone (plural stem: $\sqrt{\mathbf{i j}}$ cácaz-oj)
$\checkmark$ inápt curve down sharply with short radius
Vocásjc walk with high steps (singular imperfective stem: Vocáslc-oj)
Vojást $\quad h o p$ (singular imperfective stem: Vojásit-im)
Vomíhj slippery (singular imperfective stem: Vomíhil-im)
Voquéht bounce (singular imperfective stem: Voquéhet-im)
Votófz close up [round thing] (singular imperfective stem: Votófaz-im)
Vozácle stand on tiptoes (singular imperfective stem: Vozácalqu-im)
$\sqrt{ }$ motómn weak (plural stem: $\sqrt{ }$ motóman-oj)
(43) Final stress (on heavy syllable with no evidence of disyllabicity)

| Vacápjc | hurry to do |
| :--- | :--- |
| Vixónj | become loose |
| Vanámj | hurry to do something carelessly |
| Vihímz | have ringworm |
| Vimázc | mangy |
| Vixósjc | messy |

Verbs with a long vowel or diphthong in the final syllable of the root have stress on that syllable.

```
Vacáaix carry with yoke
Vamáai cook with fire on top
Vacáant counsel
Vahái cause rippling on the surface of the sea [generally fish]
Vihíiin protected from the wind
\icséenpx carry a large thing under the arm
Voféaa have good eyesight
Vonáaaij return
Vonéaax wash one's hands
```

A few disyllabic verb roots have final stress on a light syllable. The following list may be exhaustive.

| (45) | Vacáp |
| :--- | :--- |
| Vamác | be able to pick up (something heavy) |
| Vamós | blow [whale or dolphin] |
| Vapát | make meat-drying rack |
| hant لatín | crouch down |
| Vatóm | make noise in the water with strikes |
| †Vaxát | hold breath |
| Vayáx | be out of shape physically |
| Voqué | hear well (plural stem is Voquée) |

### 28.2.4 Stress in compounds

In synthetic compounds (those written as single words) as well as analytic compounds (those written as more than one word), the last primary word stress is retained (marked explicitly in these examples).

| xóop | $+$ | inl | $>$ | xopínl |
| :---: | :---: | :---: | :---: | :---: |
| Bursera microphylla |  | 3P-finger-PL |  | Bursera hindsiana |
| xóop | + | cáacöl | > | xopcáacöl |
| Bursera microphylla |  | SN-big-PL |  | Bursera laxiflora |


| (48) | zíix <br> thing | páaij <br> driftwood | $\begin{aligned} & \text { ano } \\ & \text { 3P.in } \end{aligned}$ | cóom <br> SN -lie | > | ziix paaij ano cóom striped tail scorpion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (49) | zíix <br> thing | hapx <br> outside | $\begin{aligned} & \text { óom } \\ & \text { N-lie } \end{aligned}$ |  | > | ziix hapx cóom ${ }^{27}$ whale |

Vowel length is lost (in the synthetic compounds) or greatly reduced (in the analytic compounds) on the syllables that do not have primary stress.

For examples of compounds that use the compounding form of adjectives, see $\S 13.5 .6$. These also retain the last primary stress.

### 28.2.5 Stress in phrases

In a noun phrase, stress is reduced on all non-final primary stresses, and with this reduction, the distinguishability of long vowels is reduced as well. In a phrase like xiica comcaac cmis Indians (things person/Seri.Pl SN-Tr-resemble), primary stress occurs on cmis. With the reduction of stress in the other syllables, vowel length is also superficially lost to a significant degree. The lexicalization of a phrase therefore is a direct path to compounds since the stress patterns are the same.

In the verb phrase itself, stress most commonly occurs on the verb, but in some special situations the primary stress occurs on the preverbal postposition (see $\S 5.7$ and $\S 7.3$ ).

### 28.3 Syllable structure

Setting aside extra consonants that are permitted by word-margin extrametricality or by morphology (§28.3.2), the maximal syllable has two consonants in the onset and three in the coda. See Figure 28.1. The nucleus commonly has up to three moras (usually as two vowel qualities, but sometimes as one), and in some rare cases even four. ${ }^{28}$ Onsets, codas and nuclei are taken up individually below. No specific interaction between

Figure 28.1: Maximal syllable template


[^191]these constituents of the syllable is known to exist - no constraints that one imposes on the other, for example. ${ }^{29}$

The maximal syllable template makes the correct prediction that the maximum number of consonants allowed word-internally is five (three from a coda and two from an onset). Attested examples of such sequences have the first person singular intransitive prefix hp-, the realis prefix $\mathbf{t}$ - or the irrealis prefix si- (without the vowel), and the allomorph $\mathbf{c m}$ - of the negative prefix, as in the following examples, with proposed syllabification shown.
a. ihps.cmá.tax a.ha 1SGS.In-Ir.Id-N-go Aux-DCL I will not go
b. ihpt.cmá.tax 1SGS.In-RL-N-go I didn't go

While onsets like cm are well attested (see §28.3.1), the codas hps and hpt are not actually attested in word-final position, although the coda of quihtj (SN-cone-shaped) is analogous to hps. A coda $\mathbf{h}+$ stop + stop is not otherwise found, however.

Word-internal vowel clusters, as in caii (mature), c-aai (SN-Tr-make) and c-aai-zi (SN-Tr-make-PL), are analyzed as tautosyllabic. ${ }^{30}$ The words caii and caai are pronounced and perceived as monosyllabic (not disyllabic), and caaizi as disyllabic (not trisyllabic). It might be disputed whether some vowel clusters are tautosyllabic or not, but examples such as these three (which can be supplemented with many more examples) justify the complex nucleus shown in the maximal syllable template.

### 28.3.1 Onsets

The onset is an obligatory constituent of the syllable except in word-initial position. Words without onsets in the initial syllable are illustrated in (51).

| (51) | a. | am | 3P-father.FE |
| :--- | :--- | :--- | :--- |
|  | c. | ilít | 3P-head |
|  | e. | ac | canvasback |
|  | g. | oot | coyote |
|  | i. | aal | 3P-spouse |


| b. | is | 3P-seed |
| :--- | :--- | :--- |
| d. | asaac | 3P-son.ME |
| f. | ool | organpipe cactus |
| h. | eenim | knife, metal |
| j. | as | IM-sing |

The contrast between an overt onset with glottal stop and the lack of an onset is most obvious in the difference between first person possessor hi- and third person possessor i-: hi-lít (1P-head) my head, i-lít (3P-head) her/his/its head.

[^192]With respect to consonants in word-initial and word-medial onsets, see §28.1.2-§28.1.6 above.

Two-consonant onsets may include combinations of consonants that are not common crosslinguistically although some of these are found only as the result of word-formation rules. ${ }^{31}$ Geminate clusters occur only with an intervening morpheme boundary. The examples below show these clusters in word-initial position, when possible. ${ }^{32}$ The parenthesized examples show these clusters in word-medial position on the assumption that the onset of a stressed syllable is maximized.
(52)

| $\begin{aligned} & \text { Stop-Stop } \\ & \text { pp - }{ }^{33} \end{aligned}$ |  |  | Stop-Fricative |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | pf |  |  |
| pt | ptaact | Colubrina viridis | ps | psaac | hunger (in idiom) |
| pc | (ihapcooyo) 3P-PON-AUG-taste-PL |  | pz | - |  |
|  |  |  | pj | - |  |
|  |  |  | px | pxaahom three (interjection) |  |
|  |  |  | pl | (caplaactim) SN-make.slapping. sound.by.hitting.water |  |
| tp | t-panzx | RL-run | tf | t-fit | RL-stand.up |
| tt | t-tapjö | RL-disintegrated | ts | t-saamij | RL-curled.up |
| tc | t-cam | RL-full | tz | $\underline{\text { tzih }}$ | bullseye puffer |
|  |  |  | tj | tiamoja | Gulf opaleye |
|  |  |  | tx | t-xana | RL-flavorless |
|  |  |  | tl | (i-tleen) | 3P-palm.of.hand. |
| ср <br> ct <br> cc | cpoot ctam c-cam | sierra mackerel man SN-full | cf | c-fit | SN-stands.up |
|  |  |  | cs | cset | magnificent frigatebird |
|  |  |  | cz | c-zaz | SN-dive.into.sea |
|  |  |  | cj | c-iip | SN-flat |
|  |  |  | cx | c-xap | SN-Tr-dig |
|  |  |  | cl | - |  |
| Fricative-Stop |  |  | Fricative-Fricative |  |  |
| fp |  |  |  |  |  |
| ft | - |  | $\mathbf{f}+$ | ricative | - |
|  | (i-fcóocl) | 3:3-PON-wear.blouse-PL |  |  |  |

[^193]

Other sequences of consonants in an onset show an increase of sonority toward the nucleus of the syllable. Complex onsets may not begin with a nasal, approximant or glottal stop (the latter being taken as a sonorant in part because of this fact). ${ }^{35}$ When such onsets might arise through affixation and the sequence is not preceded by a vowel (whether in the same word or in the immediately preceding word), a vowel is epenthesized: \{m-po-caa\} (2SGS-Ir.Dp-look.for) > impocaa if you look for it. ${ }^{36}$

[^194](54)

| Stop-Nasal |  |  |
| :--- | :--- | :--- |
| $\mathbf{p m}$ | - |  |
| $\mathbf{t m}$ | t-mam | RL-cooked/ripe |
| $\mathbf{c m}$ | $\mathbf{c m a a m}$ | woman |
| pn | pnaacoj | mangrove |
| tn | $\underline{\text { t-n }} \mathbf{0 p i n}$ | RL-convex |
| cn | $\underline{\mathbf{c}-n} \mathbf{o p i n}$ | SN-convex |


| Fricative-Nasal |  |  |
| :--- | :--- | :--- |
| $\mathbf{s m}$ | $\underline{\mathbf{s - m a m}}$ | Ir.Id-cooked/ripe |
| $\mathbf{z m}$ | $(\mathbf{a - z m i i})$ | 3P-maternal.uncle |
| $\mathbf{j m}$ | - |  |
| $\mathbf{x m}$ | - |  |
| $\mathbf{s n}$ | snaazx | a shrub |
| $\mathbf{z n}$ | $\underline{\text { znapxöl }}$ | Mexican palo verde |
| $\mathbf{j n}$ | - |  |
| $\mathbf{x n}$ | $\underline{\text { xnoois }}$ | eelgrass grain |

Stop-Approximant/Glottal

| py | pyooque | a sun star |
| :--- | :--- | :--- |
| ty | $\underline{\text { t-yeeno }}$ | RL-HAVE.face |
| cy | $\underline{\text { c-veeno }}$ | SN-HAVE.face |
| ph | - |  |
| th | $\underline{\text { t-heemt }}$ | RL-stink |
| ch | $\underline{\text { c-heemt }}$ | SN-stink |

Fricative-Approximant/Glottal
sy s-yeeno IR.ID-HAVE.face
zy -
jy -
xy -
sh s-heemt Ir.ID-stink
zh -
jh -
xh (moxhamt) last year

| Nasal-Approx./Glottal | Nasal-Nasal |  |
| :--- | :--- | :--- |
| $\mathbf{m y}-$ | $\mathbf{m p p r o x} . / G l o t t a l-A p p r o x . / G l o t t a l$ |  |
| $\mathbf{n y}-$ | $\mathbf{m n}-$ | $\mathbf{y y}-$ |
| $\mathbf{m h}-$ | $\mathbf{y h}-$ |  |
| $\mathbf{n h}-$ | $\mathbf{n m}-$ | hy |
|  | nn | - |
|  |  | hh |

Therefore the language obeys the general principles of the Sonority Sequencing Principle, which favors an increase in sonority as one goes from the edge of a syllable towards its nucleus, despite obvious violations when only obstruents are involved. ${ }^{38}$ A straightforward statement of this language-specific situation would be something like the following:
(57) Obstruent-Obstruent is permitted.

### 28.3.2 Extrametricality on the left

Two nouns have three consonants in the onset, despite the expectation from a maximal syllable template that permits only two. The first consonant in these words may be considered extrametrical: ptcamn Cortez spiny lobster and xptacamn slipper lobster (dialectal variant of tacamn).

[^195]The extrametrical consonant may be found as the result of morphology. Some unusual roots begin with two consonants, and some plural stems begin with two consonants because of infixation (§17.1.3.1); inflected forms of these verbs may have three consonants. (The wordmedial sequences of these consonants are assumed to be syllabified in different syllables.)

| (58) | SN-(Tr-)- $\underline{\mathrm{c}-\mathrm{Zx}} \mathbf{0 c}$ | IR.ID- $\underline{\mathbf{s}-\mathbf{z x}} \mathbf{0 c}$ | $\begin{aligned} & (3: 3)-R L- \\ & \text { i-t-zxoc } \end{aligned}$ | hack off |
| :---: | :---: | :---: | :---: | :---: |
|  | c-xnoois | s-xnoois | t-xnoois | characterized by small garbage |
|  | c-xtamt | s-xtamt | t-xtamt | abundant |
|  | c-jcooil | s-jcooil | i-t-jcooil | make fall (plural subject) |
|  | c-xtoope | s-xtoope | t-xtoope | spend the night (plural subject) |
|  | c-zcoomt | s-zcoomt | i-t-zcoomt | appreciate (plural subject) |

When a verb is inflected for third person oblique/indirect object (§17.1.2.4), a common allomorph of which is cö-, it is quite easy for a three- or even four-consonant onset to be formed.

| (59) | a. | cö-t-c-aahit | 3IO-RL-US-fish |
| :---: | :---: | :---: | :---: |
|  | b. | cö-t-pacta | 3IO-RL-be.in.appearance |
|  | c. | cö-s-m-aacoj | 3IO-Ir.Id-N-big |
|  | d. | cö-t-p-aii | 3IO-Rl-Pv-make |
|  | e. | cö-s-m-oii | 3IO-Ir.Id-N-be.Fl.Pl |
| (60) | a. | cö-s-zxoc | 3IO-Ir.Id-hack.off |
|  | b. | cö-s-zcoomt | 3IO-Ir.Id-appreciate-PL |

### 28.3.3 Codas

Any consonant (except for the lateral approximant) may appear in a simple coda, as shown in §28.1.2-§28.1.6 above, although the central approximant $\mathbf{y}$ occurs in codas only in two loanwords (see discussion in $\S 28.3 .4$ below).

Many kinds of consonant clusters also appear in codas. None of these are geminate clusters. ${ }^{39}$


[^196]

| zp | xtoozp | desert ground-cherry | zf | - |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| zt | c-ozt | SN-loose | zs | - |  |
| zc | iizc | 3P-front | zz | - |  |
| zcö | - |  | zj | miizi | well, correctly |
|  |  |  | zjö | - |  |
|  |  |  |  | itcazx | 3:3-RL-rip |
|  |  |  | zxÖ | - |  |
|  |  |  | zl | azl | star-PL |
| jp | t-cojp | RL-jump | j + Fricative - |  |  |
| jt |  |  |  |  |  |
| jc | c-aajc | SN-yawn |  |  |  |
| jcö | cacajöc | bagworm moth |  |  |  |
| jöp | - |  | $\mathbf{j o ̈}+$ Fricative: only jöz |  |  |
| jöt | - |  | jöz | c-ojöz | SN-round |
| jöc | Tahejöc | Tiburon Island |  |  |  |
| jöcö | - |  |  |  |  |
| xp | c-00xp | SN-white | $\mathbf{x}+$ Fricative: only $\mathbf{x z}$ and $\mathbf{x} \mathbf{l}$ |  |  |
| xt | c-axt | SN-young/tender |  | $\begin{array}{r} \text { haxz } \\ \text { hantaxl } \end{array}$ | dog |
| xc | - |  |  |  | near |
| xcö | - |  |  |  |  |
| xöp | heexöp | musical rasp | $\mathbf{x} \ddot{\text { a }}+$ Fricative: only xöl |  |  |
| xöt | iixöt | sea currentSN-four |  | haxöl | multicolored clam |
| xöc | c-zooxöc |  |  |  |  |
| xöcö |  |  |  |  |  |
| lp | haalp | a woody shrub | $\mathbf{1}+$ Fricative: only $\mathbf{l x}$ |  |  |
| It | yaolt | 3P-muscle | lx | colx | very high up |
| lc | t-masil-c | RL-burst.open-PL |  |  |  |
| lcö |  | RL-burst.open-PL |  |  |  |

As with onsets, therefore, obstruent clusters are permitted. But unlike in onsets, nasal clusters are also permitted in codas but only word-finally and only mn, as in ptcamn lobster, and queemn (SN-curve.downward), c-aamn (SN-Tr-toast (corn in basket with coals)), c-motómn (SN-weak). Otherwise, there must be a decrease in sonority away from the syllable nucleus. Therefore, clusters in the coda of obstruent followed by sonorant are not permitted.

Not permitted in codas: *Obstruent-Sonorant
*Nasal-y
*Nasal-h
*h-Nasal
*h-y

When clusters of Obstruent-Nasal arise in a derivation, which is rare, an $\mathbf{i}$ is inserted after the cluster. An example is the formation of the singular stem for hold in lap, Vnexöni (compare the imperfective stem $\sqrt{ }$ nexon-a). This epenthesis takes place regardless of whether the following word begins with a vowel or a consonant, unlike the epenthesis that takes place wordinitially (§27.1.1): Cói oneexöni oo ha (still 3P-ON-Tr-hold.in.lap DL DCL) S/he is still cuddling him/her/it (something small) while lying down.

The coda may have a sequence of consonants with decreasing sonority - either glottal stop followed by obstruent or nasal followed by obstruent.

| h-Stop |  |
| :---: | :--- |
| c-oqueht | SN-bounce |
| qu-i-h-t | SN-TR-see-PL |
| c-noohcö | SN-concave |


| Nasal-Stop |  |
| :---: | :--- |
| c-heewt | SN-stink |
| hant | land |
| Cmaamc | Pleiades |


| $\mathbf{h}$ - Fricative |  |
| :---: | :--- |
| hahiö | desert wolfberry |
| c-omihi | SN-slippery |
| $\dagger \mathbf{q u - i \underline { \mathbf { i } }}$ | SN-be.firstborn.child |


| Nasal - Fric |  |
| :---: | :---: |
| siml | barrel cactus |
| caamjö ${ }^{\circ}$ | screech-owl |
| cö-c-aamx | 3IO-SN-Tr-speak |
| anxö | IntNs |
| c-ani | SN-thunder |

Three-consonant codas are not uncommon. A sample of those attested in word-final position is given below.

| Stop-Stop-Fricative |  | Stop-Stop-Stop |
| :---: | :---: | :---: |
| atcz | 3P-younger.sister.FE |  |
| c-aptxö | SN-punctured |  |
| c-apti | SN-wide |  |
| c-maptx | SN-burst.open |  |
| i-t-actz | 3:3-RL-sift |  |
| xcoctz | burro-weed (Ambrosia) |  |
| Fricative-Stop-Fricative |  | Fricative-Stop-Stop |
| azcz | 3P-younger.brother.ME | isct 3P-lung |
| $\mathrm{c}-00 \mathrm{Sc}$ | SN-gray | t-oizct RL-enter.PL |
| izcl | 3P-gonads.of.fish |  |
| c-apazpx | SN-defecate.from.fear |  |
| c-nofti | SN-jagged |  |
| isti | 3P-leaf |  |
| i-t-axpx | 3:3-RL-be.mad.at |  |


| Stop-Fricative-Fricative |  |
| :---: | :---: |
| c-acsx | SN-wake.up |
| c-capxöl | SN-brittle |
| c-capxl | SN-sour |
| c-apzx | SN-chipped |
| c-matsi | SN-tell.lies |
| hacözi | sea catfish |
| yatootxöl | 3P-kidney |
| qu-icsi | SN-unripe.(fruit) |
| i-t-acösi | 3:3-RL-shake |
| t-itxl | RL-disintegrate |
| slenapzi | little blue heron |

Stop-Fricative-Stop<br>c-oopxöt SN-loose<br>c-tiipiöc SN-Tr-squeeze.w.hand<br>c-taaplc SN -be.early.in.day

c-apzx SN-chipped
c-matsi SN-tell.lies
hacözi sea catfish
yatootxöl 3P-kidney
qu-icsi SN-unripe.(fruit)
-acösi 3:3-RL-shake
RL-disintegrate
lenapzi little blue heron
h-Fricative-Stop
cö-c-aahiöc 3IO-SN-sit.with.knees.raised
h-Fricative-Fricative
cö-c-aahjöc 3IO-SN-sit.with.knees.raised
c-aahzx SN-sneeze
c-peehzx SN-concave.\&.shallow
(71) h-Stop-Fricative
h-Stop-Stop qu-ihti SN-cone.shaped
(72) Nasal-Fricative-Stop

Nasal-Fricative-Fricative
i-t-amjc 3:3-RL-bring
t-panzx RL-run t-amjöc RL-think.PL t-ihicoomzx RL-have.skin.lesion t-monlc RL-curly
t-inlx RL-return.empty.handed t-pamlc RL-form.into.balls

| Nasal-Stop-Fricative |  |
| :---: | :---: |
| c-omtxö | SN-straight |
| c-aanpx | SN-return.home |
| c-ancl | SN-pitted |
| c-asoompx | SN-Tr-carry.under.arm.Hz |
| imti | 3P-vein/artery |
| hantx | at base |

Nasal-Stop-Stop
-aanpx SN -return.home
c-ancl SN-pitted
c-asoompx SN-Tr-carry.under.arm.Hz
hantx at base

### 28.3.4 Nuclei

The nucleus of a syllable may contain a simple vowel or a long vowel; see the examples in §28.1.1. It may also contain a cluster of two short vowels; most of these clusters are not robustly
attested. The sequences heard as ie and io are analyzed as ye and yo for reasons explained below. ${ }^{40}$ Stress is marked in the following examples on the true phonetic peak of the syllable.

| $\mathbf{a}+\mathrm{V}$ |  |  |  | e+V |
| :---: | :---: | :---: | :---: | :---: |
| a. | hai | air, wind | d. | (ei) |
| b. | (ae) | - | e. | sea |
| c. | yaolt | 3P-muscle | f. | (eo) |
|  | 0+V |  |  |  |
| g . | c-oalali | SN-flap |  |  |
| h. | toerc | willet |  |  |
| i. | xomcahoij | Grusonia refter | na | cactus) |

Stress is perceived a bit differently on these diphthongs. The vowel $\mathbf{i}$ is never the strong member of the diphthong; it is perceived as shorter and not stressed. When $\mathbf{i}$ is not involved, an $\mathbf{0}$ is the shorter and unstressed member of the diphthong. The remaining attested bimoraic diphthong, ea, is perceived as having stress on the first vowel.

| (75) | Second vowel |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | a | e | i | 0 |
| $\begin{aligned} & \text { फ్ } \begin{array}{c} 0 \\ 3 \\ 0 \\ 0 \end{array} \end{aligned}$ | a |  | - | ái | áo |
|  | e | éa |  | - | - |
|  | 0 | oá | oé | ói |  |

Two-vowel clusters appear more commonly in earlier transcriptions of many words, but many examples such as $\mathbf{c}$-aitic ( SN -soft) were changed to $\mathbf{c}$-aaitic by the committee working on the 2005 dictionary. It is clear that a root such as $\sqrt{ }$ aaitic soft conjugates as if it begins with a short low vowel, not a long one. (For that reason the conjugation field in the dictionary presents it as tâaitic, with the circumflex to indicate that the root does not conjugate like a long vowel, despite its phonetic length.) It seems to be clearly the case that a phonetic lengthening of a vowel in a diphthong is happening; this extra vowel length is perceived and written by some proficient Seri writers. This "diphthong effect" is not across the board, however; note the word hai air, wind. It is, however, a pervasive - and complicating - factor in the pronunciation and transcription of many words.

The nucleus of a syllable much more commonly contains a trimoraic diphthong - one long

[^197]vowel and one short vowel, in either order. ${ }^{41}$ The examples presented below utilize morphemes in which length is not due to the diphthong effect described in the preceding paragraph (in order to present a clear picture of the facts). Stress is marked on the vowel that is perceived as being more prominent.

| (76) |  | a | e | i | 0 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | aa |  | - | áai | áao | Vaai | make |
|  | ee | - |  | - | éeo ${ }^{42}$ | $\checkmark$ aao | pass |
|  | ii | - | - |  | íio | $\sqrt{\text { ziiom }}{ }^{43}$ | singe |
|  | 00 | - | - | óoi ${ }^{44}$ |  |  |  |
| (77) |  | aa | ee | ii | 00 |  |  |
|  | a |  | - | áii | - | caii | mature |
|  | e | éaa |  |  | - | $\checkmark$ oféaa | have good eyesight |
|  | i | - | - |  | - | coáan | SN-murky |
|  | 0 | oáa ${ }^{46}$ |  | óii |  | coéept <br> cóíi <br> coíiz | quail SN-be.Fl.Pl spider |

The difference between óii and oíi seems to be related to open versus closed syllables. Some variation between speakers has also been observed.

A few words have trimoraic nuclei with only one vowel quality.

[^198]

In a few cases these are demonstrably due to the ablaut of $\mathbf{i}$ to $\mathbf{a}(\mathbf{a})$ as part of imperfective aspect or plural formation, and the result is a sequence of vowels that happen to have the same quality.

A complex nucleus is generally possible only in stressed syllables, however. Examples such as haitámoc $a$ small wood-boring insect, coaxáac bark scorpion, and haitáapa northwest wind are very rare exceptions, and the latter is a compound (compare hai wind and aapa strong).

When the features of [i] occur postvocalically (and not intervocalically), they are generally analyzed as vowels. Native morphemes, such as $\sqrt{\text { aai }}$ make, are all demonstrably vowel-final rather than consonant-final. One piece of evidence for this is the fact that the glottal-initial modals have epenthetic vowels before them when they follow consonants, but not when they follow vowels or strings such as aai; see §20.5. Therefore the result is caai ha (SN-Tr-make DCL) $s / h e$ is making it and not *caay iha (the latter actually being it is a horse). ${ }^{47}$

Also, consonant clusters following stressed vowels may be broken up under certain circumstances (see $\S 26.10$, for example) but strings such as aait do not behave as if they were aayt. ${ }^{48}$

Two exceptions to the generalization that vowel followed by [i] is always analyzed as $/ \mathrm{Vi}$ / are the loanwords caay horse and hapaay member of the O'odham tribe. These words occur

[^199]with the allomorph iha of the declarative modal (see §20.5). The contrast between c-aai ha (SN-Tr-make DCL) s/he is making it and caay iha (horse DcL) it is a horse is clear.

Whenever the features of [i] occur prevocalically within a morpheme, they are analyzed as being linked to an onset position. That is [i]-vowel is generally analyzed as $/ \mathrm{j} /$-vowel. The evidence comes from two sources. First, consider suppletive allomorphy that is sensitive to whether something is a vowel or a consonant. The passive prefix, for example, has one shape ( $\mathbf{p}_{\text {Abl }}$ ) before vowel-initial roots and another shape ( $\mathbf{a h}-$ ) elsewhere (§17.1.5). A root such as [iaa] own takes the allomorph ah-: i-m-ah-yaa (SN-N-Pv-own); this is true of all similar roots. Second, phonologically-conditioned non-suppletive allomorphy that is sensitive to the difference between consonants and vowels points to the same analysis. For example, while the dependent irrealis prefix po- loses its vowel before vowel-initial stems (see §27.2.1), it does not lose its vowel before roots such as [iaa]: i-po-yaa (3:3-Ir.Dp-own).

### 28.4 Minimal word

A word belonging to a major lexical category (noun or verb) must have at least two moras; all of the postpositions (chapter 22) and adjectives (chapter 23), though few in number, also have two moras. For this purpose, a vowel contributes a mora and a consonant in the coda contributes a mora. ${ }^{49}$ Therefore, nouns and verbs of the shape V or CV are not possible. Some possible words with only two moras include the following:


Words that are auxiliaries (chapter 20), NP/DP adverbs (chapter 24), certain postverbal words, or special words (such as the Different Subject markers, §3.6.1 and the Unspecified Time

[^200]enclitic, §3.6.3) are most commonly unstressed and some have only one mora.

| (80) | ha, ca, ta, pi AUX | ma, ta DS |
| :--- | :--- | :--- |
|  | ha, hi, $\mathbf{h}$ FOC | $\mathbf{x ~ U T ~}$ |
|  | $\mathbf{i}$ of.course |  |
|  | s CERT |  |
|  | xo EMPH |  |

### 28.5 Phonological processes

This section presents phonological processes that may be observed without knowledge of the morphology, although allomorphic evidence is often helpful in seeing the effects of these processes. These processes are not reflected in the practical orthography except as noted. ${ }^{50}$

### 28.5.1 Lengthening

Consonants and vowels are noticeably lengthened under certain conditions. ${ }^{51}$ This lengthening is, however, not distinctive (except in special cases discussed below). It is directly correlated to the presence and degree of stress on the word, which varies by the place of the word in the phrase, and the emotions of the speaker. It is an important phonetic feature of ordinary pronunciation of Seri words. The rules are first given simply and then extra relevant conditions are presented.

The underlined consonants and vowels of words such as the following are lengthened phonetically: catax ['kat:a: $\chi$ ] (Im-go) go!, yesen ['jes: $\varepsilon$ :n] (3P-flipper) its flipper, haxoj shore ['? $\mathrm{a} \chi: \mathrm{o}: \mathrm{x}]$, zazan ['faf:a:n] grackle. When the stressed nucleus is bimoraic, the lengthening of the consonant and vowel that follow it occurs but is slightly less than after short stressed vowels (and the underlying long vowel itself is somewhat moderated in length): ${ }^{52}$


If the stressed syllable has more than two moras, there is no noticeable lengthening of the consonant and vowel: caaijam (SN-Tr-wrap) who wraps it, caaijoj mythological manta ray, caaol iha (SN-pleated DCL) it is pleated, cocoiix iha (SN-win.race DCL) $s / h e$ is winning (race),

[^201]heeesam seahorse, catiiija common loon in winter plumage, caaitoj (SN-fish-PL) who go fishing.

It may be appropriate to view this process not as one of lengthening per se but as one of "strengthening" since even in words such as hap mule deer and hast stone the consonant following the stressed vowel is perceptibly more intense. ${ }^{53}$ This strengthening becomes obvious length when a vowel follows the consonant. In the case of a CVC word like hap, this may be in a context as simple as Hap iha (mule.deer Dcl) It is a mule deer. In the case of a word with a consonant cluster, where normally no vowel follows the first consonant of the cluster, special conditions provide just the right context. Consonant clusters may be split up by the infix -a- as part of a way of expressing disbelief or sarcasm (see §26.10) that also includes a postnominal a. This infixation provides the conditions to hear the strengthened consonant as a long consonant. Some examples include:

| Expressed with sarcasm |  |
| :--- | :--- |
| hasat a | $[\mathrm{s}:]$ |
| haxöal a | $\left[\chi^{\mathrm{w}}:\right]$ |
| ctooicalca a | $\left[\mathrm{k}^{\mathrm{s}}\right]$ |
| quicöat a | $\left[\mathrm{k}^{\mathrm{w}}:\right]$ |

## Morphological condition

There is an important morphological condition on the lengthening (or strengthening) process. Consonants and vowels that follow the root are not eligible for lengthening. Suffix consonants do not lengthen: coo-taj (guitarfish-PL) guitarfish (pl.); c-aa-tim (SN-grind-ImPF) who grinds. ${ }^{54}$ The infix -a- (§26.10) does not lengthen. Similarly, consonants and vowels that are part of enclitics do not lengthen under any condition. ${ }^{55}$ Moreover, vowels that may be epenthesized before enclitics, such as the declarative modal ha (§20.5), do not lengthen, as illustrated by the examples in (82).

| a. | Hap iha. | ['Pap: iPa] | It is a mule deer. |
| :---: | :---: | :---: | :---: |
| b. | Ctam iha. | ['ktam: i?a] | It is a man. |
| . | Cmaam iha. | ['kw ã ã m* i l a] | It is a woman. |

[^202]Lengthening does occur, however, in the irregular verbs described in §27.7; the stressed vowel in these words precedes the root and the lengthened segments are either part of prefixes or part of the root.

| a. | mo-c-a-t | $[$ 'mok:a:t] | TwD-SN-move-PL | ones who come |
| :--- | :--- | :--- | :--- | :--- |
| b. | mo-h-a | ['mol:a:] | TwD-Im-move | Come! |
| c. | ca-m-al | $[' \mathrm{kam:a:d}]$ | Im-N-accompany | Don't accompany |
|  |  |  |  | him/her! |

The morphological condition on the lengthening process produces some examples that are in essence minimal pairs for vowel length in an unstressed syllable, although the contrast is a derived one and not due to underlying length, of course. ${ }^{56}$

| a. cootaj | ['koot'a'x] | ant |
| :--- | :--- | :--- | :--- |
| b. coo-taj | ['kootax] | guitarfish-PL |

a. Iixöt cöquiti
ha.
['k ${ }^{w}$ kit:i:?a]
sea.current 3IO-SN-connected DcL
'Está viajando con la corriente.'
S/he/it is going with the sea current.

| b. | Iixöt cöquit | iha. |
| :--- | :--- | :--- |
| sea.current | 3IO-SN-go.against.current | DCL |$\quad$ ['k wit:iPa]

a. Quisi
ha.
['kis:i:Pa]
SN-TR-drink DCL
'Lo está tomando.'
S/he is drinking it.

| b. | Quis | iha. | ['kis:iPa] |
| :---: | :---: | :---: | :---: |
|  | SN-raw | DCL |  |
|  | 'Está crudo/a.' |  |  |
|  | It is raw. |  |  |
| a. | Sita | ha. | ['sit:a:?a] |
|  | IR.ID-sharp | Aux-DCL |  |
|  | 'Estará filos |  |  |
|  | It will be sh |  |  |

[^203]b. Sit aha. ['sit:a?a]

Ir.ID-dull Aux-DcL
'Estará sin filo.'
It will be dull.
a. Cooha ha. ['koo?'a'?a]
SN-cry DCL
'Está llorando.'
S/he is crying.
b. Coo ha. ['koo?a] guitarfish DCL
'Es pez guitarra.'
It is a guitarfish.
a. Tiima, ... ['tiom'a']

RL-sleep-PL
'Dormían, ...'
They were sleeping, ...
b. Itii ma,... [i'tiima]

3:3-RL-hear DS
'Lo oía, ...'
S/he heard it, ...

## Lexical conditions

Lengthening does not generally apply to loanwords. The following words are pronounced without lengthened consonants and vowels in the post-tonic syllable: tooro bull, pazaatoj shoe(s), trooqui automobile. A few loanwords, presumably with a longer history in the language, such as cápota jacket, caamiz shirt and siimet bread, display lengthening. ${ }^{57}$

### 28.5.2 Nasal Assimilation

An $\mathbf{m}$, but not an $\mathbf{n}$, assimilates to the point of articulation of a following consonant under certain conditions. ${ }^{58}$ This assimilatory process and the velarization rule described in $\S 28.5 .3$

[^204]directly account for almost all occurrences of velar and uvular nasals that occur superficially. ${ }^{59}$ The phonetic velar and uvular nasals are, therefore, allophones of $\mathbf{m}$ and not of $\mathbf{n}$. The fact that both of these processes apply to $\mathbf{m}$ alone suggests that $\mathbf{m}$ is the unmarked nasal in Seri rather than $\mathbf{n}$. (For what happens before glottal stop, see $\S 28.5 .10$.)

Some variation on this assimilation process is found within the community, as detailed below. In this section, however, unless explicitly mentioned, there is no known variation among the current population.

The primary condition on assimilation is that the nasal be in an unstressed syllable; both primary stress and secondary stress block the process. Cases with secondary stress blocking the assimilation are few. If it were not for secondary stress on the syllable in which $\mathbf{m}$ occurs in the following examples (among others of these verb paradigms), assimilation would have been expected: itamsisíin (3:3-Rl-love) $s /$ he loved him/her/it and xomsisíin (Em-pitiable) $s / h e / i t$ is a poor thing.

Generally only velar nasals occur word-medially (in an unstressed syllable) before velar consonants in monomorphemic examples. ${ }^{60}$

| a. comcaac | Seri people | [koり'kaak] |
| :---: | :---: | :---: |
| b. comcaii | old woman | [koy'kaii] |
| c. hamcanoiin | pan | [?aykano'iin] |
| d. xomcahiift | oregano | [ $\chi$ oŋka'?ii¢t] |

Other examples of this type include: xomcahai an unidentified species of flounder and xomcahoij a cactus (Grusonia spp.), and Xomcataaij a camp on Tiburon Island.

One word of this type displays considerable variation within the community; the word for ocotillo (Fouquieria splendens). ${ }^{61}$ Alternate forms include: jomjeeziz, xomjeeziz, xomjeezij, and mojeeziz. For most people (apparently) the sequence $\mathbf{m j}$ in these words is pronounced $[\eta x]$; for at least a few people, however, the sequence is pronounced $[\mathrm{mx}]$.

[^205]Examples with phonetic labial or phonetic coronal nasals in stressed syllables preceding consonants of distinct points of articulation are common. Such examples show the importance of factoring stress into the description of nasal assimilation.
(91) Tautomorphemic examples with $\mathbf{m}[\mathrm{m}]$

| a. | xpanaams | seaweed |
| :--- | :--- | :--- |
| b. | i-teems | 3P-beard |
| c. | i-t-amzo | 3:3-RL-want |
| d. | i-hicoomz | 3P-pinworm |
| e. | siml | barrel cactus |
| f. | ptcamn | spiny Cortez lobster |
| g. | c-motomn | SN-weak |
| h. | i-t-amjc | 3:3-DT-take |
| i. | Cmaamc ${ }^{62}$ | Pleiades |
| j. | c-comca | SN-noisy |

(92) Tautomorphemic examples with $\mathbf{n}$ [ n$]$

| a. | honc | seagull |
| :--- | :--- | :--- |
| b. | c-ancl | SN-pitted |
| c. | Haanc ${ }^{63}$ | Punta San Miguel |
| d. | qu-inco | SN-torn.into.shreds |
| e. | tincl | canyon ragweed |
| f. | c-aanpx | SN-return.home |
| g. | c-osanpx | SN-race |
| h. | c-sanj | SN-TR-carry.child.on.back |
| i. | c-aconxot | SN-Tr-help.carry.several.items |

(93) Polymorphemic examples with $\mathbf{m}$ [ m ]
a. am-ta 3P-father.FE-PL
b. i-t-acam-tim 3:3-RL-cause.live-IMPF
c. i-t-amla 3:3-RL-hunt.IMPF
d. teem-yo Px-say-PL
(94) Polymorphemic examples with $\mathbf{n}$ [ n ]
a. an-coj
3P-area-PL
b. c-pancojc SN -run-PL
(singular stem $\sqrt{ }$ panzu)

Examples with $\mathbf{m}$ that assimilates (in an unstressed syllable) to the point of articulation of a following consonant are found with all four prefixes that have an $\mathbf{m}$ in their underlying form.

The proximal realis prefix mi- (§17.1.1.7) loses its vowel before a consonant and assimi-

[^206]lates to the place of articulation of that consonant.

| a. | i-m-caa | 3:3-Px-look.for | [iv'kaa] |
| :---: | :---: | :---: | :---: |
| b. | im-xapz | Px-freeze/harden | [in' $\chi$ apf] |
| c. | ma h-n-zaxö | 2SGDO 1SGS.Tr-Px-discuss | [maPn ${ }^{\prime} \int a \chi^{\mathrm{w}}$ ] |
| d. | i-n-tís | 3:3-Px-point.at | [in'tis] |
| e. | i-n-yaa | 3:3-Px-own | [in'jaa] |

The second person singular subject prefix $\mathbf{m}$ - (§17.1.2.1) almost always precedes a consonant and assimilates to the point of articulation of that consonant.

| a. | m-im-panzx | 2SGS-Px-run | [mim'pan $\chi \chi$ ] |
| :--- | :--- | :--- | :--- |
| b. | im-po-caa | 2SGS-Ir.DP-look.for | [impo'kaa] |
| c. | in-t-caa | 2SGS-RL-look.for | [in'tkaa] |
| d. | in-yo-caa | 2SGS-DT-look.for | [injo'kaa] |
| e. | im-xo-caa | 2SGS-Em-look.for | [in $\left.\chi o^{\prime} k a a\right]$ |

The negative prefix $\mathbf{m}$ - (§17.1.4) assimilates to the point of articulation of a following consonant.
(97)

| a. | i-m-aa | SN-Tr-N-grind | [i'maa] |
| :---: | :---: | :---: | :---: |
| b. | i-m-pii | SN-Tr-N-taste | [im'pii] |
| c. | i-n-sii | SN-Tr-N-smell | [in'sii] |
| d. | i-n-tís | SN-Tr-N-point.at | [in'tis] |
| c. | i-n-yaa | SN-Tr-N-own | [in'jaa] |
| d. | i-m-caa | SN-TR-N-look.for | [ig'kaa] |
| e. | i-po-m-caa | 3:3-Ir.Dp-N-look.for | [ipoy'kaa] |
| f. | i-m-xapz | SN-N-harden/freeze | [in' $\chi$ aps] |

The directional prefix mo- Twd loses its vowel under certain conditions (see §17.1.6) and assimilates to the point of articulation of the following consonant.

| a. | im-c-oozi | Twd-SN-Tr-carry | [ig'koosi] |
| :---: | :---: | :---: | :---: |
| b . | in-s-iin a-ha | Twd-Ir.Id-go Aux-DCL | [in'siin apa] |
| b. | xaa n-s-iin a-ha | soon Twd-Ir.Id-go Aux-DCL | [ $\chi$ aa ${ }^{\prime}$ 'siin a?a] |

Some roots have allomorphs showing nasal assimilation before a suffix consonant.

| (99) | a. | Viixim | fear | $V_{\text {iixan-t }}$ | fear-PL |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | b. | Vasim | laugh | $V_{\text {asin-t }}$ | laugh-PL |

The next groups of examples discussed all have $\mathbf{m}$ at the end of a word that is followed by another word (or clitic). And these examples are those where there is some phonetic variation within the community. When the $\mathbf{m}$ is in a stressed syllable, the $\mathbf{m}$ is phonetically [ m ] for all speakers.

| a. | ctam -ya | man/male-QM |
| :--- | :--- | :--- |
| b. | siim caha | Ir.ID-sleep AUX.SN-DECL |
| c. | siim ta | Ir.ID-sleep AUX.RL |
| d. | saamm caha ${ }^{64}$ | Ir.ID-UO.beg AUX.SN-DECL |

When the $\mathbf{m}$ is in an unstressed syllable, the $\mathbf{m}$ is phonetically [ m ] for some speakers (a very small minority, it would seem); ${ }^{65}$ for the majority of speakers, the $\mathbf{m}$ assimilates to the point of articulation of the following consonants. These facts show that the domain of Nasal Assimilation is the phonological phrase for most speakers, but it is limited to the word for a few speakers. ${ }^{66}$
¿Cootpam -ya?
Majority Minority herring QM
¿¿Es anchoveta?’
Is it a herring?
¿Caalim -ya?
SN-play QM
¿¿Está jugando?
Is s/he playing?
(103)
¿Caaitom -ya?
['kaaitonja] ['kaaitomja]
SN-speak QM
¿¿Está hablando?
Is s/he talking?
(104)
¿Hepem -ya?
['kaałinja]
['kaadimja]
['kootpanja]
['kootpamja]
white-tailed.deer QM
‘¿Es venado de cola blanca?’
Is it a white-tailed deer?

[^207]| (105) | cootpam com herring the. Hz | ['kootpa@ kom] | ['kootpam kom] |
| :---: | :---: | :---: | :---: |
| (106) | hepem cop white-tailed.deer the. $\mathrm{VT}_{\mathrm{T}}$ | [ $12 \mathrm{pp} \mathrm{\varepsilon}$ (ه) kop] | ['? $2 \mathrm{p} \varepsilon \mathrm{m}$ kop] |
| (107) | Saalim caha. <br> Ir.Id-play Aux.SN-DcL | ['saałi@ ka?a] | ['saałim ka?a] |
| (108) | saalim ta Ir.ID-play Aux.RL | ['saałin ta] | ['saałim ta] |
| (109) | poosim ta Ir.Dp-laugh DS | ['poosin ta] | ['poosim ta] |

An underlying $\mathbf{n}$ does not assimilate to a following consonant even when it follows an unstressed vowel.
(110) a. soomen caha Ir.Id-UO-toss.sideways Aux.SN-DCL s/he will winnow b. siiscan caha Ir.Id-hard Aux.SN-DcL it will be hard
c. hesen com dry.ironwood the.Hz the dry ironwood
d. seeten quij pen.shell the.Cm the pen shell
e. hesen pac dry.ironwood some some dry ironwood
f. zazan quij grackle the. См the grackle

### 28.5.2.1 Exceptions

One noun unexpectedly has a velar nasal, despite being in a stressed syllable: ctoo[ n$] \mathbf{c}$ immature double-crested cormorant. The word is written ctoonc in the dictionary with a note that the pronunciation is onomatopoetic. ${ }^{67}$

The $\mathbf{m}$ in the distal locative morpheme him (§21.3) also assimilates in the demonstrative adjectives (not surprisingly) and even when these words are used pronominally and have stress on the first syllable: himcop (Dт-Vт), himquij (Dт-См), himcac (Dт-Lc). ${ }^{68}$

[^208]
### 28.5.3 Nasal velarization before pause

In the dialect of many (but not all) speakers, a labial nasal in an unstressed syllable becomes a velar nasal before pause. ${ }^{69}$ This may occur when a word is pronounced in isolation or when it occurs in sentence-final position before an appropriate pause.

|  |  | Pronunciation A | Pronunciation B |  |
| :--- | :--- | :--- | :--- | :--- |
| a. cootpam | sardine | $[$ 'kootpay] | ['kootpam] |  |
| b. icaaitom | 3P-PON-US-speak | [i'kaaitoy] | [i'kaaitom] |  |
| c. | iyonípatim | 3:3-DT-hit-ImPF | [ijo'nipatiŋ] | [ijo'nipatim] |

The coronal nasal does not velarize; it is always [ n ].

| a. | hesen | dry ironwood |
| :--- | :--- | :--- |
| b. | seeten | pen shell |
| c. | ihípon | 3P-PON-HAVE-voice |
| d. | yaticpan | 3P-PON-work |
| e. | zazan | grackle |

The $\mathbf{m}$ of a stressed syllable does not velarize.

| a. | ctam | man |
| :--- | :--- | :--- |
| b. | cmaam | woman |
| c. | miim | Px-sleep |
| d. | heem | pencil cholla |

### 28.5.4 Nasal Lenition

In the modern dialect of Seri, unlike the dialect of some previous generations, a labial nasal following a tautosyllabic velar stop is pronounced as a nasalized labial-velar approximant. ${ }^{70}$ Nasalization spreads to any tautosyllabic vowels.

[^209]| (114) | a. | cmiique | ['kw̃ ĩinke] | person/Seri |
| :---: | :---: | :---: | :---: | :---: |
|  | b. | cmaam | ['kwn ã ã m] | woman |
|  | c. | intemamzo | [in'tkw ã mfo ] | 2SGS-RL-N-want |
|  | d. | intemaho | [in'tkw ${ }^{\text {a }} \mathrm{ho}$ ] | 2SGS-RL-N-see |
|  | e. | acmahaj | [a'kw ${ }^{\text {a }}$ Pax] | 3P-younger.brother's.child.ME |

Examples where the $\mathbf{m}$ is not tautosyllabic with a preceding velar stop are rare, but the $\mathbf{m}$ does not lenite in these cases.
(115) acmajeete [akma'xeete] 3P-wife's.older.sister

These facts support the claim that syllabification maximizes the onset of stressed syllables, as in (114e) a.cma.haj, but not in unstressed syllables since (115) acmajeete must be syllabified ac.ma.jee.te.

### 28.5.5 Nasal syllabification

In a very restricted context - between a glottal stop and a consonant - a nasal consonant is syllabic.

| (116) | a. | ma hnzaxö | [ma?n $\left.{ }^{\prime} \int \mathrm{a} \chi^{\mathrm{w}}\right]$ | 2SGDO 1SGS.Tr-Px-discuss |
| :---: | :---: | :---: | :---: | :---: |
|  | b. | ihmpii | [i?m'pii] | 1SGS.Tr-Px-taste |
|  | c. | ihmeaa | [i? ${ }^{\prime}$ 'kaa] | 1SGS.Tr-Px-look.for |

This syllabification is another way of enforcing the condition that a syllable onset cluster cannot begin with a sonorant and that a word-internal coda cluster does not end with a nasal.

### 28.5.6 Labialization

A back consonant is labialized when it follows a labialized consonant. The entire sequence is pronounced with lip-rounding; the labial off-glide is perceptible only before a vowel. A sequence of stops is pronounced, as expected, as a single long consonant.

| a. | anxö caticpan | $\left[\chi_{\mathrm{w}} \mathrm{k}^{\mathrm{w}}\right]$ | INTNS SN-work |
| :--- | :--- | :--- | :--- |
| b. | cö-c-aticpan | $\left[\mathrm{k}_{\mathrm{w}} \mathrm{k}^{\mathrm{w}}\right]$ | 3IO-SN-work |
| c. | c-zooxöc | $\left[\chi_{\mathrm{w}} \mathrm{k}^{\mathrm{w}}\right]$ | SN-four |
| d. | $\underline{\text { cö-xo-panzx }}$ | $\left[\mathrm{k}_{\mathrm{w}} \chi^{\mathrm{w}}\right]$ | 3IO-EM-run |
| e. | haquejöc | $\left[\mathrm{x}_{\mathrm{w}} \mathrm{k}^{\mathrm{w}}\right]$ | ABS-firewood |
| f. | Tajejöc | $\left[\mathrm{x}_{\mathrm{w}} \mathrm{k}^{\mathrm{w}}\right]$ | Tiburon Island |
| g. | s-xapiö caha | $\left[\mathrm{x}_{\mathrm{w}} \mathrm{k}^{\mathrm{w}}\right]$ | IR.ID-tremble AUX.SN-DCL |
| h. | ¿zimjöc xepe iti $\ldots ?$ | $\left[\mathrm{x}_{\mathrm{w}} \mathrm{k}_{\mathrm{w}} \chi^{\mathrm{w}}\right]$ | when? sea 3P-on |
| i. | mayoocö quij | $\left[\mathrm{k}_{\mathrm{w}} \mathrm{k}^{\mathrm{w}}\right]$ | American.bittern the.CM |

Forms such as cötootij (3IO-RL-dry) Is/was it dry? among many others, show that non-back consonants do not become round. (However, see $\S 28.5 .9$ for what happens with glottal stop; this
might be analyzed as the spread of labialization to the glottal stop.)
In the case words such as haquejöc (Abs-firewood) and Tahejöc Tiburon Island in which the back consonants are tautomorphemic, the decision to write labialization on the $\mathbf{j}$ and not on the $\mathbf{c}$ was based on our understanding of the development of labialization in the language. ${ }^{71}$ The words end in a cluster that is all rounded, as shown in (117) above. A priori, one might just as easily analyze these as phonemically jöcö or jcö. However, there is actually direct evidence for the analysis jöc. When infix -a- is used (§26.10), the labialization appears only on the velar fricative in these words.
(118) a. ¡¿Haquejö-a-c a-ya?! Firewood, my eye! b. ¿¿Tahejö-a-c a -ya?! Tiburon Island, my eye! ${ }^{72}$

The sequence xöc in the word czooxöc in (117c) is justified in part by comparison with c-zooxolcam (SN-eight), but it also can be made explicit by the infix -a-.
(119) i¿Czooxö-a-c a -ya?! Four, my eye!

### 28.5.7 Velarization of $p$

A p completely assimilates to a tautosyllabic preceding labialized velar stop in the dialect of many speakers. The result is a long labialized velar stop (transcribed phonetically here as $\left[\mathrm{k}^{\mathrm{w}}:\right]$ ) with prolonged velar occlusion). This is observed when a dependent irrealis form is prefixed with the third person indirect/oblique object prefix: cö-po-panzx [ $\mathrm{k}^{\mathrm{w}}$ : o ' p an $\int \mathrm{X}$ ] (3IO-Ir.Dprun), cö-p-aticpan [ $\mathrm{k}^{\mathrm{w}}: \mathrm{a}^{\prime} \mathrm{t}_{\mathrm{t}} \mathrm{kp}$ an] (3IO-Ir.Dp-work), cöpopacta [ $\mathrm{k}^{\mathrm{w}}$ : o'pakta] (3IO-Ir.Dpbe.in.appearance), toc cöpoohca [tok ' $\mathrm{k}^{\mathrm{w}}$ : o o ? ka] (there 3IO-Ir.Dp-be.located), cöpoozcam [' $\mathrm{k}^{\mathrm{w}}$ : o o $\int \mathrm{k}$ a m ] (3IO-Ir.Dp-arrive.PL), toc cöpiij [to k ${ }^{\prime} \mathrm{k}^{\mathrm{w}}$ : iix ] (there 3IO-Ir.DP-sit). ${ }^{73}$

### 28.5.8 Diphthongization (anticipatory labialization)

A non-round vowel diphthongizes when it precedes a labialized consonant (cö, jö, or $\mathbf{x} \boldsymbol{0}$ ); a short back round vowel is inserted as the second part of the diphthong, and is perceptibly higher following ithan following e or $\mathbf{o}$. The resulting diphthongs are [iŭ ], [iiŭ ], [aŏ ], [a a o ], [ $\varepsilon \check{\circ}]$ ], and $[\varepsilon \varepsilon \circ$ ] This diphthongization is more noticeable in the speech of some speakers than

[^210]in that of others, but it has been a clear part of the phonetic structure of Seri at least since the middle of the twentieth century.


The dipthongization is an important phonetic clue for perceiving labialized consonants that precede fricatives, since the labialization is acoustically overshadowed by the fricative. ${ }^{74}$
(121) a. cacösxaj SN-tall/long ['kaŏk w $\mathrm{s} \chi \mathrm{ax}$ ]
b. icös 3P-thorn ['iŭ k w s]
c. iixözaj 3P-placenta-PL ['iiŭ $\chi^{w} \int$ ax]
d. Xeecös (a place near Punta Santa Rosa) [ $\quad$ ' $\chi \varepsilon \varepsilon$ ŏ $\mathrm{k}^{\mathrm{w}} \mathrm{s}$ ]

This diphthongization does not happen if the vowel and labialized consonant are in different words: haa cöiifp [ 3 a a ${ }^{\prime} \mathrm{k}^{\mathrm{w}} \mathrm{i} \mathrm{i} \phi \mathrm{p}$ ] (there 3IO-3P-PON-arrive).

### 28.5.9 Glottalization

A consonant followed by glottal stop is realized phonetically as a glottalized version of the consonant. This process is observed most clearly in the phonetic realization of sequences of $\mathbf{c} \boldsymbol{0}$ plus $\mathbf{h}$ : cö-h-aas (3IO-Im-cause.drink) [' $k^{\prime}{ }^{w}$ a as ]. The labialization leads into the articulation of the vowel and follows the glottalization. ${ }^{75}$

[^211]
### 28.5.10 Nasal-Glottal metathesis

A nasal consonant and an immediately following glottal stop metathesize, or at least are pronounced in a way that makes them sound as if they had metathesized. Therefore a word such as i-m-heel iha (SN-N-red DCL) it is not red is pronounced [i?'mecł i?a]. The rule is completely productive word-internally. Other examples include:

| a. | imheel | (Px-red) |
| :--- | :--- | :--- |
| b. | mimhác | (2SGS-Px-blind) |
| c. | imhaa | (SN-N-EQ) |
| d. | imhaait | (Px-bloody) |
| e. | imhamoc | (Px-be.night) |

[I?'méd]
[mi?'mak]
[I?'maa]
[I?'maailt]
[I?'mamok]
This metathesis seems to apply with some variability across word boundaries where the $\mathbf{m h}$ is followed by a stressed vowel: ihsaapxölim haa hi (1SGS.Tr-Ir.ID-cause.be.broken Aux DcL) I will break it is sometimes heard as [I ? 'saap $\left.\chi^{\mathrm{w}} \mathrm{I}^{\prime}{ }^{\prime} \mathrm{maa} ? \mathrm{i}\right]$. Metathesis is not heard in examples such as ctam hipcop (man Px-Vт); this may be due to the lack of stress on hipcop.

### 28.5.11 e-Raising

The speech of a younger generation of Seri speakers can be partially characterized by a rule that applies less frequently in the speech of older speakers: raise an unstressed $\mathbf{e}$ to $\mathbf{i}$ in the syllable after a stressed syllable. Some common examples include cmiique (conservative) > cmiiqui (innovative) person/Seri; quiipe (conservative) > quiipi (innovative) SN-good; miime (conservative) $>$ miimi (innovative) Px-end; mojet (conservative) $>$ mojit (innovative). This raising seems to be dispreferred when the stressed vowel is e. Compare various forms of the verb $\sqrt{\text { eme }}$ depleted.

| Conservative queme | Innovative (same) | SN-depleted |
| :---: | :---: | :---: |
| teme | (same) | RL-depleted |
| yoome | yoomi | DT-depleted |
| xoome | xoomi | Em-depleted |
| siime | siimi | IR.ID-depleted |
| miime | miimi | Px-depleted |

Most of the documents in Seri have used the more conservative representations of these words, but the 2005 dictionary recognized both forms and some documents have included words written in a way that reflects the innovative pronunciation.

### 28.5.12 Sibilant assimilation

When the $\mathbf{s}$ of the independent irrealis prefix is followed by a root beginning with $\mathbf{z}\left[\int\right]$, the $\mathbf{s}$
tends to assimilate (in place of articulation) to the $\mathbf{z}$, at least for some speakers and in some faster rates of speech. ${ }^{76}$
(124) a. s-zatx ca-ha Ir.ID-have.glochids Aux.SN-DCL it will have glochids ['Sat aka ka ]
b. s-ziim ca-ha Ir.Id-appreciate Aux.SN-DCL s/he will enjoy it ['f:iimka?a]
c. in-s-záxö a-ha 2SGS-Ir.ID-discuss AUX-DCL you should talk about it [in'f:a $\chi^{w}$ a?a]

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## Appendix A: Loanwords from Uto-Aztecan languages ${ }^{1}$

1. The root of make shade shelter, $\sqrt{ }$-a-sooma, cf. Yaqui suma tie ('amarrar').
2. The root of make tortilla, $\sqrt{ }$-a-tascar, cf. Yaqui itaskari, tajkaim, Eudeve táskaran.
3. The root of work (for pay), $\sqrt{ }$-a-ticpan, cf. Yaqui tekipanoa, Eudeve téquirgua (noun), O'odham chikpan.
4. The root of make adobe, $\sqrt{ }$-a-zaamt, cf. Yaqui saamí, Eudeve saamí, O'odham shahmt, Pima Bajo sami, sáamich.
5. non-Indian Mexican, cocsar, cf. Eudeve kóksor Spaniard.
6. knife, metal, eenim, cf. O'odham wainomi metal, knife, Pima Bajo guainomi iron, Pima Bajo wáynem knife, Huarijío wenomi dinero, Southeastern Tepehuan vaiñum metal (tool).
7. hat, haaonam (Abs-hat), cf. Eudeve bónama, O’odham wonami, Pima Bajo vonama, wáynem, wónem.
8. Apache, hapats, cf. Yaqui haapat, Pima Bajo aps.
9. sawn wood, hocö, cf. Yaqui woko, oko, goko pine, Eudeve wokót pine, O'odham huk pine, lumber, hucu, huk pine Huarijío ohko, Southeastern Tepehuan juk.
10. mesquite, †hoohopam, cf. Yaqui hú'upa, ju'upa, Eudeve húparo, Huarijío upara.
11. desert broom-rape (Orobanche cooperi), matar. It was said there was an O'odham man named Matar.
12. pinto bean, †moon, $c f$. Yaqui muuni, Eudeve mún, O’odham muhni, Huarijío muuni.
13. short, stunted, pootsi, cf. Yaqui poochi, Eudeve posíci hunchbacked.
14. brown sugar, sancaac, cf. Yaqui sánkaka, Pima Bajo sancaca.
15. bread, siimet, $c f$. O'odham simito.
16. cardinal (bird), †sipjö, cf. O'odham sipuk.
17. tepary bean, teepar, $c f$. Eudeve tépar.
18. bighorn sheep, †tison, cf. O'odham cheshoni.

[^213]19. turkey, too, $c f$. O'odham tohwa, Pima Bajo tow.
20. chicken, tootar, cf. Yaqui totoi, Mayo tótori, O'odham chuchul, Pima Bajo tótori.
21. Yaqui (person), yequim, cf. Yaqui jiaki, O'odham hiakim.
22. black-eyed peas, yori imoon, cf. O'odham yorimuni.
23. a grass (unidentified), zai, cf. O'odham washai, washa'i, sha'i, Pima Bajo sa'e.
24. great-tailed grackle, zazan, cf. Yaqui chana, blackbird, O'odham shashani blackbird, Pima Bajo séseyn 'chanate'.

## Appendix B: Loanwords from Spanish ${ }^{1}$

The words listed here are of Spanish origin but many show evidence of having been borrowed indirectly through or under the influence of a Uto-Aztecan language of the region.
caamiz, shirt, Spanish camisa, cf. O'odham kamish.
cápota, jacket, Spanish capota.
caar, sheep, Spanish cabra, cf. Mayo cabara sheep, O'odham kahwul.
caay, horse, Spanish caballo, cf. Yaqui kaba'i, Eudeve kaváduqui, O’odham kawiyu, Huarijío kaawai.
5. camótzila, Manila tamarind, Spanish guamúchil.
6. †cascareera, ladder, Spanish escalera.
7. caztaz, wheat, perhaps from Spanish-Seri compound castellano-eaz Spanish-eelgrass, since eaz was a source of a protein-rich seed (see Felger \& M. Moser 1985). If this is the correct analysis, however, the stress pattern is enigmatically strong-weak rather than weak-strong (the latter being expected for compounds).
8. V-a-pásiro, stroll, Spanish pasear.
9. $\sqrt{ }$-a-preent, pawn, Spanish prendar, $c f$. Yaqui peenta, O'odham plihnthat.
10. $\dagger \sqrt{ }$-a-ramozni, beg, Spanish limosna, $c f$. Yaqui limojna, O'odham limoshan.
11. V-a-rgüéyotim, wander around, Spanish vagar.
12. contiir, candle, Spanish candil, cf. Yaqui kanteelam (candela), O'odham kanjel, Pima Bajo candera, kandéel, Huarijío kaantera.
13. cootzi, pig, Spanish cochino, $c f$. Yaqui koowi (cerdo), O'odham kohji, Huarijío kooi, koowi.
14. coton, kind of short blouse or shirt, Spanish cotón, cf. O'odham cotoni.
15. haalti, †ooti, bucket, pail, Spanish balde, cf. Yaqui balle, O'odham wahlthi.
16. hasaaiti, gasoline, Spanish aceite, O'odham a-saithi.
17. haspaaya, sword, Spanish espada.
18. hateeya, bottle, Spanish botella, $c f$. Yaqui botea .
19. hohra, burro, donkey, Spanish burro, $c f$. Yaqui buuru, O'odham wuhlu, wuhlo, Pima Bajo bur, wur, Huarijío uuru.
20. hooro, gold, Spanish oro, cf. O'odham ohla.
21. icatoomec, week, Spanish domingo, $c f$. Yaqui Lomiinko, O'odham thomig week, Thomig Sunday, Pima Bajo domk week, Sunday.
22. †izaayo, Saturday, Spanish sábado, cf. Yaqui sabala, O’odham shahwai, Pima Bajo sáwan.
23. liitro, round, flat-bottomed, straight-sided basket, Spanish litro.

[^214]24. $\dagger \mathbf{l o o l s s}$, candy, Spanish dulce, $c f$. O'odham lohlsi.
25. †masaana, demijohn, Spanish damijuana.
miist, cat, Spanish miisi, cf. Yaqui miisi, Eudeve místo, O'odham mihstol, Pima Bajo micxto, Huarijío mi'si.
oenoraama, whitethorn acacia, Spanish vinorama.
paar, priest, Spanish padre, cf. Yaqui paare, O’odham pahl, páaly 'cura', Huarijío paare.
panaal, honey, Spanish panal, $c f$. O'odham pa-nahl sit'ol.
pareen, reins and bit, Spanish rienda.
pazaato, shoe, Spanish zapato.
peez, peso, Spanish peso, $c f$. Yaqui peeso, O'odham pihsh.
pyeest, party, Spanish fiesta, $c f$. O'odham piast.
quiiz, cheese, Spanish queso, $c f$. Yaqui keesum O'odham gihsho, Huarijío queesu.
raama, checkers, Spanish damas.
reali, real (coin), Spanish real, cf. O'odham lial money.
ret, lariat, Spanish reata, $c f$. Yaqui reata, O'odham liat.
roocö, crazy, Spanish loco, cf. O'odham lohgo.
saaco, long blouse, Spanish saco, O'odham sahgo.
santaar, soldier, Spanish soldado, cf. Yaqui sontao, O'odham shontal, Pima Bajo sontao, Huarijío soontaro.
seaato, goat, Spanish chivato, $c f$. O'odham siwat.
siir, saddle, Spanish silla, cf. O'odham sihl, Pima Bajo sira.
soaano, bed sheet, Spanish sábana, cf. Yaqui savana, O’odham sahwano, Huarijío sawana.
soeroj, spurs, Spanish espuelas, $c f$. Yaqui ijpuelam, $\mathrm{O}^{\prime}$ odham ispul.
Tear, Devil, Spanish Diablo, cf. O'odham jiawul, Pima Bajo yáawely.
toaaz, handkerchief, Spanish toalla, cf. O'odham tohwush.
tom, money, Spanish tomín, cf. Yaqui tomi, O'odham lial, Pima Bajo tomíny, Huarijío toomi.
trooqui, vehicle, Spanish troque, from English truck.
$\dagger$ xoola, money, Spanish jola (regionalism.) ${ }^{2}$
yaawlo, demon, Spanish diablo, cf. O'odham jiawul.
yecyar, cowboy, Spanish vaquero, cf. Yaqui bake'o, O'odham wakial, Huarijío waakero.
52. Yooz, God (Christian), Spanish Dios, $c f$. Yaqui lios, O'odham Jiosh, Pima Bajo dyóos, Huarijío Riosi.

[^215]
## Appendix C: Tests for transitivity

The following tests are available for surface transitivity or intransitivity in Seri, directly relating to the presence or absence of a direct object: (a) the allomorphy of certain prefixes, (b) the application of a phonological rule that relates to the allomorphy of one group of prefixes (c) the possibility or impossibility of passive or unspecified subject morphology, and (d) the 3:3 prefix $\mathbf{i}$-. These are in addition to the very obvious evidence from direct object inflection (see $\S 17.1 .2 .3$ ) and are especially helpful when third person is involved since that is unmarked.

## C. 1 Allomorphy

Some prefixes have suppletive allomorphy that is determined in whole or in part by the surface transitivity or intransitivity of the clause.

## C.1.1 First person singular subject inflection

Two suppletive allomorphs for the first person singular subject inflectional prefix exist: hp- if the clause is intransitive and $\mathbf{h}$ - if it is transitive. For more details, see §17.1.2.1.

Intransitive
(1)
ihpyomafp
'no llegué'
I didn't arrive
(3) ihpyompazt
'no fui tatuado'
I wasn't tattooed

Transitive
ihyomaho
'no lo/la vi'
I didn't see him/her/it
(4) ma hyomaho
'no te vi'
I didn't see you (sg.)

## C.1.2 First person emphatic subject inflection

Two suppletive allomorphs for the first person emphatic subject inflectional prefix exist: ca- if the clause is intransitive and a- if it is transitive. This prefix occurs in a different position in the word than the normal subject inflectional affixes and substitutes for the normal first person subject inflection. For more details, see §17.1.2.1.

Intransitive

## (5) Hatee somcaatax aha. <br> 'Yo no iré.' <br> I won't go. (DS2005, caa-)

Transitive
(6) Hatee smaahit aha.
'Yo no lo comeré.'
I will not eat it. (DS2005, aa-)
(7) Hatee scapazt aha.
(8) Hatee yasi. ${ }^{1}$
'Yo lo tomé.'
I drank it.
(9) Scaalx.
‘Vamos!’
Let's go!
(10) Saaitoj!
‘¿Comámoslo!’
Let's eat it!

## C.1.3 Infinitival prefix

Two suppletive allomorphs for the infinitival prefix exist: ica- if the clause is intransitive and iha- ${ }_{\text {abl }}$ if it is transitive. For more details, see $\S 17.2 .1$.

Intransitive
(11) icapanzx
'correr'
to run
(13) icapazt
'ser tatuado'
to be tattooed

Transitive
(12) ihapii
'probarlo/la'
to taste it
(14) ma ihasanj
'llevarte en la espalda'
to carry you (sg.) on my back

## C.1.4 Imperative

The imperative prefix has several suppletive allomorphs, the distribution of which is predictable based primarily on the phonological shape of the following morpheme, but also on certain other factors including the surface transitivity of the clause in limited situations. If the morpheme following the imperative prefix begins with a vowel other than $\mathbf{i}$, ii, (short) a or (short) e, transitivity is relevant. Intransitive forms take the prefix $\varnothing_{-\mathrm{Abl}}$; transitive forms take the prefix h-. For more details see $\S 17.2 .2$.

Intransitive Transitive
(15) asanj < stem Vosanj
(16) $\quad \underline{\text { hoocta }}<$ root Voocta look at
carry (unspecified) on back
as $<\operatorname{root} \sqrt{ }$ oos $\operatorname{sing}$
(18) $\quad$ haai $<$ root $\sqrt{\text { aai }}$ make
(19) aanpx < root $\sqrt{ }$ aanpx go home

## C.1.5 Realis proposition/oblique deverbal nouns

The prefix for realis proposition/oblique deverbal nouns has suppletive allomorphs, and the

[^216]distribution of these is predictable based primarily on the phonological shape of the following morpheme, but the surface transitivity of the clause is also sometimes relevant. If the morpheme following the imperative prefix begins with any vowel other than $\mathbf{a}, \mathbf{e}, \mathbf{i}$ or $\mathbf{i i}$, transitivity is relevant. Intransitive forms take the prefix $\mathbf{y}$-abl, while transitive forms take the prefix $\mathbf{h}$-. For more details see $\S 14.4$. The forms below are all cited in third person subject/possessor forms for the sake of simplicity.

Intransitive

```
yasanj < stem Vosanj
``` carry (unspecified) on back
yas \(<\) root \(V\) oos sing
yaanpx < root \(\sqrt{\text { aanpx }}\) go home
yeemej < root \(\sqrt{ }\) eemej move slowly (intr.)

Transitive
(21) ihoocta \(<\) root Voocta look at
(23) ihaai < root Vaai make
(26) iheetol < root \(\sqrt{ }\) eetol push

\section*{C. 2 Phonological rule}

Three mood prefixes end in \(\mathbf{0}\) : dependent irrealis po- (§17.1.1.1), emphatic realis xo- (§17.1.1.8), and distal realis yo- (§17.1.1.6). They interact differently with a o-initial stems in intransitive clauses than they do with \(\mathbf{0}\)-initial stems in transitive clauses. In the intransitive clauses, the \(\mathbf{0}\) 's merge and change to \(\mathbf{a}\). In the transitive clauses, the \(\mathbf{o}\) of the prefix is deleted. These facts are discussed in §27.2.2.
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{Intransitive} & & \multicolumn{3}{|l|}{Transitive} \\
\hline (27) & pas & \(<\) \{po-oos \(\}\) & (28) & ipoocta & \(<\) \{i-po-oocta \(\}\) \\
\hline & & Ir.Dp-sing & & & 3:3-Ir.Dp-look.at \\
\hline \multirow[t]{2}{*}{(29)} & \multirow[t]{2}{*}{xöas} & \(<\) \{x0-00s \(\}\) & (30) & ixoocta & \(<\) ii-xo-oocta \(\}\) \\
\hline & & Em-sing & & & 3:3-Em-look.at \\
\hline \multirow[t]{2}{*}{(31)} & \multirow[t]{2}{*}{ihpyás} & < hp-yo-oos \(\}\) & (32) & ihyoocta & < h-yo-oocta \(\}\) \\
\hline & & 1Sg.S.In-DT-sing & & & 1Sg.S.Tr-Dt-look.at \\
\hline
\end{tabular}

\section*{C. 3 Passive vs. Unspecified Subject}

Transitive verbs commonly have passive counterparts; intransitive verbs do not. When one wishes to omit explicit reference to the agent of a transitive verb, the passive form is used (see \(\S 17.1 .5\) ). When one wishes to do the same for an intransitive verb, the unspecified subject prefix is used (§17.1.5). Passive morphology is not permitted on intransitive verbs and unspecified
subject morphology is not permitted on transitive verbs. Therefore transitive verbs are straightforwardly distinguishable from intransitive verbs because this unspecified subject prefix may not be used with transitive verbs. The forms below are all cited in the action or obliqueoriented deverbal noun form (§14.4.1) in third person. Note that the intransitive verbs do not permit the presence of the passive prefix and the transitive verbs do not permit the presence of the unspecified subject morpheme.

Intransitive Transitive
(33)
a. icaafp
i-Ø-ca-afp
3P-PON-US-arrive
one's arriving
b. *ipafp i-Ø-p-afp 3P-PON-Pv-arrive
a. icapanzx i-Ø-ca-panzx
3P-PON-US-run
one's running
b. \(\begin{aligned} & \quad \text { *ihapanzx } \\ & \text { i-h-ah-panzx } \\ & \text { 3P-PON-Pv-run }\end{aligned}\)

a. ihacazni

i-h-ah-cazni

3P-PON-Pv-bite

his/her being bitten
b. *icacazni i-Ø-ca-cazni 3P-PON-US-bite (one's biting him/her/it)
(36)
\(\begin{aligned} & \text { a. } \text { ipaho } \\ & \text { i- }-\mathbf{-}-\mathbf{p}-\text { aho } \\ & \text { 3P-PON-Pv-see } \\ & \text { his/her being seen }\end{aligned}\)
b. * icaaho
i-Ø-ca-aho
3P-PON-US-see
(one's seeing him/her/it)

\section*{C. 4 3:3i-}

The prefix i- occurs on finite transitive verbs only when both the subject and direct object are third person. (For more details see §17.1.2.1.) Therefore it does not occur in (37), because it is intransitive, nor in (38) because the Direct Object is first person, nor in (39) because the Subject is first person. But it does occur in (40) because the proper conditions are met.

\section*{Yoofp.}

Dt-arrive
'Llegó.'
S/helit arrived.
(38) Hin yooho.

1 SGDO Dt-see
'Me vio.'
S/helit saw me.
(39) Zo hyooho.
one 1SGS.Tr-Dt-see
'Vi uno.'
I saw one.
(40) Iyooho.

3:3-Dт-see
'Lo/la vio.'
S/he/it saw it/her/him.

\section*{Appendix D: Glossary of compounds and verbal idioms}

Words and expressions that are marked with a raised small circle \(\left(^{\circ}\right)\) in the text are listed here. These words include a few that simply have an etymology worth pointing out (but not all such words), compound nouns (see general discussion in §13.5) and verbal idioms (see general discussion in chapter 7).
acaam ccaa wren (3P-husband SN-TR-
look.for); see §13.5.4.2.
an ihiliti her scarf(3P.in 3P-PON-HAVE-hair); see §13.5.4.4.
an ihitj his/her pants (3P.in 3P-PON-HAVEtrunk.of.body); see §13.5.4.4.
an imoofin his/her not arriving to it (3P.in SN-\(\mathrm{N}-\) ?); see general pattern in \(\S 7.3\).
an iquitj pants (3P.in 3P-PON-US-HAVEtrunk.of.body); see §13.5.4.4. Plural: an iquitzil. Possessed forms include ano mihitj your pants and ano hihitj my pants.
an iquitzil pants (pl.) (3P.in 3P-US-HAVE-trunk.of.body-PL). \(C f\). an iquitj.
an iyahojöz it scraped it off (3P.in 3:3-DT-AUGmounded); see general pattern in \(\S 7.3\).
an iyeemoz \(s\) /he peeled it (3P.in 3:3-DT-?); see §7.3.
ano cöipitaai it will happen simultaneously (3P.in 3IO-3:3-Ir.Dp-?); see §7.3.
ano cötahníp it was inserted (3P.in 3IO-RL-PVhit); see general pattern in §7.3.
áno hizi matápolquim \(s\) /he interrupted \(u s\) (3P.in 1SGDO-PX-AUG-broken); see \(\S 7.3\).
ano hmeemjöc I peeled them (3P.in 1SGS.TR-PX-?-IMPF); see §7.3.
áno moopox it sheds (3P.in Px-UO-pull.out); see §7.3.
áno paait when it is the afternoon (3P.in IR.DParrive); see \(\S 7.3\).
áno siizquim it [the sun] will set (3P.in IR.IDenter); see §7.3.
ano sozamlcam they will step in it (3P.in Ir.ID-UO-put.VT-PL); see general pattern in §7.3.
ano toofin \(s\) /he was passing (3P.in RL-?); see general pattern in §7.3.
ano yazalca they meddle (3P.in DTtalk.PL.IMPF); see general pattern in §7.3.
áno yimoz it turned over (3P.in DT-HAVEheart); see §7.3.
anxö haa injured (InTNS SN.be Irreg ); see \(\S 7.4\).
anxö itaaizilca they injured him/her (InTNS 3:3-RL-make-PL-IMPF); see §7.4.
anxö iyaai \(s / h e / i t\) injured him/her/it (INTNS 3:3-DT-make);see §7.4.
anxö ma saai \(s / h e / i t\) will harm you (InTNS 2SGDO Ir.ID-make); see §7.4.
azlc canl stars (star-PL SN-roar/burn.with. sound-PL). \(C f\). azoj canoj.
azoj canoj star (star SN-burn.with.sound); see §13.5.4.1.
caaha iyoaaj they get ready (? 3:3-DT-knowPL); see §7.4.
caail dry lake bed, Caail San Bartolo Playa (SN-wide/spacious); see beginning of chapter 14.
caamjö screech owl (SN-UO.hunt).
capii fat (SN-AUG-taste).
cmaa hapx caap newborn (now outside SNstand); see §7.1.
cmaa quiih new (now SN-be.Fl); see §7.4. With the plural word comcaac (person.PL) it means the present generation. See also the expression xicacaziil \({ }^{\circ} \mathbf{c m a a} q u i i h^{\circ}\) hizi
quiinim hizcom (children new 1PLDO SN-TR-mix.with Px-Hz) for the children of our generation.
cöcapii fat (3IO-SN-AUG-taste, inflected for oblique object because of modifier). \(C f\). capii.
cocazni rattlesnake (SN-UO-bite); see beginning of chapter 14.
cöhatoohjoj we went out to sea (3IO-1PLS-RL-vertical.and.right.side.up-PL.IMPF); see §7.6.
cohsaactim I will shut it off; I will guess (3IO-1SGS.TR-Ir.ID-AUG-be.cut); see §7.6.
cöipatj his/her.side (3IO-3P-PON-flattened); see discussion in §13.4.2.
cöitatni s/he shot/speared/stung (3IO-3:3-RLtouch); see §7.6.
cöootni what s/he shot (3IO-3P-ONmake.pointed.contact.with); see §7.6.
cöquiij shriveled up, lame (3IO-SN-sit); see §7.6.
cösiictim will come to an end [activity] (3IO-IR.ID-be.cut); see §7.6.
cöyiimj it came to an abrupt termination (3IO-DT-translucent); see §7.6.
eenim cosi needle (metal thorn); see \(\S 13.5 .1\).
eenm haacni rifle \(<\) (metal (reduced form of eenim), bow); see \(\S 13 \cdot 5.1\). Plural: eenm haaczoj.
eenm hacoaazj chain \(<\) (metal (reduced form of eenim), SN-PV-braid); see §13.5.4.1.
eenm icaatj hammer \(<\) (metal (reduced form of eenim), 3P-PON-US-pound.flat); see §13.5.4.1.
haa caahca necessary (there SN-be.located); see §7.4.
haa matatoohajoj you (pl.) imagine (there 2PLS-RL-cause.be.located-PL); \({ }^{1}\) see \(\S 7.4\).

\footnotetext{
\({ }^{1}\) This idiom does not appear in the 2005 dictionary. The verb stem is also slightly different than what is recorded there for this verb.
}
haa yoohca it was (apparently) the case (there DT-be.located); see §7.4.
haaco ano hapaspoj \({ }^{\circ}\) cöicacoaat school (ABS.house 3P.in paper 3IO-3P-UScause.know); see §13.5.4.3.
haai cahipt experts (? SN-AUG-?); see §7.4.
haai cmipi difficult (? SN-?); see §7.4.
haai ntahipi can you do it easily? (? 2SGS-RL-AUG-?); see §7.4.
haai quipi easy (? SN-?); see §7.4.
haai xommipi it isn't difficult (? Em-N-?); see §7.4.
haait quizp dysentery (ABS-blood SN-TRexpel.like.diarrhea). \({ }^{2}\)
haaix ima serious (? SN-N-be Irreg ); see §7.4.
haat hanoohcö pot-shaped basket (limberbush SN-Pv-AUG-concave); see \(\S 13.5 .4 .1\).
hacx cmiih dead, die (person) (apart SNnot.be.FL); see §7.4.
hacx cöisahmiihit that s/he will be killed (apart 3IO-3P-Ir.ID-Pv-AUG.not.be.FL); see §7.4.
hacx cöyomiih \(s\) /he died in that way (apart 3IO-DT-not.be.FL); see §7.4.
hacx cpaailx lost (pl.) (apart SN -arrive.PL); see §7.4.
hacx hasmiihtoj we will die (apart 1PLS-IR.ID-not.be.FL-PL); see §7.4.
hacx icamiih one's dying (apart 3P-PON-USnot.be.FL); see §7.4.
hacx icamiih to die (apart InF.In-not.be.FL); see §7.4.
hacx imiih its being lost, his/her/its dying (apart \(3 \mathrm{P}-\mathrm{PON}-\) not.be.FL); see \(\S 7.4\). (The example in the grammar has the sense of being lost, whereas the idiom most generally means 'die'.)
hacx immihtoj they have died (apart PX-

\footnotetext{
\({ }^{2}\) This expression and the verb on which it is based were not included in the 2005 dictionary since the consultants judged the words highly objectionable.
}
not.be.FL); see §7.4.
hacx immiih not dying (apart SN-N-not.be.FL); see §7.4.
hacx immiih \(s / h e\) died (apart Px-not.be.FL); see §7.4.
hacx ipi tommiih \(s / h e\) had not died yet (apart yet RL-N-not.be.FL); see §7.4.
hacx itamiihtaj they killed him/her (apart 3:3-RL-AUG-not.be.FL-PL); see §7.4.
hacx ixamiihitim \(s / h e\) killed them (apart 3:3-Em-AUG-not.be.Fl-?-ImpF); see §7.4.
hacx miih it was occasionally (apart Px-be.FL) see general pattern in §7.4.
hacx mimiih your dying (fainting) (apart 2P-PON-not.be.FL); see §7.4.
hacx scamiih one will die (apart IR.IDnot.be.FL); see §7.4.
hacx smiih will die (apart Ir.ID-not.be.FL); see §7.4.
hacx tmiih s/he it dies/died (apart RLnot.be.FL); see §7.4.
hacx yomiih \(s\) /he /it died (apart RL-not.be.FL; see §7.4.
hai xepe imac quiij west wind (air/wind sea 3Pmiddle SN -sit); see general pattern in §13.5.4.1.
hamác cömootni \(s\) /he made a smoke signal (fire 3IO-PX-UO-make.contact); see general pattern in §7.1.
hamatj inptooxi I was thirsty (thirst (?) 1SGS.In-RL-die); see §7.1.
hamatj ihpxöaxi I am thirsty! (thirst (?) 1SGS.In-Em-die); see §7.1.
hamatj somcooxi one will not get thirsty (thirst (?)Ir.Id-N-US-die); see §7.1.
hant caalaje who are giving birth (land SNAUG.release.PL); see §7.1.
hant cafeaa that has spent the night, day-old (land SN-?); see §7.1.
hant cocom what has the form of (something long) (land 3IO-SN-lie); see §7.1.
hant cöhascomjcooil we will not exaggerate (overdo it) (land 3IO-1PLS-Ir.Id-N-fall-PL; see general pattern in §7.1.
hant cöhatpamlcam we came across (land 3IO-1PLS-RL-connected-PL); see §7.1.
hant cohsaheectim I will transport it (land 3IO1 SGS.Tr-IR.ID-?); see §7.1.
hant cöitaiis is s/he watching over it/him/her? (land 3IO-3:3-RL-?); see §7.1.
hant com cöminej it is exterminated (land the.Hz 3IO-PX-empty); see §7.7.
hant cöquiiis who takes care of him/her/it (land 3IO-SN-TR-?); see §7.1.
hant haaco iima worldwide disaster (land ? 3P-PON-?); see §7.1 and §13.5.4.
hant ifii morning (land 3P-PON-?); see §7.1.
hant ihiip its meaning (land 3P-PON-stand); see §13.5.4.
hant ihyomaamac I have not cooked century plant (land \(1 \mathrm{SGS} . T \mathrm{R}-\mathrm{DT}-\mathrm{N}-\) ?); see §7.1.
hant ipzx gulch (land ?); see §13.5.4.
hant iyootyajc they towed it (land 3:3-Dт-stretch.out-IMPF); see §7.1.
hant oozitoj caiitim bothering (land 3P-? SN-do-IMPF); see §5.5.2.
hant pofii ta tomorrow (land Ir.Dp-? DS); see §7.1.
hant quixoaa hermit crab; ghost shrimp (land SN-plan.to.fight); see §13.5.4. \({ }^{3}\)
hant safeaacol that will stay all night (land Ir.Id-?-PL); see §7.1.
hant xepe imac quiij island (land sea 3Pmiddle SN-sit); see §13.5.4.
hant xnoois garbage (land eelgrass.grain); see §13.5.1.
hant yaacatx gave birth (land DT-release); see §7.1.

\footnotetext{
\({ }^{3}\) While some speakers use hant quixóaa for ghost shrimp as well as hermit crab, others use it only for the latter.
}
hantx cömiiha long time ago, the old days (at.base 3IO-TwD-3P-PON-move); see §7.4.
hantx moca ancestor (at.base TwD-SN-move); see \(\S 7.4\) and \(\S 13.5 .4\).
hantx mocat ancestors (at.base TwD-SN-movePL); see §7.4 and §13.5.4.
hanzajipj quiipa frying pan (pan SN-HAVEtail); see §13.5.4.1.
hapaha quis flour (SN-Pv-grind SN-raw); see §13.5.4.
hapapjc beads (SN-PV-wear.on.neck); see general pattern in §14.1.
hapaspoj paper (SN-Pv-AUG-spotted); see the general pattern in §14.1.
hapaspoj \({ }^{\circ}\) cohyacoaat my student (paper 3IO-1P-PON-AUG-know); see §7.1.
hapaspoj \({ }^{\circ}\) cöcacoaat school teacher (paper 3IO-SN-AUG-know); see §7.1.
hapaspoj \({ }^{\circ}\) cöhacoaat student (in school) (paper 3IO-SN-Pv-AUG-know); see §7.1.
hapaspoj \({ }^{\circ}\) cötacoaat (paper 3IO-RL-AUGknow); see §7.1.
hapaspoj \({ }^{\circ}\) cötahcoaat (paper 3IO-RL-PV-AUGknow); see §7.1.
hapaspoj \({ }^{\circ}\) hanoocaj book (paper SN-PVcarry.under.arm); see §13.5.4.1.
hapaspoj \({ }^{\circ}\) he cacoaat my school teacher (paper 1IO-SN-AUG-know); see §7.1.
hapaspoj \({ }^{\circ}\) me tacoaat is s/he teaching you? (paper 2IO-RL-AUG-know); see §7.1.
hapáspolca papers ( \(\mathrm{SN}-\mathrm{Pv}-\mathrm{AUG}-\) spotted-PL); see the general pattern in §14.1.
hapnaail skirt (ABs-skirt); very likely derived historically from a reanalysis of hap ipnaail (mule.deer 3P-skin).
hapx caap who was born; who defecated (outside SN-stand); see §7.4.
hapx hant cacatx save/rescue him/her! (outside land Im-release); see general pattern in §7.4 and §7.1.
hapx hant cöyoome they escaped (outside land

3IO-DT-arrive.PL); see general pattern in §7.4 and §7.1.
hapx hant ihpsooca I will take out (things, to move) (outside land 1SGS.In-Ir.ID-UOput.LQ); see general pattern in \(\$ 7.4\) and §7.1.
hapx hant tooit \(s\) /he went outside; s/he escaped (outside land RL-arrive); see general pattern in §7.4 and §7.1
hyaa; postvocalic form of ihyaa, q.v.
hapx ihiip where s/he was born (outside 3P-PON-stand); see §7.4.
hapx mihiip when you were born (outside 2P-PON-stand); see §7.4.
hapx taailx \(s / h e\) demonstrated magical powers (outside RL-release-IMPF); see §7.4.
hasaaiti coozlil lubricating oil (gasoline SNslippery); see §13.5.4.
hasaamilc limberbush rolls (SN-Pv-AUG-rolled.up-?; see §14.1.
hataia cloth (SN-Pv-wear.kilt); see beginning of chapter 14.
hateiictim piece of cloth, rag. From hataai (q.v.) iictim (q.v).
hax ano hpyaalim I took a bath (water 3P.in 1SGS.In-DT-play); see §7.7.
hax ano htah I washed it (water 3P.in 1SGS.TR-RL-put.FL); see §7.7.
hax emaapa just now; see §24.3.3.
hax ihasii quiipe perfume (water 3P-PON-AUGsmell SN-good); see §13.5.4.
hax mahii it seems, it seemed (just Px-Pv-feel); see §12.2.1.7.
hax pahii it seems, it seemed (just Ir.Dp-Pvfeel); see §12.2.1.7.
hax tahii it seems, it seemed (just RL-Pv-feel); see §12.2.1.7.
haxölinaail mollusk < (haxöl clam, inaail 3Pshel1/skin); see §13.5.2. Plural: haxölinaaile, with -c Plural.
hayaa cacoxl storekeeper (SN-PV-own SN-TR-

> tend); see §13.5.4.
heen imt cow's milk (cow 3P-breast/milk); see general pattern in §13.5.2.
heenj stringed instrument (monochord violin or guitar); (SN-Pv-play.stringed.instrument); see general pattern in §8.4.6).
hehe án countryside (plant 3P.area/place.inside); see §13.5.2.
hehe an icaaij water drum (plant/wood 3P.in 3P-PON-US-fetch.water); see §13.5.4.
hehe cpooin dense vegetation, forest (plant/tree SN-closed); the expression is idiosyncratic since the word cpooin generally only means close (active).
hehe hamasij ceremonial crown used by Seri men in the past (plant SN-PV-cause.open); see §13.5.4.1.
hehe hant haníp post (plant/wood land SN-Pvhit); see general pattern in §13.5.4.1.
hehe hascám ship (plant/wood Abs-reed.boat); see §13.5.1.
hehe hasitlca cradleboards; portable beds (plant/wood SN-tie.slats.for.bed-IMPF); see general pattern in §13.5.4.1.
hehe icám caterpillar (plant/wood 3P-PONalive); see general pattern in §13.5.4.4.
hehe it iicom bed (plant/wood 3P-on 3P-PONlie); see general pattern in §13.5.4.3.
hehe iti hyahitim my table (plant/wood 3P-on 1P-PON-UO-eat-IMPF); see §13.5.4.3.
hehe iti icoohitim table (plant/wood 3P-on 3P-PON-US-UO-eat-IMPF); see §13.5.4.3.
hehe iti iquícolim chair (plant/wood 3P-on 3P-PON-US-sit-IMPF); see general pattern in §13.5.4.3.
hehe yapxöt flower (plant 3P-PON-bloom).
hehe zamij box (plant/wood palm.tree); see §13.5.1. (It is not known how this name developed.)
heme camp (ABs-home/family).
heme cöiquiin one's engagement (ABS-
camp/family 3IO-3P-PON-US-go.away); see general patterns in §13.5.4.4 and §7.1.
hiicot haai help us! (1P-with.PL Im-make); see §7.3.
hiicto my children (1P-PON-pregnant.with.PL); see §14.4.
hiictoj our children (1P-PONpregnant.with.PL.IMPF); see §14.4.
hiihax haai help me! (1P-with.SG Im-make); see §7.3.
hiihax isaai me ayudará (1P-with.SG 3:3-Ir.IDmake); see §7.3.
hiihjoj xöaxyat I got very tired (from walking or dancing) (1P-limb-Pl Em-die-PL); see §7.2.
hiihjoj yomoooxyat I didn't get tired (from walking or dancing) (1P.limb-PL DT-Ndie.PL); see §7.2.
hiiqui saa it will harm me (1P-toward IR.ID-?); see §7.3.
hiisax hant icooit for me to be happy (1P-? land Inf.IN-arrive); see §7.2.
hiisax hant xöaait I am happy! (1P-? land Emarrive); see §7.2.
hiistox hant yopaailx we are happy (1P-?-PL land DT-arrive.PL); see §7.2.
himo tpazjc it spilled out (elsewhere RL-?); see §7.4.
himo yopazjc it spilled out (elsewhere Dт-?); see §7.4.
himoz smeet \(I\) will be sad (1P-heart IR.ID-?); see §7.2.
hipos cöyopazlax I choked on it (1P-throat 3IO-Dт-?-Імрғ); see §7.2.
hisolca hatqueept we were proud of ourselves (1P-self-Pl 1PLS-RL-AUG-good-PL); see §7.5.
hisolca hayanzaaitj we were patient, calm, not impulsive ( 1 P -self-Pl 1PlS-DTcareful.with); see \(\S 7.5\).
hisolca hayoox we got ready (1P-self-PL 1PLS-

\section*{Dт-finish-PL); see §7.5.}
hiza tacsx looked to one side (toward.elsewhere RL-awake); see general pattern in §7.4.
hoo xah teme (ma) suddenly (? AtTEN RL-end (DS)); see §7.4.
icaaisx soap (3P-PON-US-wash); see general pattern in §14.4.
icaaitom word (3P-PON-US-speak); see general pattern in §14.4.
icaapjöquij sea-pounding stick (3P-PON-USpound.sea); see general pattern in §14.4.
icaaspoj pencil (3P-PON-US-AUG-spotted) what one writes with; see §14.4.
icocozyax scissors (3P-PON-US-UO-saw.IMPF), what one cuts with. The morphology is a bit irregular; see general pattern in §14.4.
ihipon his/her/its voice (3P-PON-HAVE-voice). See general pattern in \(\S 14.4\).
ihít tactim it ended, it was all gone (3Pplace.behind RL-be.cut); see §7.1.
ihyaa mine (from an irregular form of own); see discussion in §16.1.6.
ihyaazi my child (man speaking) (1P-ON-carry). See general pattern in §14.3.
iicp cöquiipe useful, necessary (toward 3IO-SN-good); see §7.4.
iicp cösiipe it will be useful (toward 3IO-IR.IDgood); see §7.4.
iicp intaanim did you forget? (toward 2SGS-RL-AUG-covered); see §7.4.
iicp me hpyooitom I defended you (verbally) (toward 2IO 1SGS.In-DT-speak); see §7.4.
iicp tyai s/he opposed him/her (toward RL-?); see general pattern in §7.4.
iicto her children (3P-PON-pregnant.with.IMPF); see §14.4.
iiha capii fat (? SN-AUG-taste); see §7.1.
iiha ntapii are you fat? (? 2SGS-RL-AUG-taste); see \(\S 7.1\).
iihax coha resembling (3P-with.SG 3IO-SNbe \(_{\text {Irreg }}\) ); see §7.3.
iihjoj sooxyat s/he will get tired (from walking or dancing) (3P.limb.PL Ir.ID-die.PL); see §7.2.
iiquet her child (3P-PON-pregnant.with); see §14.4.
iiqui caaitom go to the authorities! (3P-toward Im-speak); see §7.3.
iiqui catni urge him/her/them (3P-toward Imtouch); see general pattern in §7.3.
iiqui cöihiin with respect to him/her/it/them, compared to him/her/it/them (3P-toward 3IO-3P-PON-go.away) (etymology uncertain; no distinct plural); see discussion in §10.4.7.
iiqui cöipazj button (3P-toward 3IO-3P-PONPv -string.up); see general pattern in §13.5.4.4.
iiqui he ihiin with respect to me/us (3P-toward 1IO 3P-PON-go.away) (etymology uncertain); see discussion in §10.4.7.
iiqui hpsatolec I will curse him/her (3P-toward 1SGS.In-Ir.ID-ask.for.help); see §7.3.
iiqui itasnan \(s\) /he pressed him towards (3Ptoward 3:3-RL-?); see general pattern in §7.3.
iiqui iyaai \(s\) /he sprinkled it on it (3P-toward 3:3-DT-make); see §7.3.
íiqui tojoz suddenly (3P-toward RL-flee); see §7.3.
iisax com iij hant toom se puso triste (3P-? the.Hz differently land R1-lie); see §7.7.
iisax cöxooptxö s/he is gleeful (3P-? 3IO-Emopen.with.holes); see general pattern in §7.2.
iisax hant yaait \(s\) he was happy (3P-? land DTarrive); see §7.2.
iisax iizc its breast (3P-? 3P-front); see §7.2.
iisax quihiih cah(a)/quih great degree (3P-? SN-remain.behind the.Fl-Foc/the.Fl); see beginning of chapter 24.
iistox hant spaailx they will be happy (3P-?-PL land IR.ID-arrive.PL); see §7.2.
iistox hant tpaailx they were happy (3P-?-PL land RL-arrive.PL); see §7.2.
iistox theemloj they were angry (3P-?-PL RL-stink-PL); see §7.2.
iizc ano cöcayaxi smaller, younger (3P-front 3P.in 3IO-SN-measure); see discussion in §10.4.7.
imiipla coha deceased from (3P-PON-bad 3IO-SN-be \({ }_{\text {Irreg }}\) ); see §7.1.
imiipla haa deceased (3P-PON-bad SN.be \(\mathrm{e}_{\text {Irreg }}\) ); see §7.1.
imoz caaj worried (3P-heart SN-?); see §7.2.
imoz cöiihca who hoards (3P-heart 3IO-3Pbe.located); unclear analysis.
imoz he yaaitot \(s / h e\) reminded me about it (3Pheart 3IO+1SGDO DT-cause.arrive); see §7.1.
imoz me hyaaitot I reminded you about it (3Pheart 3IO+2SGDO DT-cause.arrive); see §7.1.
imoz yomeet \(s\) /he was sad (3P-heart DT-?); see §7.2.
ipea rain; distinct from the regular proposition/oblique nominalization iipca \{i-\(\varnothing\)-apca \(\}\) (3P-PON-rain).
iquiisax spirit, one's spirit (3P-PON-UShave.life); see general pattern in \(14.4 \S\). Used as part of paradigm with iisax his/her spirit.
iquiisax z imacapat \(s\) /he took someone's life (3P-PON-US-have.life a 3:3-Px-AUG-fly-?).
iquiistox spirits (3P-PON-US-have.life.PL). \(C f\). iquiisax.
isnaap cazoj six (3P-breast SN -alone/one); see Table 18.1.
isoj hacx cöiyaaitim \(s\) /he challenged with a brag (3P-self apart 3IO-3:3-Dt-make-ImpF); §7.5.
isxeen itemaa \(s /\) he wasn't wise (3P-abdomen 3:3-RL-N-know); see §7.2.
itacl cöcayaxi bigger/older (3P-surface 3IO-SN-measure); see §10.4.7.
iti cayaxi (3P-on SN-measure); see general pattern in §7.3.
iti cohtahojoz I overdid it (3P-on 3IO-1SGS.TR-AUG-flee); see §7.3.
iti cöica to be with (3P-on 3IO-3P-PON-USbe \({ }_{\text {Irreg }}\) ); see general pattern in §7.3.
iti cöitcazx \(s\) /he split it open (3P-on 3IO-3:3-RLtear); see general pattern in §7.3.
íti cöiyacócamot \(s / h e\) dressed him/her (3P-on 3IO-3:3-Dт-help.put.things); see general pattern in §7.3.
iti conyahojoz you overdid it (3P-on 3IO-2SGS-AUG-flee); see §7.3.
iti hmiiha my parent (3P-on TwD-1P-PONmove). \(C f\). iti miiha.
iti hmiihat my parents (3P-on TwD-1P-PON-move-PL). \(C f\). iti miiha.
iti imahca not possible ( \(3 \mathrm{P}-\) on \(\mathrm{SN}-\mathrm{N}-\) be.located); §7.3.
iti masiistox you (pl.) will believe in (3P-on 2PlS-Ir.ID-have.life-Pl); see §7.3.
íti me iyacócamot \(s\) he dressed you (3P-on 2 IO 3:3-Dt-help.put.things); see general pattern in §7.3.
iti miiha his/her parent (3P-on TwD-3P-PONmove). See §13.5.4.4.
iti miistox they did it with gusto (3P.on Px-have.life-PL); see general pattern in §7.3.
iti tinol s/he grabbed it (3P-on RL-HAVEhand/finger/arm); see general pattern in §7.3.
itj iixquim his/her belt (3P-trunk.of.body 3P-PON-put.Hz); see general pattern in §14.4.1.
itleen oaah his/her deceased child (3Ppalm.of.hand 3P-ON-put.FL).
itleen oo moaah your deceased child (3Ppalm.of.hand DL 2P-ON-put.FL).
ixaap days (3P-PON-spend.night); see general pattern in §14.4.
ixtamt hihaai my doing it when I had the opportunity (3P-PON-abundant 1P-PON-
make); see §7.1.
ixtamt yaai what s/he did easily (3P-PONabundant 3P-ON-make); see §7.1.
iyat cöcoocapoj his/her descendants (3P-tip 3IO-SN-grow-PL).
iyat cöhayacp (the one(s)) from whom we have descended (3P-tip 3IO-1P-PON-grow).
miicp tap s/he supports you (s/he gives you encouragement) (2P-place.next.to RLstand); see §7.2.
miihjoj sooxyat you will get tired (from walking or dancing) (2P.limbs IR.ID-die.PL); see §7.2.
miiquet your child (of woman) (2P-ONpregnant.with); see §14.3.1.
miiqui yatolec \(s\) /he cursed you (2P-toward DTask.for.help); see \(\S 7.3\).
miisax hant paait you will be happy (2P-? land IR.DP-arrive); see §7.2.
miisax hant tooit are you happy? (2P-? land RL-arrive); see §7.2.
miisax hant yaait your being happy (2P-? land 3P-PON-arrive); see §7.2.
miixax theemt are you angry? (2P-? RL-stink); see §7.2.
miizc ano me coha smaller than you (2P-front 3P.in 2IO 3IO-SN-be); see §10.4.7.
miizj cmiique caai one who does good things for people (well person SN-make).
miizj hoocta be careful!, pay attention! (well Im-look.at).
miizj insaai you will take care of it (well 2SGS.Ir.ID-make); see §7.4.
miizj misoj insoocta you will behave (well 2Pself 2SGS-IR.ID-look.at).
miizj quisoj spacta one will behave (well US-3P-self Ir.ID-Pv-look.at).
miizj spaii aha s/helit will be taken care of (well 2SGS.Ir.Id-Pv-make); see §7.4.
mimoz cöyomooit you don't remember (2Pheart 3IO-Dt-N-arrive).
mimoz icameet for you to be sad (2P-heart Inf.IN-?).
mimoz smaaj you will not worry (2P-heart IR.ID-N-?); see §7.2.
mimoz teepit are you stingy? (2P-heart RL-?).
mimoz tmeet are you sad? (2P-heart RL-?); see §7.2.
misoj hapx hant cacatx save yourself! (2P-self outside land IMP-release).
misoj insanzaait you will be patient ( 2 P -self 2SGS-Ir.Id-careful.with).
misoj me yapxazl \(s\) /he hugged you (2P-self 2IO Dt-put.on.top.of); §7.2.
misoj miizj insoocta you will behave (2P-self well 2SGS-Ir.ID-look.at).
misolca oo pte mascmaai you should not do bad things to each other (2P-self-PL DL RCP +3 IO 2PLS-Ir.Id-N-make).
misxeen cohcaa think about it well! (2Pabdomen 3ІO-Ім-look.for); see §7.2.
moficj your shirt, your shirt (2P-ONwear.as.shirt/blouse); see §14.3.
mos áno superior.degree (also 3P-in); see §24.3.1.5.
mos itacl oo again (also 3P-surface DL); see beginning of chapter 24.
oeen his children (3P-ON-carry.items). This is the plural form that corresponds to yaazi his child (q.v.).
oot cola hin tcaai I was detained (coyote high 1SGDO RL-hang.up); see §7.7.
ox cöiiha nowadays (thus 3IO-3P-PON-be); see §3.9.
ox hisolca hamii we had that custom (thus 1P-self-PL 1PLS-Px-do.PL).
ox oo mpacta xo however (thus DL PXbe.in.appearance but).
ox tpacta ma (x) then (thus RL-be.in.appearance DS (UT)).
pazaatoj ihanaxz shoe polish (shoe-PL 3P-PON-PV-rub); see general pattern in
§13.5.4.
psaac cöhimooxi my not being hungry (? 3IO-1P-PON-N-die); see §7.1.
psaac hayaxyat our being hungry (? 1PLS-PON-die); see §7.1.
psaac icooxi one's being hungry (? 3P-PON-US-die); see §7.1.
psaac tooxi s/he was hungry (? RL-die); see §7.1.
pte miistox they made an agreement \((\mathrm{RCP}+3 \mathrm{IO}\) Px-have.life-PL).
ptiicp ixoyai they were fighting with each other (Rcp-3P-side 3:3-Em-?).
quihehe ruler, governor, king (SN-HAVE-plant), where hehe refers to a rod of authority, apparently; see general pattern in §13.5.4.2.
quisiil child \(<\) (small, shifted stress from normal quisil SN -small); a common variant of zixquisiil; see general pattern in §13.5.4.2.
quisoj miizj spacta one will behave (US-3P-self well Ir.Id-Pv-look.at).
quisoj sahnzaait one will be patient (US-3Pself Ir.Id-Pv-careful.with).
saa (xah) ha tamoz ah wow! (? ? AUX RL-think ?). See discussion in §26.4.
seehe cöhapaa possible (to.do.(it) 3IO-SN-Pvknow); see §12.1.2.1.
taax ano cöititaai at that same time (DDP 3P.in 3IO-3:3-RL-?); see §3.9.
toc cöcahca necessary; happened (there 3IO-SN-be.located); see §7.4.
toii nthamat we escaped (toward.somewhere. else Aw-1PLS-Px-move-Pl); see §7.4.
toii spot will spin (toward.somewhere.else Ir-?; see §7.4.
tojquítajc great horned owl (etymologically from toox quitjac (far SN-TR-vomit)).
xepe án sea area (sea 3P.area); see §13.5.2.
xicacaziil children, variant xicaquiziil (etymologically from xiica quizil (thing-PL SN -small.PL)). \(C f\). zixquisiil.
xiica an icaai sugar (thing.PL 3P.in 3P-PON-US-make). This has to do with an expression for put in and mix up, ano \(\sqrt{ }\) aai (3P.in make).
xiica canaaotaj cats (thing.PL SN-meow-PL). \(C f\). ziix canaao.
xiica ccamotam animals (thing.PL SN-alivePL). \(C f\). ziix ccam.
xiica coaafp mullet. Cf. ziix coaafp.
xiica coopol coffee (thing-PL SN-black).
xiica coosotoj rice (thing-PL SN-narrow-PL).
xiica is cquihjö beans (thing-PL 3P-fruit SNred).
xiica quiistox, xiica quih quiistox people. \(C f\). ziix quiisax.
xiica quiti cooyaj authorities (thing.PL? SN-travel.far-PL). Singular is ziix quiti cooyam.
xiica quixaazjoj soldiers, policemen. \(C f\). ziix quixaaza.
xiica ziix quih cöiyacoaatim his/her disciples (thing.PL thing the.FL 3IO-3:3-PON-AUG-know-IMPF).
xonj itaast emis banana (Proboscidea althaeifolia (devil's claw) 3P-tooth SN-TRresemble).
yaa his/hers (from an irregular form of own); see discussion in §16.1.6.
yaat theirs (from an irregular form of own); see discussion in §16.1.6.
yaazi his child (3P-ON-carry). (The possessor must be a male.) This is a specalized meaning. On the form, see general pattern in §14.3. The plural form is oeen his children.
zaaj hampaailx we entered it (gulch or dry lake bed) (cave 1PLS-Px-arrive.PL); see general pattern in §7.1.
zaaj yopaailx they entered it (gulch or dry lake bed) (cave DT-arrive.PL); see general pattern in §7.1.
zaxt quisil child (thing (?) SN-small). The word zaxt is probably an archaic form of ziix
thing. See general pattern in §13.5.4.1.
ziix an iquitóm purse (thing 3P.in 3P-PON-US-have-money); see general pattern in §13.5.4.3.
ziix canaao cat (thing SN-meow); see general pattern in §13.5.4.1.
ziix ccam animal (thing SN-alive); see general pattern in §13.5.4.1..
ziix ccap airplane (thing SN-jump); see general pattern in §13.5.4.1.
ziix coaafp mullet (thing SN-bounce.upwards).
Plural: xiica coaafp (thing.Pl SN-
bounce.upwards); see general pattern in §13.5.4.1.
ziix cooha cow (thing SN-cry); see general pattern in §13.5.4.1.
ziix coosyat giant (thing SN-sing-?) (the form of the root is not a common form); see general pattern in §13.5.4.1.
ziix coqueht ball (thing SN-bounce.upwards); see general pattern in §13.5.4.1.
ziix cxatlc tortilla (thing SN-thin-PL); see general pattern in §13.5.4.1. Plural: xiica cxatlc.
ziix hacacj carving (thing SN-Pv-chip.at); see general pattern in §13.5.4.1.
ziix hamoz hamqueet sadness (thing ABS-heart ?).
ziix hapahit food (thing SN-Pv-eat); see general pattern in §13.5.4.1.
ziix hapámasoj caacöl rope (thing SN-PV-twist SN-big.PL); see general pattern in §13.5.4.1.
ziix hapsx caaitim doctor (thing? SN-TR-make-IMPF) (one who is attentive); see general pattern in §13.5.4.1.
ziix hapx coom whale (thing outside SN -lie); often pronounced with elision of \(\mathbf{x}\) of ziix.
ziix hast iizx ano coom northern chuckwalla (thing stone 3P-crevice 3P.in SN-lie); see general pattern in §13.5.4.1.
ziix icacötim blanket (thing 3P-PON-US-
cover.oneself); see §13.5.4.3.
ziix iháx cooking oil (thing 3P-fat); often pronounced with elision of the \(\mathbf{x}\) of ziix.
ziix ihpaatim I will make the food (thing 1 SGS.TR-Ir.DP-?-IMPF).
ziix imiipla haa, ziix imiipla haa coom deceased person (thing 3P-PON-bad SN.be \({ }_{\text {Irreg }}\) there SN-lie). See the idiom imiipla haa §7.1.
ziix is ccapxl pitaya agria (thing 3P-fruit SNsour); see general pattern in §13.5.4.1.
ziix paaij ano coom scorpion (thing driftwood 3P.in SN-lie); see §13.5.4.1.
ziix quih canoj light (thing the.FL SNroar/burn.with.noise).
ziix quih cöcacoaat teacher (thing the.FL 3IO-SN-TR-cause.know); see §13.5.4.1.
ziix quih cöihiihat \({ }^{4}\) truth (thing the.Fl SN.true).
ziix quih coox cah everything (thing the.FL all the.Fl-FOC).
ziix quih iic cöhiqueepe my helping him/her/it (thing the.FL toward 3IO-1P-appreciate).
ziix quiije dynamite (thing SN-explode); see general pattern in §13.5.4.1.
ziix quiisax person (thing SN-have.life); see §13.5.4.1.
ziix quixaaza soldier, policeman (thing SNhave.weapon).
ziix yacoso caaixaj donkey (thing 3P-ONcarry.on.back SN-strong).
zixcám caacoj giant sea bass (fish SN-big); see general pattern in §13.5.4.1.
zixcám caacöl giant sea basses (fish SN-bigPL). Cf. zixcám caacoj.
zixcám cacöla totoabas (fish SN-tall/long.PL). \(C f\). zixcám cacösxaj.
zixcám cacösxaj totoaba (fish SN-tall/long); see general pattern in §13.5.4.1.
zixcám cheel red snapper (fish SN-red); see

\footnotetext{
\({ }^{4}\) This form is listed as an irregular verb in DS2005.
}
general pattern in §13.5.4.1.
zixcám coospoj spotted cabrilla (fish SN-
spotted); see general pattern in §13.5.4.1.
zixquisiil child \(<\) thing (reduced form of ziix),
small (shifted stress from normal quisil SN-
small).
zó cyaxi how many? (how? SN-?); see §6.2.2.4.
zó tpacta ma why? (how? RL-be.in.appearance DS); see §6.2.2.4.

\section*{Appendix E: Analytical glossary of inflected words in interlinear examples}

The following glossary only explicitly represents inflectional prefixes, derivational prefixes, infixes and some suffixes. (For various reasons, some derivational prefixes were typically not segmented in the text. This glossary therefore gives slightly more complete morphological information than in the text.)

The underlying forms given are quite certain for prefixes but only approximate for suffixes when the latter are shown at all. Noun and verb stems are often not analyzed as there may be many changes and complications, and indeed underlying forms are not always obvious; see §13.2.3 and chapter 19 . Some verbs are simply marked as with subscript Irreg to indicate that the verb is especially irregular. Forms marked with superscript \({ }^{\text {pv }}\) (postvocalic) are those occurring following a vowel; otherwise they would have an epenthetic \(\mathbf{i}\) at the beginning (see §27.1.1). The underlying forms include V (vowel of unspecified quality), C (consonant of unspecified quality), âa (long vowel that conjugates as a short vowel), and subscript \({ }_{\text {Abl }}\) (indicating that the morpheme causes the ablaut of a following vowel of certain qualities; see §14.4.2). The citation forms beginning with cö| are found as subentries under words of the shape that follow the vertical bar. The analysis shown may not be the only one possible for a given word, but the one given is found in some example in the text. When boldface curly braces ( \(\}\) ) are used around a root, the form of the root includes sounds that are lost for non-phonological reasons either in the form in question or in some related form.

The words are presented in alphabetical order; cö follows \(\mathbf{c}\).
\begin{tabular}{|c|c|c|c|}
\hline Inflected form & Underyling form & Morpheme glosses & Citation form \\
\hline \multicolumn{4}{|l|}{A} \\
\hline aacj & \(\left\{\varnothing_{\text {Abl }} \mathbf{a}_{\text {Abl }}\right.\) - \(\left.\mathbf{0 o c a j} \mathbf{j}\right\}\) & Im-Times-two & caacj \\
\hline aahit & \(\left\{\emptyset_{\text {Abl-a-ahit }}\right.\) \} & Im-Aug-eat & caahit \\
\hline aait & \(\left\{\varnothing_{\text {Abl }}\right.\)-0it \(\}\) & Im-dance & cooit \\
\hline aal & \{a-VCal \(\}\) & 3P-spouse & aal \\
\hline aama & \(\left\{\mathrm{mi}-\mathrm{a}_{\text {Irreg }}\right.\) \} & Px-be & aaha \\
\hline aanpx & \(\left\{\emptyset_{\text {Abl }}\right.\) \{aanipx \(\}\) \} & Im-return.home & caanpx \\
\hline acaam & \{a-caam\} & 3P-husband & acaam \\
\hline acmahaj & \{a-cmahaj\} & 3P-younger.brother's.child.ME & acmahaj \\
\hline acmajeete & \{a-cmajeete\} & 3P-wife's.older.sister & acmajeete \\
\hline aha & \{ha ha\} & Aux Dcl & \(c f\). aha, ha \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline aha & \(\left\{\emptyset_{\text {Abl-ooha }}\right\}\) & Im-cry & cooha \\
\hline ahoot & \{a-hoot\} & 3P-entrance & ahoot \\
\hline ai & \{a-Vi\} & 3P-father.ME & ai \\
\hline am & \{a-Vm \(\}\) & 3P-father.FE & am \\
\hline an (prevocalic) & \(\{\varnothing\)-ano \(\}\) & 3P.in & ano \\
\hline an & \(\{\varnothing\)-an \(\}\) & 3P-area & an \\
\hline ancoj & \(\{\varnothing\)-an-coj \(\}\) & 3P-area-PL & an \\
\hline ano & \(\{\varnothing\)-ano \(\}\) & 3P.in & ano \\
\hline as & \(\left\{\emptyset_{\text {Abl }}\{\mathbf{0 o s i}\}\right\}\) & Im-sing & coos \\
\hline asaac & \{a-saac \(\}\) & 3P-son.ME & asaac \\
\hline asanj & \(\left\{\emptyset_{\text {Abl-0-sanj }}\right\}\) & Im-UO-carry.on.back & cosanj, csanj \\
\hline asjoj & \(\left\{\emptyset_{\text {Abl-asjoj }}\right.\) \} & Im-paddle.PL & casquim \\
\hline ata & \{a-Vta \(\}\) & 3P-mother & ata \\
\hline atcal & \{a-Vtcal\} & 3P-younger.sister.FE.PL & atcz \\
\hline atcalcoj & \{a-Vtcal-coj\} & 3P-ygr.sister.of.female.FE.PL-PL & atcz \\
\hline atcz & \{a-Vtcz\} & 3P-younger.sister.FE & atcz \\
\hline aticpan & \(\left\{\emptyset_{\text {Abl-aticpan }}\right.\) \} & Im-work & caticpan \\
\hline azcz & \{a-Vzcz\} & 3P-younger.brother.ME & azcz \\
\hline azlc & \{azlc \} & star.PL & azoj \\
\hline \multicolumn{4}{|l|}{C} \\
\hline caaaxoj & \{c-\{âaix\}-toj \} & IM-go.away.from-PL & quiiix \\
\hline caacni & \{c-aacni\} & SN-bowed & caacni \\
\hline caacoj & \{c-aacoj\} & SN-big & caacoj \\
\hline caacöl & \{c-aacöl\} & SN-big.Pl & caacoj \\
\hline caafc & \{c-i-aafc \(\}\) & SN-Tr-pound & caafc \\
\hline caafp \({ }^{1}\) & \{c-\{afap \} \} & SN -arrive & caafp \\
\hline caahca & \{c-ahca\} & SN-be.located & caahca \\
\hline caahit & \{c-aa-ahit\} & SN-AUG-eat & caahit \\
\hline caai & \{c-i-aai\} & SN-Tr-make & caai \\
\hline caail & \{c-aail\} & SN-wide/spacious & caail \\
\hline caaitic & \{c-âaitic\} & SN-soft & caaitic \\
\hline
\end{tabular}

\footnotetext{
\({ }^{1}\) The vowel of this root lengthens irregularly in this form.
}
\begin{tabular}{|c|c|c|c|}
\hline caaitim & \{c-i-aai-tim \(\}\) & SN-Tr-make-IMPF & caai \\
\hline caaitom & \{c-âaitom \} & IM-speak & caaitom \\
\hline caaitom & \{c-âaitom \} & SN-speak & caaitom \\
\hline caaixaj & \{c-âaixaj\} & SN-strong & caaixaj \\
\hline caaizi & \{c-aai-zi\} & SN-make-PL & caai \\
\hline caaj & \{c-aaj \} & SN-? & caaj \\
\hline caalim & \{c-aalim & SN-play & caalim \\
\hline caamjö & \{c-aamjö\} & SN-UO.hunt & caamjö, quimjö \\
\hline caanlca & \{caanlca \} & Gulf.grouper.PL & caanj \\
\hline caao & \{c-aao \(\}\) & SN-UO.pass.by & caao \\
\hline caao & \{c-i-aao \} & SN-Tr-pass.by & caao \\
\hline caap & \{c-ap\} & SN-stand & caap \\
\hline саарха & \{c-a-apxa\} & SN-Aug-three & caapxa \\
\hline caaspoj \({ }^{1}\) & \{c-aaspoj \(\}\) & SN-AUG.spotted & caaspoj \\
\hline caaytaj & \{caay-taj\} & horse-PL & caay \\
\hline cazcam & \{c-azcam \(\}\) & SN-arrive.PL & caafp \\
\hline cazcam & \{c-azcam \(\}\) & Im-arrive.PL & caafp \\
\hline caazi & \{c-i-aazi\} & SN-Tr-carry & caazi \\
\hline cacaaixaj & \{c-i-ac-âaixaj\} & SN-AUG-strong & cacaaixaj \\
\hline cacaatol & \{c-acaatol\} & SN-dangerous & cacaatol \\
\hline cacat & \{c-acat & SN-salty/bitter & cacat \\
\hline cacatim & \{c-ācat-tim \} & SN-swim-PL & cacat \\
\hline cacatx & \{c-acatx\} & Im-release & quicatx \\
\hline cacöla & \{c-acöla\} & SN-tall/long.PL & cacösxaj \\
\hline cacösxaj & \{c-acösxaj\} & SN-tall/long & cacösxaj \\
\hline cacoxl & \{c-i-acoxl \(\}\) & SN-TR-tend & cacoxl \\
\hline cactim & \{c-actim \(\}\) & SN-be.cut & cactim \\
\hline cafeaa & \{c-afeaa\} & SN-AUG-? & cafeaa \\
\hline cafzx & \{c-afzx \(\}\) & SN-lightweight & cafzx \\
\hline cah & \{c-ah\} & Im-say/do/put.Fl & quih \\
\hline cah, caha & \{quih ah\} & the.Fl Foc & cah \\
\hline caha & \{ca ha\} & Aux.SN Dcl & ca, ha \\
\hline cahcaail & \{c-ahcaail\} & SN-remain/lacking & cahcaail \\
\hline caheetot & \{c-ah-eet-ot\} & SN-AUG-lie-? & caheetot \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline cahipt & \{c-ah-\{ipi\}-ot\} & SN-Aug-?-Pl & cahipi \\
\hline cahit & (c-ahit \({ }^{\text {c }}\) & Im-eat & quihit \\
\hline cahmác & \{c-ahmác\} & SN-emit.spark & cahmác \\
\hline cahtxima & \{c-ahtxima \(\}\) & SN-rich & cahtxima \\
\hline caiitim & \{c-aiitim \(\}\) & SN-do & caiitim \\
\hline calx & \{c-\{alax \} \} & SN-go.Pl & catax \\
\hline calx & \{c-\{alax\} & Im-go.PL & catax \\
\hline camal & \{c-m-al \({ }_{\text {Irreg }}\) \} & SN-N-accompany & ical \\
\hline cameepit & \{c-ameepit\} & SN-strange/marvelous & cameepit \\
\hline camje & \{c-amjc\} & Im-bring & quimjc \\
\hline camjöc & \{c-amjöc\} & SN-think/try.PL & camoz \\
\hline camoz & \{c-amoz\} & SN-think/try & camoz \\
\hline camsisiijc & \{c-a-msisiijc\} & SN-AUG-pitiable.PL & camsisiin \\
\hline canaao & \{c-anaao \(\}\) & SN-meow & canaao \\
\hline canaaotaj & \{c-anaao-taj & SN-meow-PL & canaao \\
\hline canl & \{c-anl\} & SN-roar/burn.with.sound.PL & canoj \\
\hline canoaataj & \{canoaa-taj\} & boat-PL & canoaa \\
\hline canoj & \{c-anoj\} & SN-roar/burn.with.sound & canoj \\
\hline cap & \{c-ap\} & Im-stand & caap \\
\hline capii & \{c-a-pii\} & SN-AUG-taste & capii \\
\hline capox & \{c-apox\} & Im-pull.out & quipox \\
\hline captj & \{c-aptj \(\}\) & SN-wide & captj \\
\hline capxa & \{c-apxa\} & SN-three & capxa \\
\hline caseaalam & \{c-i-aseaalam \(\}\) & SN-Tr-do.PL & casiijim \\
\hline casi & \{c-asi\} & Im-drink & quisi \\
\hline casiijim & \{c-i-asiijim \(\}\) & SN-Tr-do & casiijim \\
\hline casiimet & \{c-a-siimet\} & SN-AUG-bread & casiimet \\
\hline casyoj & \{c-asyoj \} & Im-drink.PL & quisi \\
\hline catax & \{c-atax \(\}\) & SN-go & catax \\
\hline catax & \{c-atax \(\}\) & Im-go & catax \\
\hline caticpan & \{c-aticpan\} & SN-work & caticpan \\
\hline catni & \{c-atni\} & Im-make.contact & quitni \\
\hline catol & \{c-atol \(\}\) & SN-wild & catol \\
\hline catxo & \{c-atxo \(\}\) & SN-many/much & catxo \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline caxquim & \{c-axquim \({ }^{\text {a }}\) & Im-put.Hz & quixquim \\
\hline cayaxi & \{c-a-yaxi\} & SN-AUG-? & cayaxi \\
\hline cazcam & \{c-azcam \(\}\) & Im-arrive.Pl & caafp \\
\hline caziim & \{c-a-ziim \(\}\) & SN-AUG-appreciate & caziim \\
\hline cazje & \{c-azje \(\}\) & Im-pile.up & quizje \\
\hline ccaa & \{c-i-caa\} & SN-Tr-look.for & ccaa \\
\hline ccah & \{c-Cah\} & SN-make.sound & ccah \\
\hline ccam & \{c-cam \(\}\) & SN-alive & ccam \\
\hline ccamotam & \{c-camo-tam\} & SN-alive-PL & ccam \\
\hline cfit & \{c-fit\} & SN-stand & cfit \\
\hline chaa & \{c-haa \(\}\) & SN-EQ & chaa, haa \\
\hline chanl & \{c-hanl\} & SN-ten & chanl \\
\hline cheel & \{c-heel\} & SN-red & cheel \\
\hline cjcooil & \{c-i-jcooil\} & SN-Tr-make.fall.PL & cjiit \\
\hline cjizi & \{c-jizi\} & SN-painful/picante & cjizi \\
\hline cmaacöl & \(\{\{\) cmaacoj\}- \(\varnothing\) \} & old.man-PL & cmaacoj \\
\hline cmaaix & \{c-m-âaix \(\}\) & Im-N-go.away.from & quiiix \\
\hline cmah & \{c-m-ah\} & Im-N-do/say/put.FL & quíh \\
\hline cmajiic & \{cmajiic \} & woman/female.PL & cmaam \\
\hline cmam & \{c-mam \} & SN-cooked/ripe & cmam \\
\hline cmasol & \{c-masol\} & SN-yellow & cmasol \\
\hline cmatax & \{c-m-atax \(\}\) & SN-N-go & catax \\
\hline cmatax & \{c-m-atax \(\}\) & Im-N-go & catax \\
\hline cmatj & \{c-matj\} & SN-hot & cmatj \\
\hline cmeque & \{c-meque\} & SN-warm & cmeque \\
\hline cmiih & \{c-miih \({ }^{2}\) \} & SN-not.be.FL & cmiih \\
\hline cmiipla & \{c-miipla \(\}\) & SN-bad & cmiipla \\
\hline cmipi & \{c-mipi\} & SN-? & cmipi \\
\hline cmis & \{c-i-mis\} & SN-TR-resemble & cmis \\
\hline cmizj & \{c-mizj \(\}\) & SN-well.formed & cmizj \\
\hline cmoos & \{c-m-\{oosi\}\} & Im-N-sing & coos \\
\hline cmoqueepe & \{c-moqueepe\} & SN-sick & cmoqueepe \\
\hline
\end{tabular}

\footnotetext{
\({ }^{2}\) The stem is historically derived from the negative prefix \(\mathbf{m}\) - and the root iih (be.FL). See Marlett (2002).
}
\begin{tabular}{|c|c|c|c|}
\hline cmoqueept & \{c-\{moqueepe\}-t & SN-sick-PL & cmoqueepe \\
\hline cmotet & \{c-motet\} & SN-heavy & cmotet \\
\hline cmotís & \{c-m-o-tis \(\}\) & Im-N-UO-point.at & cotís, ctis \\
\hline cmotomn & \{c-motomn\} & SN-weak & cmotomn \\
\hline cmozimtoj & \{c-\{mozime\}-toj \} & SN-drunk-PL & cmozime \\
\hline cneeej & \{c-neeej\} & SN-curled.up & cneeej \\
\hline cneeen & \{c-neeen\} & SN-hunchbacked & eneeen \\
\hline cnip & \{c-i-\{nipa\}\} & SN-Tr-hit & cnip \\
\hline cnipatim & \{c-i-\{nipa\}-tim \(\}\) & SN-Tr-hit-ImpF & cnip \\
\hline cnooptoj & \{c-i-\{nipa\}-toj\} & SN-Tr-hit.PL & cnip \\
\hline cnooptolca & \{c-i-\{nipa\}-tolca\} & SN-Tr-hit.Pl.ImpF & cnip \\
\hline coaafp & \{c-oaafp \} & SN-bounce.upwards & coaafp \\
\hline coaah \({ }^{3}\) &  & SN-UO-put.FL & coaah \\
\hline coaatjö & \{c-oaatjö\} & SN-sweet & coaatjö \\
\hline cocazni & \{ \(\mathbf{c - o}_{\text {Abl }}\)-cazni\} & SN-UO-bite & cocazni, ccazni \\
\hline coccaa & \{co-c-i-caa\} & 3IO-SN-Tr-look.for & ccaa \\
\hline cocjiit & \{co-c-i-jiit\} & 3IO-SN-Tr-hit & co|cjiit \\
\hline cocmatj & \{co-c-matj \} & 3IO-SN-hot & cmatj \\
\hline cocom & \{co-c-0om \({ }_{\text {Irreg }}\) \} & 3IO-SN-lie & cocom, coom \\
\hline cocompanzx & \{co-c-m-\{panozx\} & 3IO-Im-N-run & cpanzx \\
\hline cocpám & \{co-c-pam\} & 3IO-SN-be.connected & cocpám \\
\hline cocpanzx & \{co-c-\{panozx\} & \(3 \mathrm{IO}-\mathrm{SN}\)-run & cpanzx \\
\hline coczáxö & \{co-c-i-zaxö\} & 3IO-SN-Tr-discuss & czaxö \\
\hline coeenzil & \{c-o \(\mathbf{o d b l}^{\text {-Cenzil }}\) \} & SN-UO-play.stringed.instrument-PL & coeenj, cqueenj \\
\hline coha & \{co-h-a \} & \(3 \mathrm{IO}-\mathrm{SN}-\mathrm{be} \mathrm{Irrreg}\) & coha \\
\hline cohcaa & \{co-h-caa\} & 3IO-Im-look.for & ccaa \\
\hline cohcacooix & \{co-h-c-aco-âaix\} & 3IO-1SGS.Tr-SN-AUG-go.away.from & cöcacooix \\
\hline cohmiiho & \{co-h-mi-aho\} & 3IO-1SgS.Tr-Px-see & quiho \\
\hline cohmiimjc & \{co-h-mi-amjc \} & 3IO-1SGS.Tr-Px-bring/take & quimjc \\
\hline cohmqueepe & \{co-h-mi-qu Abl \(^{\text {- }}\) (iipe \(\left.\}\right\}\) & 3IO-1SGS.Tr-Px-AUG-good & cqueepe \\
\hline cohpiih & \{co-hp-po-iih\} & 3IO-1SGS.In-Ir.DP-be.Fl & quiih \\
\hline cohpoojöc & \{co-hp-po-ajöc\} & 3IO-1SGS.In-Ir.DP-continually & cöcajöc \\
\hline
\end{tabular}

\footnotetext{
\({ }^{3}\) This form is irregular. See §19.1.1.
}
\begin{tabular}{|c|c|c|c|}
\hline cohpsacötim & \{co-hp-si-\{āco\}-tim & 3IO-1SGS.In-Ir.ID-cover.oneself-ImPF & cacötim \\
\hline cohpsemiij & \{co-hp-si-m-iij\} & 3IO-1SGS.In-Ir.Id-N-sit & quiij \\
\hline cohpseepit & \{co-hp-si-eepit \(\}\) & 3IO-1SGS.In-Ir.Id-? & cö|queepit \\
\hline cohpseeti & \{co-hp-si-eeti\} & 3IO-1SGS.In-Ir.ID-fetch.for & queeti \\
\hline cohpsiifp & \{co-hp-si-\{afap\}\} & 3IO-1SGS.In-Ir.Id-arrive & caafp \\
\hline cohptaasitim & \{co-hp-t-aasitim \(\}\) & 3IO-1SGS.In-RL-UO.deceive & cöcaasitim \\
\hline cohptajöc & \{co-hp-t-ajöc\} & 3IO-1SGS.In-RL-continually & cöcajöc \\
\hline cohptás & \{co-hp-t-as \} & 3IO-1SGS.In-Rl-err & cöcas \\
\hline cohpyitalhaa & \{co-hp-yo-italhaa\} & 3IO-1SGS.In-Dt-buy/sell & cö|quitalhaa \\
\hline cohqueetx & \{co-h-queetx\} & 3IO-Im-return & cö|cqueetx \\
\hline cohsaactim & \{co-h-si-a-actim\} & 3IO-1SgS.Tr-Ir.ID-AUG-be.cut & cö|caactim \\
\hline cohsaaha & \{co-h-si-aha\} & 3IO-1SGS.Tr-Ir.Id-keep & cöcaaha \\
\hline cohsaheectim & \{co-h-si-ah-eectim\} & 3IO-1SGS.Tr-Aug-? & cöcaheectim \\
\hline cohsahipit & \{co-h-si-ahipit\} & 3IO-1SGS.Tr-Ir.Id-permit & cö|cahipit \\
\hline cohsahita & \{co-h-si-ah-ita\} & 3IO-1SgS.Tr-Ir.Id-Aug-sharp & cahita \\
\hline cohsiih & \{co-h-si-ah\} & 3IO-1SGS.Tr-Ir.Id-put.Fl & quih \\
\hline cohsiitni & \{co-h-si-atni\} & 3IO-1SGS.Tr-Ir.ID-make.contact & cö|quitni \\
\hline cohsmiiit & \{co-h-si-miiit\} & 3IO-1SgS.Tr-ask & cmiiit \\
\hline cohsnaxz & \{co-h-si-naxz\} & 3IO-1SGS.Tr-Ir.ID-rub & co|cnaxz \\
\hline cohtahojoz & \{co-h-t-ah-ojoz\} & 3IO-1SgS.Tr-Rl-Aug-flee & cahojoz \\
\hline cohtamsisiin & \{co-h-t-a-msisiin\} & 3IO-1SGS.Tr-Rl-Aug-pitiful & camsisiin \\
\hline cohtatni & \{co-h-t-atni\} & 3IO-1SGS.Tr-RL-make.contact & cö|quitni \\
\hline cohtemaa & \{co-h-t-m-aCa\} & 3IO-1SGS.Tr-Rl-N-know & quiya \\
\hline cohtmihzx & \{co-h-t-mihzx \(\}\) & 3IO-1SGS.Tr-RL-slip & cmihzx \\
\hline cohyacoaat & \{co-hi-y Abl \(^{\text {aco-aCa-ot }}\) \} & 3IO-1P-PON-AUG-know-? & cöcacoaat \\
\hline cohyacohot & \{co-h-y Abl \(^{\text {-aco-\{aho\}-ot }\}}\) & 3IO-1P-PON-AUG-see-? & cöcacohot \\
\hline cohyacooix & \{co-h-yo-aco-âaix\} & 3IO-1SGS.Tr-Dt-AUG-go.away.from & cöcacooix \\
\hline cohyoáxazim & \{co-h-yo-Caxazim \(\}\) & 3IO-1SGS.Tr-Dt-beat.Hz.ImpF & ccaxz \\
\hline cohyomaa & \{co-h-yo-m-aCa\} & 3IO-1SGS.Tr-Dt-N-know & quiya \\
\hline cohyomacooyam & \{co-h-yo-m-acooyam\} & 3IO-1SGS.Tr-Dt-N-honor & cöcacooyam \\
\hline comom & \{co-mi-0om \({ }_{\text {Irreg }}\) \} & 3IO-Px-lie & cocom, coom \\
\hline compaapjö & \{co-m-po-aapjö\} & 3IO-2SGS-Ir.Dp-illuminate & caapjö \\
\hline compacta & \{co-mi-pacta\} & 3IO-Px-be.in.appearance & hapacta \\
\hline compomaa & \{co-m-po-m-aCa\} & 3IO-2SGS-Ir.Dp-N-know & quiya \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline comsisiin & \{c-msisiin \(\}\) \\
\hline consaahal & \{co-m-si-aahal\} \\
\hline consaaipj & \{co-m-si-aaipj\} \\
\hline consacötim & \{co-m-si-\{āco\}-tim \(\}\) \\
\hline consataasitot & \{co-m-si-ataasit-ot\} \\
\hline consaziim & \{co-m-si-a-ziim \(\}\) \\
\hline consemaa & \{co-m-si-m-aCa\} \\
\hline consconjiit & \{co-m-si-m-jiit\} \\
\hline consiij & \{co-m-si-iij\} \\
\hline conspooin & \{co-m-si-pooin\} \\
\hline contaa & \{co-m-t-aCa\} \\
\hline contaaplim & \{co-m-t-aaplim \(\}\) \\
\hline contajöc & \{co-m-t-ajöc \} \\
\hline contamjc & \{co-m-t-amjc\} \\
\hline contemaaixaj & \{co-m-t-m-âaixaj\} \\
\hline conthamat & \{co-nt-ha-m- \(\mathbf{a}_{\text {Irreg }} \mathbf{- t}\) \} \\
\hline conthapa & \{co-nt-ha-po-a \({ }_{\text {Irreg }}\) \} \\
\hline contheyahaazi & \{co-nt-he-yo-ah-aazi\} \\
\hline contica & \{co-nt-c-a \(\mathrm{a}_{\text {Irreg }}\) \} \\
\hline contiih & \{co-m-t-iih \(\}\) \\
\hline contiiha & \{co-nt-i-h-a Irreg \(\}\) \\
\hline contiin & \{co-m-t-iin \} \\
\hline contima & \{co-nt-mi-a \({ }_{\text {Irreg }}\) \} \\
\hline contìpa & \{co-nt-po-a Irree \} \\
\hline contís & \{c-m-tis\} \\
\hline contisa & \{co-nt-si- \(\mathrm{a}_{\text {Irreg }}\) \} \\
\hline contisoozi & \{co-nt-i-si-oozi \(\}\) \\
\hline contita & \{co-nt-t-2 Irreg \} \\
\hline contitat & \{co-nt-t-a \(\mathrm{I}_{\text {Irreg }}\)-t \(\}\) \\
\hline contiya & \{co-nt-yo-a \} \\
\hline contmaca & \{co-nt-mi-ca-a \({ }_{\text {Irreg }}\) \} \\
\hline contmesoozi & \{co-nt-me-si-oozi\} \\
\hline contmiiha & \{co-nt-mi-h-a \(\mathrm{a}_{\text {Irreg }}\) \} \\
\hline conttà \({ }^{\text {a }}\) & \{co-nt-t-ca-a \({ }_{\text {Irreg }}\) \} \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline SN-pitiable & comsisiin \\
\hline 3IO-2SGS-Ir.ID-AUG.accompany & caahal \\
\hline 3IO-2SGS-Ir.Id-Aug.transverse & cö|caaipj \\
\hline 3IO-2SGS-IR.ID-cover.oneself-IMPF & cacötim \\
\hline 3IO-2SGS-Ir.Id-Aug.have.name-? & cö|cataasitot \\
\hline 3IO-2SGS-Ir.ID-AUG-enjoy & caziim \\
\hline 3IO-2SGS-Ir.Id-N-know & quiya \\
\hline 3IO-2SGS-Ir.Id-N-hit & co|cjiit \\
\hline 3IO-2SGS-Ir.ID-sit & quiij \\
\hline 3IO-2SGS-Ir.ID-close & cocpooin \\
\hline 3IO-2SGS-RL-know & quiya \\
\hline 3IO-2SGS-RL-AUG.cover.(passively) & cö|caaplim \\
\hline 3IO-2SGS-RL-continually & cöcajöc \\
\hline 3IO-2SGS-Rl-bring & quimjc \\
\hline 3IO-2SGS-RL-N-strong & caaixaj \\
\hline 3IO-Aw-1PLS-Px-move-PL & contica \\
\hline 3IO-Aw-1SGS-Ir.Dp-move & contica \\
\hline 3IO-Aw-3IO+1DO-DT-Pv-carry & caazi \\
\hline 3IO-Aw-SN-move & contica \\
\hline 3IO-2SGS-Rl-be.Fl & quiih \\
\hline 3IO-Aw-3P-PON-move & contica \\
\hline 3IO-2SGS-RL-touch & cöquiin \\
\hline 3IO-Aw-Px-move & contica \\
\hline \(3 \mathrm{IO}-\) Aw-Ir.Dp-move & contica \\
\hline Im-N-point.at & ctis \\
\hline 3IO-Aw-Ir.ID-move & contica \\
\hline 3IO-Aw-3:3-Ir.ID-carry & contcoozi \\
\hline 3IO-Aw-Rl-move & contica \\
\hline 3IO-Aw-RL-move-PL & contica \\
\hline \(3 \mathrm{IO}-\mathrm{Aw}\)-Dt-move & contica \\
\hline 3IO-Aw-Px-US-move & contica \\
\hline 3IO-Aw-3IO+2DO-Ir.Id-carry & contcoozi \\
\hline 3IO-Aw-2P-PON-move & contica \\
\hline 3IO-Aw-Rl-US-move & contica \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline conttahaazi & \{co-nt-t-ah-oozi\} & 3IO-Aw-RL-Pv-carry & contcoozi \\
\hline conyahamoc & \{co-mi-y-a-hamoc\} & 3IO-2P-PON-AUG-be.night & cahamoc \\
\hline conyahojoz & \{co-m-yo-ah-ojoz\} & 3IO-2SGS-Dt-AUG-flee & cahojoz \\
\hline conyeenj & \{co-mi-y-eenj \} & 3IO-2P-PON-UO.yell & queenj \\
\hline coocj & \{c-oocj \(\}\) & SN-two & coocj \\
\hline cooha & \{c-ooha\} & SN-cry & cooha \\
\hline coohit & \{ \(\mathbf{c - 0} \mathbf{o}_{\text {Abl }}\)-ahit \} & SN-UO-eat & coohit, quihit \\
\hline cooil & \{c-ooil\} & SN-blue/green & cooil \\
\hline cooit & \{c-ooit\} & SN-arrive & cooit \\
\hline cooit & \{c-ooit\} & SN-dance & cooit \\
\hline cooitom & \{c-ooitom \(\}\) & SN-five & cooitom \\
\hline coom & \(\left\{\mathbf{c - o o m}{ }_{\text {Irreg }}\right\}\) & SN-lie & coom \\
\hline coomje & \{co- \(\varnothing\)-amjc \(\}\) & 3IO-IM-bring/take & quimje \\
\hline coii & \{c-oii\} & SN-be.Fl.Pl/stand.PL & quiih, caap \\
\hline coop & \{c-o \(\mathbf{o d b l}^{\text {-ap }}\) \} & SN-UO-sew.basket & coop \\
\hline coopl & \(\{\mathrm{c}-\{00 \mathrm{pol}\}-\varnothing\) \} & SN-black-PL & coopol \\
\hline coopol & \{c-\{00pol \(\}\) \} & SN-black & coopol \\
\hline coos & \{c-\{oosi\}\} & SN-sing & coos \\
\hline coosel & \{c-ooscl\} & SN-mottled & cooscl \\
\hline coosi & \(\{\mathbf{c}-\{\) oosi \(\}-\varnothing\}\) & SN- sing-PL & coos \\
\hline coosot & \{c-oosot\} & SN-narrow & coosot \\
\hline coospoj & \{c-\{0ospoj\}\} & SN-spotted & coospoj \\
\hline coostim & \{c-\{oosi\}-tim \} & SN-sing-ImpF & coos \\
\hline cootax & \{co-Ø-\{atax\}\} & 3IO-Im-go & catax \\
\hline cooxalca & \{c-ooxalca\} & SN-sit.PL & quiij \\
\hline cooxi & \{c-\{00xi\} \} & SN-die & cooxi \\
\hline cooxp & \{c-ooxp\} & SN-white & cooxp \\
\hline cooyolca & \{c-ooyolca\} & SN-stand.Pl.IMPF & caap \\
\hline coozix & \{ \(\mathbf{c - 0} \mathbf{o}_{\text {Abl }}\)-azix \(\}\) & SN-UO-saw & coozix, quizix \\
\hline coozlil & \{c-oozlil\} & SN-slippery & coozlil \\
\hline cozactim & \(\left\{\mathbf{c - o} \mathbf{o d b l}_{\text {Al-zactim }}\right\}\) & SN-UO-intercept & cozactim, czactim \\
\hline cpaailx & \{c-paailx & SN-arrive.Pl & cooit \\
\hline cpaainj & \{c-paainj\} & SN-roll/tumble.over (intr.) & cpaainj \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline cpaaisx & \{c-paaisx \({ }^{4}\) \} & SN-clean & cpaaisx \\
\hline cpancoje & \{c-pancojc\} & SN-run.PL & cpanzx \\
\hline cpánozxim & \{c-\{panozx\}-tim \(\}\) & SN-run-ImpF & cpanzx \\
\hline cpanzx & \{c-\{panozx\}\} & SN-run & cpanzx \\
\hline cpoct & \{c-poct\} & SN -full & cpoct \\
\hline cpooin & \{c-pooin\} & SN-close & cocpooin \\
\hline cqueecöl & \{c-i-\{queecol\}\} & SN-Tr-listen & cqueecöl \\
\hline croocö & \{c-roocö\} & SN-crazy & roocö \\
\hline csiijim & \{c-siijim \} & SN-move & csiijim \\
\hline ctaai & \{c-i-taai\} & SN-TR-wear.kilt & ctaai \\
\hline ctamcö & \{ctam-cö\} & man/male-PL & ctam \\
\hline cxaap & \{c-xaap\} & SN-spend.night & cxaap \\
\hline cxap & \{c-i-xap \(\}\) & SN-Tr-dig.up & cxap \\
\hline cxatcaj & \{c-xatcaj\} & SN-thin & cxatcaj \\
\hline cxatle & \{c-xatlc\} & SN-thin.Pl & cxatcaj \\
\hline cyaa & \{c-i-yaa\} & SN-Tr-own & cyaa \\
\hline cyaxi & \{c-yaxi\} & SN-? & cyaxi \\
\hline czaxö & \{c-i-zaxö\} & SN-TR-discuss & czaxö \\
\hline czooxöc & \{c-zooxöc\} & SN-four & czooxöc \\
\hline czooxolcam & \{c-zooxolcam \(\}^{5}\) & SN-eight & czooxolcam \\
\hline czxoc & \{c-i-zxoc \(\}\) & SN-Tr-hack.off & czxoc \\
\hline \multicolumn{4}{|l|}{Cö} \\
\hline cöaizct & \{co- \(\varnothing_{\text {Abl-oizet }}\) \} & 3IO-Im-enter.PL & cazquim \\
\hline cöcaaitim & \{co-c-aaitim \(\}\) & 3IO-SN-chase & cöcaaitim \\
\hline cöcaap & \{co-c-ap \} & 31O-SN-stand & caap \\
\hline cöcaapl & \{co-c-aapl\} & 3IO-SN-cold & caapl \\
\hline cöcazcam & \{co-c-azcam \(\}\) & 3IO-SN-arrive.PL & caafp \\
\hline cöcacoaat \({ }^{1}\) & \{co-c-aco-\{aCa\}-ot \} & 3IO-SN-AUG-know-? & cöcacoaat \\
\hline cöcacoozit & \{co-c-i-a-\{coozi\}-ot\} & 3IO-SN-Tr-AUG-rob-? & cöcacoozit \\
\hline cöcacozit & \{co-c-i-acozi-ot\} & 3IO-SN-Tr-Aug.defeat-? & cöcacozit \\
\hline
\end{tabular}

\footnotetext{
\({ }^{4}\) The stem is historically derived from the passive prefix \(\mathbf{p}_{\mathrm{Abl}}\) and the root aaisx (clean). See Marlett (2002).
\({ }^{5}\) This is obviously related to the verb for four.
}
\begin{tabular}{|c|c|c|c|}
\hline cöcahca & \{co-c-ahca\} & 3IO-SN-be.located & cahca \\
\hline cöcahemej & \{co-c-ahemej\} & 3IO-SN-sail & cahemej \\
\hline cöcajöc & \{co-c-ajöc\} & 3IO-SN-continually & cöcajöc \\
\hline cöcasii & \{co-c-a-sii\} & 3IO-SN-AUG-smell & casii \\
\hline cöcatax & \{co-c-atax\} & \(3 \mathrm{IO}-\mathrm{SN}\)-go & catax \\
\hline cöcaticpan & \{co-c-aticpan\} & 3IO-SN-work & caticpan \\
\hline cöcazquim & \{co-c-azquim\} & 3IO-SN-enter & cazquim \\
\hline cöcoaafp & \{co-c-oaafp\} & 3IO-SN-come.loose & cöcoaafp \\
\hline cöcocaai & \{co-c-ocaai\} & \(3 \mathrm{IO}-\mathrm{SN}\)-? & cöcaai \\
\hline cöcoii & \{co-c-oii\} & 3IO-SN-be.Fl.PL/stand.Pl & quiih, caap \\
\hline cöcoos & \{co-c-\{oosi\}\} & 3IO-SN-sing & coos \\
\hline cöcoqueetx & \{co-c-0 \(\mathbf{o d b l}_{\text {abl }}\) queetx \(\}\) & 3IO-SN-UO-? & cöcoqueetx, cqueetx \\
\hline cöhaafc & \{co-h-aafc\} & 3IO-Im-pound & caafe \\
\hline cöhaaizi & \{co-h-aai-zi\} & 3IO-Im-make-Pl & caaizi \\
\hline cöhaas & \{co-h-a-\{asi\}\} & 3IO-Im-Aug-drink & cöcaas \\
\hline cöhacoaat & \{co-ha-ah-aco-aCa-ot\} & \(3 \mathrm{IO}-\mathrm{SN}-\mathrm{Pv}-\mathrm{Aug}-\mathrm{know}\)-? & cöcacoaat \\
\hline cöhacohot & \{co-h-aco-\{aho\}-ot\} & 3IO-Im-AUG-see-? & cöcacohot \\
\hline cöhacooix & \{co-ha-ah-aco-âaix\} & 3IO-SN-Pv-AUG-go.away.from & cöcacooix \\
\hline cöhacózixot & \{co-h-acozix-ot\} & 3IO-Im-Aug.saw-? & cöcacózixot \\
\hline cöhahipet & \{co-h-ahipit\} & 3IO-Im-permit \({ }^{6}\) & cö|cahipit \\
\hline cöhamatoaasxaj & \{co-ha-mi-atoaasxaj\} & 3IO-1PLS-Px-clean.Pl & caaisx \\
\hline cöhamiizcam & \{co-ha-mi-azcam & 3IO-1PLS-Px-arrive.PL & caafp \\
\hline cöhamom & \{co-h-mi- oom \({ }_{\text {Irreg }}\) \} & 3IO-1SgS-Px-lie & cocom, coom \\
\hline cöhapaa & \{co-ha-p Abl \(^{\text {aCCa }}\) \} & 3IO-SN-Pv-know & quiya \\
\hline cöhapacta & \{co-ha-pacta\} & 3IO-SN-be.in.appearance & hapacta \\
\hline cöhapahaatxoj & \{co-ha-po-ah-atxo-j\} & 3IO-1PlS-Ir.Dp-Times-many-Pl & cahaatxo \\
\hline cöhascomjcooil & \{co-ha-si-m-cooil\} & 3IO-1PlS-Ir.Id-N-fall.Pl & cahjiit \\
\hline cöhasmiipla & \{co-ha-si-miipla\} & 3IO-1PLS-Ir.Id-bad & cmiipla \\
\hline cöhatemaaj & \{co-ha-t-m-aCa-j \} & 3IO-1PLS-RL-N-know-PL & quiya \\
\hline cöhatiih & \{co-ha-t-iih \(\}\) & 3IO-1PlS-Rl-be.Fl & quiih \\
\hline cöhatoohjoj & \{co-ha-t-oohjoj\} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{3IO-1PLS-RL-vertical.and.right.side.up-PL.ImPF
cö|coohcö}} \\
\hline & & & \\
\hline
\end{tabular}

\footnotetext{
\({ }^{6}\) The root is actually uncertain in its meaning.
}
\begin{tabular}{|c|c|c|c|}
\hline cöhatpamlcam & \{co-ha-t-pam-lcam \(\}\) & 3IO-1PLS-RL-connected-PL.IMPF & cocpám \\
\hline cöhayacp & \{co-ha-y \({ }_{\text {Abl }} \mathbf{- 0 0 c}\) \} \(\}\) & 3IO-1PLP-PON-grow & coocp \\
\hline cöhiheetol & \{co-hi-h-eetol\} & 3IO-1P-PON-push & queetol \\
\hline cöhihiihtolca & \{co-hi-h-iih-tolca\} & 3IO-1P-PON-be.Fl-Pl-ImPF & quiih \\
\hline cöhihiim & \{co-hi-h-\{iima\}\} & 3IO-1P-PON-sleep & quiim \\
\hline cöhihixt & \{co-hi-h-ixt \(\}\) & 3IO-1P-PON-small.Pl & quisil \\
\hline cöhiifp & \{co-hi-Ø-\{afap\}\} & \(310-1 \mathrm{P}-\mathrm{PON}\)-arrive & caafp \\
\hline cöhiihit & \{co-hi-Ø-ahit\} & 3IO-1P-PON-eat & quihit \\
\hline cöhiin & \{co-h-iin \} & 3IO-Im-go & quiin \\
\hline cöhimaa & \{co-hi-Ø-m-aCa\} & 3IO-1P-PON-N-know & quiya \\
\hline cöhimahit & \{co-hi-ø-m-ahit\} & \(310-1 \mathrm{P}-\mathrm{PON}-\mathrm{N}\)-eat & quihit \\
\hline cöhimooxi & \{co-hi- \(\varnothing\)-m-ooxi\} & 3IO-1P-PON-N-die & cooxi \\
\hline cöhimoqueepe & \{co-hi- \(\varnothing\)-moqueepe\} & 3IO-1P-PON-sick & cmoqueepe \\
\hline cöhiqueepe & \{co-hi- \(\varnothing\)-qu \(\left.\mathrm{Abll}^{-\{i i p e\}}\right\}\) & 3IO-1P-PON-AUG-good & cqueepe \\
\hline cöhisiicö & \{co-hi-si-\{aco\}\} & 3IO-1P-Ir.Id-kill & quicö \\
\hline cöhisiicö & \{co-hi-si-acö\} & 3IO-1P-Ir.Id-kill & quicö \\
\hline cöhisiihit & \{co-hi-si-ahit\} & 3IO-1P-Ir.ID-eat & quihit \\
\hline cöhitooij & \{co-h-itooij\} & 3IO-Im-go.Pl & quiin \\
\hline cöicaahit & \{co-i-Ø-ca-a-ahit\} & 3IO-3P-PON-US-AUG-eat & caahit \\
\hline cöicaap & \{co-i- \(\varnothing\)-ca-ap \(\}\) & 3IO-3P-PON-US-stand & caap \\
\hline cöicaasitim & \{co-ica-aasitim \} & 3IO-Inf.In-UO.deceive & cöcaasitim \\
\hline cöicacoaat & \{co-i-Ø-ca-aco-aCa-ot\} & 3IO-3P-PON-US-AUG-know-? & cöcacoaat \\
\hline cöicahtxima & \{co-i-Ø-ca-ahtxima\} & 3IO-3P-PON-US-rich & cahtxima \\
\hline cöicoizct & \{co-i-Ø-ca-oizct\} & 3IO-Inf.In-enter.PL & cazquim \\
\hline cöicoopis & \{co-i-Ø-ca-o Abl \(^{\text {-apis }}\) \} & 3IO-3P-PON-US-UO-smoke & coopis, quipis \\
\hline cöihaafzx & \{co-i-h-aafzx\} & 3IO-3P-PON-fast & caafzx \\
\hline cöihacooyam & \{co-i-h-acooyam & 3IO-3P-PON-honor & cöcacooyam \\
\hline cöihapacta & \{co-i-h-a-pacta \(\}\) & 3IO-3P-PON-AUG-be.in.appearance & capacta \\
\hline cöihiihtim & \{co-i-h-iih-tim\} & 3IO-3P-PON-be.Fl-ImpF & quiih \\
\hline cöihiihtolca & \{co-i-h-iih-tolca\} & 3IO-3P-PON-be.Fl-Pl.ImpF & quiih \\
\hline cöihiij & \{co-i-h-iij \} & 3IO-3P-PON-sit & quiij \\
\hline cöihooctam & \{co-i-h-oocta-m\} & 3IO-3P-PON-look.at-PL & coocta \\
\hline cöiifp & \{co-i-Ø-\{afap \(\}\) \} & \(3 \mathrm{IO}-3 \mathrm{P}-\mathrm{PON}\)-arrive & caafp \\
\hline cöiiha & \{co-i-h-a Irreg \} & 3IO-3P-PON-be & coha \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline cöiihca & \{co-i-Ø-ahca \(\}\) & 3IO-3P-PON-be.located & caahca \\
\hline cöiihca & \{co-i- \(\varnothing\)-ahca \(\}\) & 3IO-3P-PON-sit.PL & quiij \\
\hline cöiihom & \(\left\{\mathbf{c o - i - h - 0 o m}{ }_{\text {Irreg }}\right\}\) & 3IO-3P-PON-lie & coom \\
\hline cöiitax & \{co-i- \(\varnothing\)-atax\} & \(310-3 \mathrm{P}-\mathrm{PON}-\mathrm{go}\) & catax \\
\hline cöitom & \{co-i- \(\varnothing\)-âaitom \(\}\) & 3IO-3P-PON-speak & caaitom \\
\hline cöiizquim & \{co-i-Ø-azquim \} & 3IO-3P-PON-enter & cazquim \\
\hline cöimaa & \{co-i-i-m-aCa\} & 3IO-SN-Tr-know & quiya \\
\hline cöimaafajquim & \{co-i-mi-aafajquim \(\}\) & 3IO-3:3-Px-pound.ImPF & caafc \\
\hline cöimaafc & \{co-i-mi-aafe\} & 3IO-3:3-Px-pound & caafe \\
\hline cöimaai & \{co-i-mi-aai\} & 3IO-3:3-Px-make & caai \\
\hline cöimaaix & \{co-i-mi-aaix\} & 3IO-3:3-Px-carry & cö|caaix \\
\hline cöimacoaat & \{co-i-mi-aco-aCa-ot\} & 3IO-3:3-Px-AUG-know-? & cöcacoaat \\
\hline cöimasiijim & \{co-i-mi-asiijim\} & 3IO-3:3-Px-do & casiijim \\
\hline cöimataasitot & \{co-i-mi-ataasitot\} & 3IO-3:3-Px-AUG.HAVE.name & cö|cataasitot \\
\hline cöimiih & \{co-i-mi-ah \(\}\) & 3IO-3:3-Px-say & quíh \\
\hline cöimiih & \{co-i-m-iih\} & 3IO-SN-N-be.Fl & quiih \\
\hline cöimiij & \{co-i-m-iij\} & 3IO-SN-N-sit & quiij \\
\hline cöimiimjc & \{co-i-mi-amjc\} & 3IO-3:3-Px-bring/take & quimjc \\
\hline cöimiimlaje & \{co-i-mi-amlajc\} & 3IO-3:3-Px-bring/take.PL & quimje \\
\hline cöimitalhaajö & \{co-i-m-italhaajö\} & 3IO-SN-Tr-N-buy/sell.PL & cö|quitalhaa \\
\hline cöimoqueepe & \{co-i-Ø-moqueepe\} & 3IO-3P-PON-sick & cmoqueepe \\
\hline cöimqueept & \(\left\{\right.\) co-i-mi-qu Abl \(^{\text {- }}\) (iipe\}-ot \(\}\) & 3IO-3:3-Px-AUG-good-PL & cqueepe \\
\hline cöinzáxö & \{co-i-mi-zaxö\} & 3IO-3:3-Px-discuss & czaxö \\
\hline cöipahit & \{co-i- \(\varnothing-\mathbf{p}_{\text {Abl }}\)-ahit \(\}\) & 3IO-3P-PON-Pv-eat & quihit \\
\hline cöipahit & \{co-i- \(\varnothing-\mathbf{p}_{\text {Abl }}\)-ahit \(\}\) & 3IO-3P-PON-Pv- EAT & quihit \\
\hline cöipamzo & \{co-i-Ø-p \({ }_{\text {Abl }}\)-amzo \(\}\) & 3IO-3P-PON-Pv-want & quimzo \\
\hline cöipanzx & \{co-i-Ø-panzx\} & \(3 \mathrm{IO}-3 \mathrm{P}-\mathrm{PON}-\mathrm{run}\) & cpanzx \\
\hline cöipátajquim & \{co-i-Ø-p abl \(^{\text {atatajquim }}\) \} & 3IO-3P-PON-Pv-insult & cöcaatajquim \\
\hline cöipatj & \{co-i- \(\varnothing\)-patj \(\left.{ }^{7}\right\}\) & 3IO-3P-PON-flattened & cöipatj, cpatj \\
\hline cöipaxi & \{co-i-Ø-p \(\mathbf{p}_{\text {Abl }}\)-axi\} & 3IO-3P-PON-Pv-finish & quixi \\
\hline cöipitaai & \{co-i-po-itaai\} & 3IO-3:3-Ir.Dp-? & quitaai \\
\hline cöisaahit & \{co-i-si-a-ahit \(\}\) & 3IO-3:3-Ir.ID-AUG-eat & cö|caahit \\
\hline
\end{tabular}

\footnotetext{
\({ }^{7}\) This verb root is etymologically derived from \(\mathbf{p}_{\text {Abl }}\) and the root \(\mathbf{a a t j}\) (pound flat). See Marlett (2002).
}
\begin{tabular}{|c|c|c|c|}
\hline cöisacópoxot & \{co-i-si-aco-apox-ot\} & 3IO-3:3-Ir.Id-AUG-pull.out-? & cöcacópoxot \\
\hline cöisahaaix & \{co-i-si-ah-aaix \(\}\) & 3IO-3P-Ir.Id-Pv-take & cöcaaix \\
\hline cöisahipet & \{co-i-si-ahipet \(\}\) & 3IO-3:3-Ir.Id-permit & cö|cahipit \\
\hline cöisahmiihit & \{co-i-si-ah-a-\{miihi \({ }^{8}\) \}-ot\} & 3IO-3P-Ir.Id-Pv-Aug-not.be.Fl-? & camiihit \\
\hline cöisiifp & \{co-i-si-\{afap \(\}\) \} & 3IO-3P-Ir.ID-arrive & caafp \\
\hline cöisiimjc & \{co-i-si-amjc\} & 3IO-3P-Ir.ID-bring & quimjc \\
\hline cöisooxi & \{co-i-si-ooxi \(\}\) & 3IO-3P-Ir.Id-die & cooxi \\
\hline cöisooxi & \{co-i-si-ooxi \(\}\) & 3IO-3P-Ir.Id-die & cooxi \\
\hline cöitaa & \{co-i-t-aCa \(\}\) & 3IO-3:3-RL-know & quiya \\
\hline cöitaahal & \{co-i-t-aahal\} & 3IO-3:3-RL-AUG.accompany & caahal \\
\hline cöitacohot & \{co-i-t-aco-\{aho\}-ot\} & 3IO-3:3-RL-AUG.see-? & cöcacohot \\
\hline cöitacólecot & \{co-i-t-acolec-ot\} & 3IO-3:3-RL-ask.for.help-? & cöcatólecot \\
\hline cöitáh & \{co-i-t-ah\} & 3IO-3:3-RL-put.FL/do & quíh \\
\hline cöitahizj & \{co-i-t-ahizj\} & 3IO-3:3-RL-tie.up & cö|cahizj \\
\hline cöitamje & \{co-i-t-amje\} & 3IO-3:3-RL-bring & quimjc \\
\hline cöitámlaje & \{co-i-t-amlajc\} & 3IO-3:3-RL-bring.PL & quimje \\
\hline cöitatni & \{co-i-t-atni\} & 3IO-3:3-RL-touch & cö|quitni \\
\hline cöitatolec & \{co-i-t-atolec\} & 3IO-3:3-RL-ask.for.help & catolec \\
\hline cöitcazit & \{co-i-t-cazit\} & 3IO-3:3-RL-grab.away & ccazit \\
\hline cöitcazx & \{co-i-t-cazx \(\}\) & 3IO-3:3-RL-tear & ccazx \\
\hline cöitcomcazit & \{co-i-t-m-cazit\} & 3IO-3:3-RL-N-grab.away & ccazit \\
\hline cöitexl & \{co-i-t-exl \(\}\) & 3IO-3:3-RL-take & quiix \\
\hline cöititaai & \{co-i-t-itaai\} & 3IO-3:3-RL-? & quitaai \\
\hline cöitjeaatim & \{co-i-t-jeaatim \(\}\) & 3IO-3:3-RL-make.fall.IMPF & cjiit \\
\hline cöitníp & \{co-i-t-\{nipa\}\} & 3IO-3:3-RL-hit & co|cnip \\
\hline cöittáxazim & \{co-i-t-\{Caxaz\}-tim \(\}\) & 3IO-3:3-RL-hit.Hz-ImpF & ccaxz \\
\hline cöitzáxö & \{co-i-t-zaxö\} & 3IO-3:3-RL-discuss & czaxö \\
\hline cöixatcaj & \{co-i-Ø-xatcaj\} & 3IO-3P-PON-thin & cxatcaj \\
\hline cöiyaai & \{co-i- \(\mathbf{y}_{\text {Abl }}\)-aai \(\}\) & 3IO-3P-PON-make & caai \\
\hline cölyaaitim & \{co-i-yo-aai-tim \(\}\) & 3IO-3:3-Dt-make-IMPF & caai \\
\hline cöiyaamx & \{co-i-yo-aamx\} & 3IO-3:3-DT-say+IO & cöcaamx \\
\hline cöiyaasitim & \{co-i-y dal \(^{\text {aasitim }}\) \} & 3IO-3P-PON-deceive & cöcaasitim \\
\hline
\end{tabular}

\footnotetext{
\({ }^{8}\) The stem is historically derived from the negative prefix \(\mathbf{m}\) - and the root iih (be.FL). See Marlett (2002).
}
\begin{tabular}{|c|c|c|c|}
\hline cöiyacaapis & \{co-i- ¢ \(_{\text {Abl }}\)-acaapis \(\}\) & 3IO-3:3-Dt-shut.tightly & cö|cacaapis \\
\hline cöiyacoaaxoj & \{co-i-yo-aco-âaaxoj\} & 3IO-3:3-DT-AUG-go.away.from.PL & cöcacoiix \\
\hline cöiyacócamot & \{co-i-yo-aco-\{aquim\}-ot\} & 3IO-3:3-Dt-AUG-put.items-? & cö|cacócamot \\
\hline cöiyacohot & \{co-i-y-aco-\{aho\}-ot\} & 3IO-3P-ON-AUG-see-? & cöcacohot \\
\hline cöiyacohot & \{co-i-yo-aco-\{aho\}-ot\} & 3IO-3:3-DT-AUG-see-? & cöcacohot \\
\hline cöiyacooix & \{co-i-yo-aco-âaix \(\}\) & 3IO-3:3-DT-AUG-go.away.from & cöcacooix \\
\hline cöiyahipet & \{co-i-yo-ahipet\} & 3IO-3:3-Dt-permit & cö|cahipit \\
\hline cöiyaii & \{co-i- \(\left.\mathbf{y}_{\text {Abl }} \mathbf{0 i i}\right\}\) & 3IO-3P-PON-be.Fl.Pl & cöiyaii \\
\hline cöiyanzaaitj & \{co-i-y-a-nzaait-j\} & 3IO-3P-ON-AUG-careful.with-PL & canzaait \\
\hline cöiyaqueecotol & \{co-i-yo-aqueecotol\} & 3IO-3:3-DT-AUG.listen & cöcaqueecotol \\
\hline cöiyasíyalam & \{co-i-y-asíyalam\} & 3IO-3P-ON-use.Pl.ImpF & casiijim \\
\hline cöiyeesxö & \{co-i-yo-eesxö\} & 3IO-3:3-Dт-hide+IO & cö|queesxö \\
\hline cöiyocooz & \{co-i-yo-cooz\} & 3IO-3:3-DT-steal & ccooz \\
\hline cöiyooh & \{co-i-yo-ah\} & 3IO-3:3-DT-say/do/put.FL & quíh \\
\hline cöiyoohit & \{co-i-yo-ahit\} & 3IO-3:3-Dт-eat & quihit \\
\hline cöiyooho & \{co-i-yo-\{aho\}\} & 3IO-3:3-Dт-see & quiho \\
\hline cöiyoomje & \{co-i-yo-amjc\} & 3IO-3:3-DT-bring/take & quimje \\
\hline cöiyoomlajc & \{co-i-yo-amlajc\} & 3IO-3:3-DT-bring/take.PL & quimje \\
\hline cöiyozáxö & \{co-i-yo-zaxö\} & 3IO-3:3-Dt-discuss & czaxö \\
\hline cöizáxö & \{co-i-Ø-zaxö\} & 3IO-3P-PON-discuss & czaxö \\
\hline cömapii & \{co-mi-a-pii\} & 3IO-Px-Aug-taste & capii \\
\hline cömatcmoii & \{co-ma-tm-oii\} & 3IO-2PlS-Sb-stand.Pl & caap \\
\hline cömaticpan & \{co-mi-aticpan\} & 3IO-Px-work & caticpan \\
\hline cömayooi & \{co-ma-yo-ai\} & 3IO-2PLS-Dt-do.Pl & quíh \\
\hline comhima & \{co-mo-hi- \(\varnothing\)-m- \(\mathrm{I}_{\text {Irreg }}\) \} & 3IO-Twd-1P-PON-N-move & moca \\
\hline cömicooz & \{co-mi-Ø-cooz\} & 3IO-2P-PON-steal & ccooz \\
\hline cömihaait & \{co-mi-h-aait\} & 3IO-2P-PON-pass.by.PL & caao \\
\hline cömihiim & \{co-mi-h-\{iima\}\} & 3IO-2P-PON-sleep & quiim \\
\hline cömiiha & \{co-mo-i-h-a \({ }_{\text {Irreg }}\) \} & 3IO-Twd-3P-PON-move & moca \\
\hline cömiihca & \{co-mi-ahca \(\}\) & 3IO-Px-be.located & caahca \\
\hline cömiihit & \{co-mi-Ø-ahit\} & 3IO-2P-PON-eat & quihit \\
\hline cömiij & \{co-mi-iij \} & 3IO-Px-sit & quiij \\
\hline cömiijöc & \{co-mi-ajöc\} & 3IO-Px-continually & cöcajöc \\
\hline cömiip & \{co-mi-ap & 3IO-Px-stand & caap \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline cömiisa & \{co-m-si- \(\mathbf{a}_{\text {Irreg }}\) \} & 3IO-2SGS-IR.ID-be \({ }_{\text {Irreg }}\) & coha \\
\hline cömiitom & \{co-mi-âaitom\} & 3IO-2P-PON-speak & caaitom \\
\hline cömiizcam & \{co-mi-azcam\} & 3IO-Px-arrive.PL & caafp \\
\hline cömiizquim & \{co-mi-azquim \(\}\) & 3IO-Px-enter & cazquim \\
\hline cömiroocö & \{co-mi-Ø-\{roocot\} & 3IO-2P-PON-crazy & croocö \\
\hline cömoca & \{co-mo-c-a Irreg \} & 3IO-Twd-SN-move & moca \\
\hline cömocaaaxoj & \{co-mi-o Abl \(^{\text {deaaaxoj }}\) \} & 3IO-Px-UO-?.Pl & cö|cocaai \\
\hline cömocat & \{co-mo-c-a Irreg \(^{\text {- }}\) t \(\}\) & 3IO-Twd-SN-move-PL & moca \\
\hline cömoii & \{co-mi-oii\} & 3IO-Px-be.Fl.PL/stand.PL & quiih, caap \\
\hline cömoma & \{co-mo-mi- \(\mathrm{a}_{\text {Irreg }}\) \} & 3IO-Twd-Px-move & moca \\
\hline cömomat & \{co-mo-mi-a Irreg \(^{\text {- }}\) t \(\}\) & 3IO-Twd-Px-move-PL & moca \\
\hline cömooix & \{co-mi-o Abl \(^{\text {araix }}\) \} & 3IO-2P-UO-go.away.from & quiiix \\
\hline cömoospoj & \{co-mi-oospoj\} & 3IO-Px-spotted & coospoj \\
\hline cömootni & \{co-mi-o Abl \(^{\text {atni }}\) \} & 3IO-Px-UO-make.contact & cootni \\
\hline cömota & \{co-mo-t-a Irreg \} & 3IO-Twd-RL-move & moca \\
\hline cömotat & \{co-mo-t-a Irreg \(^{\text {-t }}\) \} & 3IO-Twd-RL-move-PL & moca \\
\hline cöocoaaj & \{co-i-oco-aCa-j & 3IO-3P-ON-know-PL & quiya \\
\hline cöootni & \{co-i-o-atni\} & 3IO-3P-ON-touch & quitni \\
\hline cöpahaatxo & \{cö-po-ah-atxo \} & 3IO-Ir.Dp-Times-many & cahaatxo \\
\hline cöpamiiit & \{co-po-a-miiit\} & 3IO-Ir.Dp-Aug-ask & cöcamiiit \\
\hline cöpaticpan & \{co-po-aticpan\} & 3IO-Ir.Dp-work & caticpan \\
\hline copom & \{co-po-oom \({ }_{\text {Irreg }}\) \} & 3IO-Ir.Dp-lie & cocom, coom \\
\hline cöpomaiitim & \{co-po-m-aiitim\} & 3IO-Ir.Dp-N-do & caiitim \\
\hline cöpoojöc & \{co-po-ajöc\} & 3IO-Ir.Dp-continually & cöcajöc \\
\hline cöpoop & \{co-po-ap \(\}\) & 3IO-Ir.Dp-stand & caap \\
\hline cöpootxo & \{co-po-atx \(\}\) & 3IO-Ir.Dp-manyu & catxo \\
\hline cöpopacta & \{co-po-pacta\} & 3IO-Ir.Dp-be.in.appearance & hapacta \\
\hline cöpopanzx & \{co-po-panzx\} & 3IO-Ir.Dp-run & cpanzx \\
\hline cöqueemij & \{co-qu-i-eemij \} & 3IO-SN-Tr-surpass & cöqueemij \\
\hline coquéhelam & \{c-oquéhelam\} & SN-bounce.upwards.PL & coqueht \\
\hline cöquica & \{co-qu-i-aca \(\}\) & 3IO-SN-Tr-put.LQ & quica \\
\hline cöquiih & \{co-qu-iih \(\}\) & 3IO-SN-be.Fl & quiih \\
\hline cöquiihtim & \{co-qu-iih-tim\} & 3IO-SN-be.Fl-ImpF & quiih \\
\hline cöquiiis & \{co-qu-i-aiis\} & 3IO-SN-TR-? & cöquiiis \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline cöquiij & \{co-qu-iij & 3IO-SN-sit & quiij, cö|quiij \\
\hline cöquiipe & \{co-qu-\{iipe\}\} & 3IO-SN-good & quiipe \\
\hline cöquimaxp & \{co-qu-imaxp \(\}\) & 3IO-SN-light.pink & cöquimaxp \\
\hline cöquimjc & \{co-qu-i-amjc\} & 3IO-SN-Tr-bring/take & quimjc \\
\hline cöquit & \{co-qu-it\} & 3IO-SN-go.against.current & cö|quit \\
\hline cöquiti & \{co-qu-iti\} & 3IO-SN-connected.VT & quiti \\
\hline cösaticpan & \{co-si-aticpan\} & 3IO-Ir.ID-work & caticpan \\
\hline cöscoiimaj & \{co-si-coiimaj\} & 3IO-Ir.ID-wind.around & coccoiimaj \\
\hline cösihiimat & \{co-si-ihiimat \} & 3IO-Ir.Id-be.lie & cöihiimat \\
\hline cösiictim & \{co-si-actim\} & 3IO-Ir.Id-cut & cactim \\
\hline cösiihit & \{co-si-ahit\} & 3IO-Ir.Id-eat & quihit \\
\hline cösiij & \{co-si-iij\} & 3IO-Ir.ID-sit & quiij \\
\hline cösiijöc & \{co-si-ajöc\} & 3IO-Ir.Id-continually & cöcajöc \\
\hline cösiizcam & \{co-si-azcam \} & 3IO-Ir.Id-arrive.PL & caafp \\
\hline cösitooij & \{co-si-itooij\} & 3IO-Ir.Id-go.Pl & quiin \\
\hline cösiya & \{co-si-aCa\} & 3IO-Ir.Id-know & quiya \\
\hline cösmiipe & \{co-si-m-iipe\} & 3IO-Ir.ID-N-good & quiipe \\
\hline cösoii & \{co-si-oii\} & 3IO-Ir.Id-be.Fl/stand.PL & quiih, caap \\
\hline cösompanzx & \{co-si-m-panzx \(\}\) & 3IO-Ir.Id-N-run & cpanzx \\
\hline cösonaaaij & \{co-si-onaaaij\} & 3IO-Ir.Id-return & conaaaij \\
\hline cöspanzx & \{co-si-panzx\} & 3IO-Ir.Id-run & cpanzx \\
\hline cössol & \{co-si-Col\} & 3IO-Ir.Id-argue & ccol \\
\hline cötaacoj & \{co-t-aacoj\} & 3IO-Rl-big & caacoj \\
\hline cötaahjöim & \{co-t-aahjöim \(\}\) & 3IO-RL-choke & cöcaahjöim \\
\hline cötaanim & \{co-t-aanim \(\}\) & 3IO-RL-covered & caanim \\
\hline cötaaipot & \{co-t-aaipot\} & 3IO-RL-pay & caaipot \\
\hline cötaanim & \{co-t-aanim \(\}\) & 3IO-RL-Aug.covered & caanim \\
\hline cötaanim & \{co-t-aanim\} & 3IO-RL-covered & caanim \\
\hline cötacoaat & \{co-t-aco-aCa-ot\} & 3IO-RL-Aug-know-? & cöcacoaat \\
\hline cötafp & \{co-t-\{afap\}\} & 3IO-RL-arrive & caafp \\
\hline cötahajca & \{co-t-ahajca\} & 3IO-RL-sit.Pl.ImpF & quiij \\
\hline cötahatalhaa & \{co-t-ah-italhaa \} & 3IO-RL-Pv-buy/sell & cö|quitalhaa \\
\hline cötahca & \{co-t-ahca\} & 3IO-RL-be.located & caahca \\
\hline cötahca & \{co-t-ahca\} & 3IO-RL-sit.Pl & quiij \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline cötahcoaat & \{co-t-ah-aco-aCa-ot \(\}\) & 3IO-RL-PV-AUG-know-? & cöcacoaat \\
\hline cötahjoj & \{co-t-ahjoj\} & 3IO-RL-be.located.PL & cahca \\
\hline cötahníp & \{co-t-ah-\{nipa\}\} & 3IO-RL-Pv-hit & cnip \\
\hline cötajöc & \{co-t-ajöc \(\}\) & 3IO-RL-continually & cöcajöc \\
\hline cötap & \{co-t-ap \(\}\) & 3IO-RL-stand & caap \\
\hline cötasii & \{co-t-a-sii \(\}\) & 3IO-RL-AUG-smell & casii \\
\hline cötayaxi & \{co-t-a-yaxi\} & 3IO-RL-AUG-? & cayaxi \\
\hline cötazcam & \{co-t-azcam \(\}\) & 3IO-RL-arrive.PL & caafp \\
\hline cötazquim & \{co-t-azquim\} & 3IO-RL-enter & cazquim \\
\hline cötcaahit & \{co-t-ca-a-ahit\} & 3IO-RL-US-AUG-eat & caahit \\
\hline cötcaajöc & \{co-t-ca-ajöc\} & 3IO-RL-US-continually & cöcajöc \\
\hline cötiih & \{co-t-iih\} & 3IO-Rl-be.Fl & quiih \\
\hline cötiihtim & \{co-t-iih-tim \} & 3IO-RL-be.Fl-ImpF & quiih \\
\hline cötiihtolca & \{co-t-iih-tolca \(\}\) & 3IO-Rl-be.Fl-Pl.ImpF & quiih \\
\hline cötiij & \{co-t-iij\} & 3IO-RL-sit & quiij \\
\hline cötiin & \{co-t-iin\} & 3IO-RL-go & quiin \\
\hline cötmacötim & \{co-t-m-\{āco\}-tim \(\}\) & 3IO-RL-N-cover.oneself & cacötim \\
\hline cötmafp & \{co-t-m-\{afap \}\} & 3IO-RL-N-arrive & caafp \\
\hline cötmiij & \{co-t-m-iij\} & 3IO-RL-N-sit & quiij \\
\hline cötoii & \{co-t-oii\} & 3IO-Rl-be.Fl.Pl/stand.Pl & quiih, caap \\
\hline cotom & \{co-t-oom \({ }_{\text {Irreg }}\) \} & 3IO-RL-lie & cocom, coom \\
\hline cötooit & \{co-t-ooit\} & 3IO-RL-arrive & cooit \\
\hline cötooitoj & \{co-t-ooitoj\} & 3IO-RL-lie.Pl & cocom, coom \\
\hline cötootij & \{co-t-ootij\} & 3IO-RL-dry & cöcootij \\
\hline cötooxalca & \{co-t-ooxalca\} & 3IO-RL-sit.PL & quiij \\
\hline cötpacta & \{co-t-pacta\} & 3IO-RL-be.in.appearance & hapacta \\
\hline cötpaii & \{co-t-p abl \(^{\text {aai }}\) \} & 3IO-RL-Pv-make & caai \\
\hline cötpamjc & \{co-t-p Abl \(^{\text {amje }}\) \} & 3IO-RL-Pv-bring/take & quimjc \\
\hline cötpanzx & \{co-t-panzx\} & 3IO-RL-run & cpanzx \\
\hline cötpexl & \(\left\{\mathbf{c o - t - p _ { \text { Abl } } - \mathbf { e x } \mathbf { x } \}}\right.\) & 3IO-RL-Pv-take & quiix \\
\hline сӧхаасо & \{co-xo-aaco\} & 3IO-Em-have.house & caaco \\
\hline cöxaacoj & \{co-x0-aacoj\} & 3IO-Em-big & caacoj \\
\hline cöxasii & \{co-x0-a-sii\} & 3IO-Em-Aug-smell & casii \\
\hline cöyaaitim & \{co-yo-aaitim & 3IO-Dt-chase & cöcaaitim \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline cöyacaai & \{co-yo-ocaai\} & 3IO-DT-? & cö|cocaai \\
\hline cöyaticpan & \{co-yo-aticpan\} & 3IO-DT-work & caticpan \\
\hline cöyaxyat & \{co-yo-ooxyat\} & 3IO-DT-die.PL & cooxi \\
\hline cöyiij & \{co-yo-iij\} & 3IO-DT-sit & quiij \\
\hline cöyiim & \{co-yo-iim\} & 3IO-DT-sleep & quiim \\
\hline cöyiin & \{co-yo-iin\} & 3IO-Dt-go & quiin \\
\hline cöyomajöc & \{co-yo-m-ajöc\} & 3IO-Dt-N-continually & cöcajöc \\
\hline cöyimasol & \{co-yo-imasol\} & 3IO-Dt-orange & cöquimasol \\
\hline cöyomiih & \{co-yo-miih \({ }^{9}\) \} & 3IO-DT-not.be.Fl & cmiih \\
\hline cöyomooit & \{co-yo-m-ooit \(\}\) & 3IO-Dt-N-arrive & cooit \\
\hline cöyoofp & \{co-yo-\{afap\}\} & 3IO-Dt-arrive & caafp \\
\hline cöyooitom & \{co-yo-âaitom\} & 3IO-Dt-speak & caaitom \\
\hline cöyoojöc & \{co-yo-ajöc\} & 3IO-DT-continually & cöcajöc \\
\hline cöyoome & \{co-yo-eme\} & 3IO-DT-arrive.Pl & cooit \\
\hline cöyoozquim & \{co-yo-azquim \(\}\) & 3IO-DT-enter & cazquim \\
\hline cöyopanzx & \{co-yo-panzx\} & 3IO-DT-run & cpanzx \\
\hline cöyopémetx & \{co-yo-pémetx\} & 3IO-Dt-overturn & cocpémetx \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|l|}{E} \\
\hline eaacalca & \{i-Vacalca \} & 3P-clothing/personal.items & hácalca \\
\hline eenj & \(\left\{\emptyset_{\text {Abl }}-\emptyset_{\text {Аыl }}\right.\)-iinj \(\}\) & Im-UO-yell.at & queenj, quiinj \\
\hline eexl & \(\left\{\mathbf{i}-\mathbf{o}_{\text {Abl }}-\overline{\mathbf{e}} \mathbf{x}\right.\) ] \(\}\) & 3P-ON-buy & queexl \\
\hline eteja & \(\left\{\emptyset_{\text {Abl-oteja }}\right.\) \} & Im-stagger & coteja \\
\hline \multicolumn{4}{|l|}{H} \\
\hline haa & \{ha\} & Aux & ha, haa \\
\hline haa & \(\{\varnothing\)-haa \(\}\) & SN-EQ & haa, chaa \\
\hline haaco & \{ haaco \} \} & ABS.house & haaco \\
\hline haacöt & \{ haaco 0 -t \(\}\) & Abs.house-PL & haaco \\
\hline haaf & \{ha-VVf \(\}\) & Abs-nose & haaf, iif \\
\hline haafc & \{h-aafc \(\}\) & Im-pound & caafc \\
\hline haai & \{h-aai\} & Im-make & caai \\
\hline
\end{tabular}

\footnotetext{
\({ }^{9}\) The stem is historically derived from the negative prefix \(\mathbf{m}\) - and the root iih (be.FL). See Marlett (2002).
}
\begin{tabular}{|c|c|c|c|}
\hline haait & \{haait \({ }^{\text {d }}\) & ABS.blood & haait \\
\hline haaonam & \{ha-VVonam\} & ABS-hat & haaonam, iionam \\
\hline haaonatz & \{ha-VVonatz\} & Abs-hat.Pl & haaonam, iionam \\
\hline hacaaix & \{ha-ah-caaix\} & SN-PV-put.CM & ccaaix \\
\hline hacaaiz & \{ha-caaiz & ABS-fishing.spear & hacaaiz \\
\hline hacaalim & \{h-ac-aalim \} & Im-AUG-play & cacaalim \\
\hline hacacj & \{ha-ah-cacj\} & SN-PV-chip.at & ccacj \\
\hline hácalca & \{hácalca\} & ABS.clothing/personal.items & hacalca \\
\hline hacamaz & \{ha-camaz\} & ABS-daughter.in.law & hacamaz, acamaz \\
\hline hacazja & \{ha-ah-cazja \} & SN-Pv-bite.ImpF & ccazni \\
\hline hacazjoj & \{ha-ah-cazjoj\} & SN-Pv-bite.PL & ccazni \\
\hline hacoaazj & \{ha-ah-acoaazj\} & SN-Pv-braid & cacoaazj \\
\hline hacoxl & \{ha-ah-acoxl\} & SN-PV-tend & cacoxl \\
\hline hafaiilquim & \{ha-ah-faiilquim & SN-Pv-tie.up.ImPF & cfain \\
\hline hahooil & \{h-ah-ooil\} & Im-AUG-blue/green & cahooil \\
\hline hahoot & \{ha-hoot\} & ABS-entrance & hahoot \\
\hline hahootj & \{ha-hootj\} & ABS-entrance-PL & hahoot \\
\hline hahótitol & \{ha-ah-ahotitol\} & SN-Pv-Aug.arise & cahótitol \\
\hline haii & \{ha-ah-Cii\} & SN-Pv-feel & cquii \\
\hline halít & \{ha-lit \} & Abs-head/hair & halít, ilít \\
\hline hamaacalcam & \{ha-mi- \(\mathbf{a m b l}_{\text {Al- }}\) oocaj\}-tam \(\}\) & 1PlS-Px-Times-two-Pl & caacj \\
\hline hamaax & \{ha-ah-amaax\} & SN-Pv-make.alcoholic.beverage & hamaax, camaax \\
\hline hamahaatxoj & \{ha-mi-ah-atxo-j\} & 1PLS-Px-Times-many-Pl & cahaatxo \\
\hline hamaticpan & \{ha-mi-aticpan\} & 1PLS-Px-work & caticpan \\
\hline hamazaj & \{ha-mazaj\} & AbS-clay.pot & hamazaj \\
\hline hamcaat & \{ha-mi-caa-t \} & 1PLS-Px-look.for-PL & ccaa \\
\hline hamii & \{ha-mi-ai\} & 1PLS-Px-put.Fl.PL & quih \\
\hline hamiiht & \{ha-mi-\{aho\}-t & 1PLS-Px-see-PL & quiho \\
\hline hamiilx & \{ha-mi-\{alax\}\} & 1PLS-Px-go.PL & catax \\
\hline hamiimcajc & \{ha-mi-ámcajc\} & 1PLS-Px-want.PL & quimzo \\
\hline hamiimjöc & \{ha-mi-amjöc\} & 1PLS-Px-think.PL & camoz \\
\hline hamimjöc & \{ha-mi-imjöc\} & 1PLS-Px-HAVE.heart.PL & quimoz \\
\hline hamiyaj & \{ha-mi-aCa-j\} & 1PLS-Px-know-PL & quiya \\
\hline hamoii & \{ha-mi-oii\} & 1PLS-Px-be.Fl.PL/stand.PL & quiih, caap \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline hamom & \(\left\{\mathbf{h - m i - 0 o m} \mathrm{Irrreg}{ }^{10}\right.\) & 1SGS-Px-lie & coom \\
\hline hamooctam & \{ha-mi-oocta-m\} & 1PLS-Px-look.at-PL & coocta \\
\hline hampaailx & \{ha-mi-paailx & 1PLS-PX-arrive.PL & cooit \\
\hline hamqueept & \{ha-mi-qu \({ }_{\text {Abl }}\) - iipe\}-t \(\}\) & 1PLS-Px-AUG-good-PL & cqueepe \\
\hline haníp & \{ha-ah-\{nipa\}\} & SN-Pv-hit & cnip \\
\hline hanol & \{ha-Vnol\} & Abs-finger/hand/arm & hanol \\
\hline hanoocaj & \{ha-ah-anoocaj\} & SN-PV-carry.under.arms & canoocaj \\
\hline hanoohcö & \{ha-ah-a-noohcö\} & SN-Pv-AUG-concave & canoohcö \\
\hline hapaa & \{ ha-p \({ }_{\text {Abl }}-\mathbf{a C a}\) \} & SN-Pv-know & quiya \\
\hline hapaaal & \{ha-p Abl \(^{\text {aaal }}\) \} & SN-Pv-order & queaal \\
\hline hapacta & \{ha-pacta\} & SN-be.in.appearance & hapacta \\
\hline hapafitlam & \{ha-po-a-fit-lam\} & SN-Ir.Dp-AUG-stand-PL & cafít \\
\hline hapáh & \{ha-p \(\mathbf{p}_{\text {Abl }}\)-ah \(\}\) & SN-PV-say/put.FL & quih \\
\hline hapahit & \{ha-p Abl \(^{\text {ahit }}\) \} & SN-Pv-eat & quihit \\
\hline hapai & \{ \(\mathbf{h a - p _ { \text { Abl } } \mathbf { - a i } \}}\) & SN-Pv-tell & quii \\
\hline hapámasoj & \{ha-p Abl \(^{\text {-amasoj }}\) & SN-Pv-twist & quimas \\
\hline hapamyam & \{ha-p Abl \(^{\text {amy }}\) - \({ }^{\text {amam }}\) & SN-Pv-swallow.ImpF & quim \\
\hline hapapje & \{ ha-p \(\mathbf{p l a l}^{\text {-apje }}\) \} & SN-Pv-wear.on.neck & quipje \\
\hline hapaspoj & \{ha-p Abl \(^{\text {aaspoj }}\) \} & SN-PV-AUG.spotted & caaspoj \\
\hline hapazix & \{ha-p \({ }_{\text {Abl }}\)-azix\} & SN-PV-saw & quizix \\
\hline hapéc & \{ha-p \(\mathbf{p}_{\text {Abl }} \mathbf{- i i c}\) \} & SN-Pv-plant & quiic \\
\hline hapeexem & \{ha-p Abl \(^{\text {-eexem }}\) \} & SN-PV-respect.by.not.saying & queexem \\
\hline hapeme & \{hape-ama\} & Abs-father.FE & am, hapeme \\
\hline hapesxö & \{ ha-p Abl \(^{\text {isxö }}\) \} & SN-Pv-hide & quiisxö \\
\hline hapete & \{hape-Vta\} & Abs-mother & hapete, ata \\
\hline hapiistox & \{ha-po-iistox\} & SN-Ir.Dp-have.life.Pl & quiisax \\
\hline hapitooij & \{ha-po-itooij\} & 1PlS-Ir.Dp-go.Pl & quiin \\
\hline hapnaail \({ }^{11}\) & \{ha-pnaail\} & Abs-skirt & hapnaail \\
\hline hapocaat & \{ha-po-caa-t \} & 1PlS-Ir.Dp-look.for-Pl & ccaa \\
\hline hapocooo & \{ha-po-cooo\} & 1PLS-Ir.Dp-all & ccooo \\
\hline hapoolx & \{ha-po-\{alax\} \} & 1PLS-Ir.Dp-go.Pl & catax \\
\hline
\end{tabular}

\footnotetext{
\({ }^{10}\) This irregular verb does not use the standard first person singular intransitive inflection for subject.
\({ }^{11}\) See discussion of a possible etymology on page 1020.
}
\begin{tabular}{|c|c|c|c|}
\hline hapoox & \{ha-po-\{axi\}- \(\varnothing\) \} & 1PlS-Ir.DP-finish-Pl & quixi \\
\hline hapoozcam & \{ha-po-azcam\} & 1PlS-Ir.DP-arrive.PL & caafp \\
\hline hapoziit & \{ha-po-oziit\} & 1PLS-Ir.Dp-go.to.PL & cyaai \\
\hline haquejöc & \{ha-quejöc\} & Abs-firewood & haquejöc \\
\hline hasaaitoj & \{ha-si-a-\{ahit\}-toj \} & 1PLS-Ir.ID-AUG-eat-PL & caahit \\
\hline hasaamilc & \{ha-ah-a-saamilc\} & SN-PV-AUG-rolled.up.Impr \({ }^{12}\) & casaamij \\
\hline hasaii & \{ha-ah-saii\} & SN-PV-remove.with.pole & csaii \\
\hline hásalca & \{hasalca\} & basket.PL \({ }^{13}\) & hasaj \\
\hline hasamsisiijc & \{ha-si-a-msisiijc\} & 1PlS-Ir.Id-AUG-pitiable.Pl & camsisiin \\
\hline hasamsisiin & \{ha-si-a-msisiin \} & 1PlS-Ir.Id-AUG-pitiable & camsisiin \\
\hline hasanj & \{ha-ah-sanj\} & SN-PV-carry.on.back & csanj \\
\hline hasatoj & \{hasat-0j\} & stone-PL & hast \\
\hline hascám & (ha-scam & Abs-reed.boat & hascám \\
\hline hascmaaj & \{ha-si-m-aa-j\} & 1PLS-Ir.ID-N-know-PL & quiya \\
\hline hascmaht & \{ha-si-m-\{aho\}-t \} & 1PLS-Ir.ID-N-see-PL & quiho \\
\hline hascmalx & \{ha-si-m-\{alax\}\} & 1PLS-Ir.Id-N-go.PL & catax \\
\hline hasiihca & \{ha-si-ahca\} & 1PLS-Ir.ID-sit.PL & quiij \\
\hline hasiiht & \{ha-si-\{aho\}-t \} & 1PlS-Ir.ID-see-PL & quiho \\
\hline hasiiitoj & \{ha-si-aiitoj\} & 1PLS-IR.ID-eat.PL & quihit \\
\hline hasiimjöc & \{ha-si-amjöc\} & 1PLS-Ir.Id-think.PL & camoz \\
\hline hasitj & \{ha-ah-sitj\} & 1PLS-PV-make.cradleboard & hasitj, csitj \\
\hline hasiyaj & \{ha-si-aCa-j & 1PLS-IR.ID-know-PL & quiya \\
\hline hasmiihtoj & \{ha-si-miih-toj\} & 1PLS-Ir.Id-not.be.FL-PL & cmiih \\
\hline hasocoozx & \{ha-si-0 \({ }_{\text {Abl }}\)-cooz-x \} & 1PlS-Ir.Id-UO-steal-Pl & ccooz \\
\hline hataahoj & \{h-ataaho-j\} & Im-Aug.be.ready-PL & cataaho \\
\hline hataai & \{ha-ah-taai\} & SN-Pv-wear.kilt & hataai, ctaai \\
\hline hataaitoj & \{ha-t-a-\{ahit\}-toj \} & 1PLS-RL-AUG-eat-PL & caahit \\
\hline hataamatot & \{h-a-i-taamat-ot\} & Im-AUG-HAVE-sandal-? & cataamatot \\
\hline hataamt & \{ha-taamt\} & AbS-sandal(s) & hataamt, itaamt \\
\hline hataap & \{ha-taap \} & Abs-mucus & hataap, itaap \\
\hline hataasi & \{ha-taasi\} & AbS-name & hataasi, itaasi \\
\hline
\end{tabular}

\footnotetext{
\({ }^{12}\) The ending on this word is not one recorded for the verb form itself.
\({ }^{13}\) This word may be an absolutive form related to possessed form iisj.
}
\begin{tabular}{|c|c|c|c|}
\hline hatahca & \{ha-t-ahca\} & 1PLS-RL-sit.PL & quiij \\
\hline hataht & \{ha-t-\{aho\}-t \} & 1PLS-RL-see-PL & quiho \\
\hline hatalhaa & \{ha-ah-italhaa\} & SN-Pv-buy/sell & quitalhaa \\
\hline hatasjoj & \{ha-t-asjoj\} & 1PLS-RL-paddle.PL & casquim \\
\hline hatatoomlcam & \{ha-t-atoomlcam\} & 1PLS-RL-cut.Hz.VT.Pl & caam \\
\hline hatáx & \{ha-t-\{axi\}- \(\varnothing\) \} & 1PLS-RL-finish-Pl & quixi \\
\hline hatazcam & \{ha-t-azcam \(\}\) & 1PLS-RL-arrive.PL & caafp \\
\hline hatcaat & \{ha-t-caa-t \} & 1PLS-RL-look.for-PL & ccaa \\
\hline hatemalx & \{ha-t-m-\{alax\} \} & 1PLS-RL-N-go.PL & catax \\
\hline hatemasjoj & \{ha-t-m-asjoj\} & 1PLS-RL-N-paddle.PL & casquim \\
\hline hatemooctam & \{ha-tm-oocta-m\} & 1PLS-Sb-look.at-Pl & coocta \\
\hline hatcmocoozx & \{ha-tm-oco-azx\} & 1PlS-Sb-UO-steal.Pl & cocooz, ccooz \\
\hline hatcooo & \{ha-t-cooo\} & 1PLS-RL-all & ccooo \\
\hline hatiifp & \{hati- \(\varnothing\)-\{afap \}\} & 1Em.P-PON-arrive & caafp \\
\hline hatiihtoj & \{ha-t-iih-toj\} & 1PlS-Rl-be.Fl-Pl.ImpF & quiih \\
\hline hatiin & \{ha-ah-tiin\} & SN-PV-slice & ctiin \\
\hline hatom & \{h-t-oom \({ }^{14}\) & 1SGS-Rl-lie & coom \\
\hline hatoocj & \{ha-t-oocj\} & 1PLS-RL-two & coocj \\
\hline hatqueept & \(\left\{\right.\) ha-t-qu \({ }_{\text {Abl }}\) \{iipe\}-t \(\}\) & 1PLS-RL-AUG-good-PL & cqueepe \\
\hline hatyaa & \{hati-Ø-yaa\} & 1Em.P-ON-own & yaa, cyaa \\
\hline hax & \{ha-Vx\} & ABS-water/liquid & hax \\
\hline haxaaza & \{ha-xaaza\} & AbS-arrow & haxaaza \\
\hline háxaca & \{ha-'Vxaca\} & Abs-pet.Pl & haxz \\
\hline haxöaii & \{ha-xo-oii\} & 1PLS-Em-be.Fl.PL/stand.Pl & quiih, caap \\
\hline haxz & \{ha-Vxz\} & ABS-pet & haxz \\
\hline hayaa & \{ha-ah-yaa\} & SN-PV-own & cyaa \\
\hline hayaii & \{ha- \(\mathbf{y ~}_{\text {Abl }} \mathbf{- 0 i i}\) \} & 1PLP-PON-be.Fl.PL & quiih \\
\hline hayanzaaitj & \{ha-yo-anzaait-j\} & 1PLS-Dt-careful.with-PL & canzaait \\
\hline hayatósiploj & \{ha-y dibl \(^{\text {atósiploj }}\) \} & 1PlP-PON-AUG.spotted.Pl & caaspoj \\
\hline hayayoozxam & \{ha-y-a-yooz-xam\} & 1PLP-ON-AUG-god-Pl & cayooz \\
\hline hayaza & \{ha- \(\mathbf{y ~}_{\text {Abl }} \mathbf{- 0 0 z a}\) \} & 1PLP-PON-speak.PL & caaitom \\
\hline hayocaat & \{ha-yo-caa-t & 1PLS-DT-look.for-PL & ccaa \\
\hline
\end{tabular}

\footnotetext{
\({ }^{14}\) This irregular verb does not use the standard first person singular intransitive inflection for subject.
}
\begin{tabular}{|c|c|c|c|}
\hline hayom & \{h-yo-oom \(\left.{ }_{\text {Irreg }}\right\}^{15}\) & 1SGS-Dt-lie & coom \\
\hline hayomaaj & \{ha-yo-m-aCa-j\} & 1PLS-DT-N-know-PL & quiya \\
\hline hayomalx & \{ha-yo-m-\{alax\}\} & 1PLS-Dt-N-go.Pl & catax \\
\hline hayomahinej & \{ha-yo-m-ah-inej\} & 1PLS-DT-N-AUG-empty & cahinej \\
\hline hayomámcajc & \{ha-yo-m-ámcaje\} & 1PLS-Dt-N-want.Pl & quimzo \\
\hline hayomatax & \{ha-yo-m-atax\} & 1PLS-Dt-N-go & catax \\
\hline hayomiijajoj & \{ha-yo-m-iijajoj\} & 1PLS-Dt-N-wet-PL & quiije \\
\hline hayonooptoj & \{ha-yo-nooptoj\} & 1PlS-Dt-hit.PL & cnip \\
\hline hayonooptolca & \{ha-yo-nooptolca\} & 1PlS-Dt-hit.Pl.ImpF & cnip \\
\hline hayooht & \{ha-yo-\{aho\}-t \(\}\) & 1PlS-Dt-see-PL & quiho \\
\hline hayoolx & \{ha-yo-\{alax\}\} & 1PLS-DT-go.Pl & catax \\
\hline hayoomcajc & \{ha-yo-ámcajc \} & 1PLS-DT-want.PL & quimzo \\
\hline hayoomjöc & \{ha-yo-amjöc\} & 1PLS-Dt-think.PL & camoz \\
\hline hayoomxoj & \{ha-yo-amx-0j\} & 1PLS-Dt-say-PL & quimx \\
\hline hayootax & \{ha-yo-atax\} & 1PLS-Dt-go & catax \\
\hline hayoox & \{ha-yo-\{axi\}- \(\varnothing\) \} & 1PlS-DT-finish-PL & quixi \\
\hline hayooyolca & \{ha-yo-ayolca\} & 1PlS-Dt-put.Fl.Pl.ImpF & quih \\
\hline hayoozcam & \{ha-yo-azcam\} & 1PlS-DT-arrive.Pl & caafp \\
\hline hazi pocazni & \{hazi-po-cazni\} & 1PlDO-Ir.Dp-bite & ccazni \\
\hline hazi yahfaiilquim & \{hazi-yo-ah-faiilquim\} & 1PLDO-Dt-Pv-tie.up.ImpF & cfain \\
\hline hazi yopaho & \{hazi-yo-p \(\mathbf{A b l}^{\text {a }}\) \{aho\}\} & 1PLDO-Dt-Pv-see & quiho \\
\hline hcaaix \({ }^{\text {pv }}\) & \{h-caaix \(\}\) & Im-put.Cm & ccaaix \\
\hline he cazcam & \{he-c-azcam \(\}\) & 1IO-SN-arrive.PL & caafp \\
\hline he cacoaat & \{he c-aco-aCa-ot\} & 1IO-SN-Aug-know-? & cöcacoaat \\
\hline he camje & \{he-c-amjc\} & 1IO-Im-bring & quimje \\
\hline he cazcam & \{he-c-azcam \} & 1IO-Im-arrive.PL & caafp \\
\hline he cocaai & \{he-c-ocaai\} & \(1 \mathrm{IO}-\mathrm{SN}\)-? & cöcaai \\
\hline he hiij & \{he-h-iij\} & 1IO-Im-sit & quiij \\
\hline he hpanzx & \{he-h-panzx & 1IO-Im-run & cpanzx \\
\hline he itámlaje & \{he-i-t-amlajc\} & 1IO-3:3-RL-bring.PL & quimjc \\
\hline he iyocazit & \{he-i-yo-cazit\} & 1IO-3:3-DT-grab.away & ccazit \\
\hline he iyocázitim & \{he-i-yo-cazit-tim \} & 1IO-3:3-DT-grab.away-IMPF & ccazit \\
\hline
\end{tabular}

\footnotetext{
\({ }^{15}\) This irregular verb does not use the standard first person singular intransitive inflection for subject.
}
\begin{tabular}{|c|c|c|c|}
\hline he iyocooz & \{he-i-yo-cooz\} & 11O-3:3-DT-steal & ccooz \\
\hline he mascmaht & \{he-ma-si-m-\{aho\}-ot\} & 3IO+1DO-2PLS-Ir.ID-N-see-Pl & quiho \\
\hline he masiii & \{he-ma-si-aii\} & 3IO+2SGDO-2PlS-Ir.Id-put.Fl.Pl & quíh \\
\hline he mocaaaxoj & \{he-mi-o \({ }_{\text {Abl }}\)-caaaxoj\} & 1IO-Px-UO-?.PL & cö|cocaai \\
\hline he moya & \{he-mo-yo- \(\mathbf{a}_{\text {Irreg }}\) \} & 1IO-Twd-Dt-move & moca \\
\hline he siih & \{he-si-ah\} & 3IO+1DO-Ir.Id-put.FL & quíh \\
\hline he smaanim & \{he-si-m-aanim \(\}\) & 1IO-Ir.ID-N-cover & caanim \\
\hline he sompazt & \{he-si-m-p-\{azit\}\} & 3IO+1DO-Ir.Id-N-Pv-tattoo & quizt \\
\hline he tpazt & \{he-t-p Abll \(^{\text {\{ }}\) azit \(\left.\}\right\}\) & 3IO+1DO-RL-Pv-tattoo & quizt \\
\hline he yaaitot & \{he-yo-aaitot\} & 1IO-Dt-Aug.arrive & cö|caaitot \\
\hline heecto & \{ heeque\}-to \} & small/juvenile-PL & heeque \\
\hline heenim & \{hi-eenim & 1P-knife & eenim \\
\hline hehet & \{hehe-t \({ }^{\text {c }}\) & plant-PL & hehe \\
\hline heme & \{ha-Vme\} & Abs-home/family/camp & heme \\
\hline hemyo & \{h-mi-yo \({ }_{\text {Irreg }}\) \} & 1PLS-Px-say.PL & teeque \\
\hline hexl & \{h-ēxl\} & Im-take & quiixl \\
\hline hicaamiz & \{hi-caamiz\} & 1P-shirt & caamiz \\
\hline hicamaz & \{hi-camaz\} & 1P-daughter-in-law & acamaz \\
\hline hicápota & \{hi-cápota\} & 1P-jacket & capota \\
\hline hicmiiquet & \{hi-Ø-cmiique-t \(\}\) & 1P-PON-person-? & -cmiiquet \\
\hline hicoome & \{hi-coome\} & 1P-younger.sister.ME & acoome \\
\hline hihaactim & \{hi-h-a-actim \} & 1P-PON-AUG-be.cut & caactim \\
\hline hihaai & \{hi-h-aai\} & 1P-PON-make & caai \\
\hline hihaait & \{hi-haait\} & 1P-blood & haait, ihaait \\
\hline hihaaitloj & \{hi-haait-loj\} & 1P-blood-PL & haait, ihaait \\
\hline hihacohot & \{hi-h-aco-\{aho\}-ot\} & 1P-PON-AUG-see-? & cöcacohot \\
\hline hihacazni & \{hi-h-ah-cazni\} & 1P-PON-Pv-bite & ccazni \\
\hline hihajcooil & \{hi-h-ahjcooil\} & 1P-PON-fall.PL & cahjiit \\
\hline hihexaj & \{hi-h-ēxaj\} & 1P-PON-take.Pl & quiixl \\
\hline hihihiimet & \{hi-h-ihiimet\} & 1P-PON-be.married & quihiimet \\
\hline hihiih & \{hi-h-iih\} & 1P-PON-be.FL & quiih \\
\hline hihiij & \{hi-h-iij\} & 1P-PON-sit & quiij \\
\hline hihiim & \{hi-h-\{iima\}\} & 1P-PON-sleep & quiim \\
\hline hihisil & \{hi-h-isil\} & 1P-PON-small & quisil \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline hihizil & \{hi-h-izil\} & 1P-PON-small.PL & quisil \\
\hline hihoocta & \{hi-h-oocta\} & 1P-PON-look.at & coocta \\
\hline hii & \{hi-Vi\} & 1P-father.ME & ai \\
\hline hiicot & \{hi-VVcot \} & 1P-with.PL & iihax \\
\hline hiicp & \{hi-VVep \(\}\) & 1P-place.next.to & iicp \\
\hline hiict & \{hi-VVet \} & 1P-maternal.grandmother & aact \\
\hline hiicto & \{hi-Ø-VVcto \} & 1P-PON-pregnant.with-IMPF & quiiquet, iiquet \\
\hline hiictoj & \{hi-Ø-VVquet-toj \} & 1P-PON-pregnant.with-PL & quiiquet, iiquet \\
\hline hiif & \{hi-VVf\} & 1P-nose & iif \\
\hline hiifp & \{hi-Ø-\{afap\}\} & 1P-PON-arrive & caafp \\
\hline hiihax & \{hi-VVhax \} & 1P-with.SG & iihax \\
\hline hiihca & \{hi-Ø-ahca\} & 1P-PON-sit.PL & quiij \\
\hline hiihjoj & \{hi-VVhioj \(\}\) & 1P-limb.PL & iiha \\
\hline hiiho & \{hi-Ø-aho\} & 1P-PON-see & quiho \\
\hline hiij & \{h-iij\} & Im-sit & quiij \\
\hline hiim & \{h-\{iima\}\} & Im-sleep & quiim \\
\hline hiime & \{hi-Vme\} & 1P-home & iime, heme \\
\hline hiime & \{ \(\left.\mathbf{h - m i -} \mathbf{e l}_{\text {Irreg }}\right\}\) & 1SGS.Tr-Px-give & iique \\
\hline hiin & \{h-iin\} & Im-go & quiin \\
\hline hiionam & \{hi-VVonam \} & 1P-hat & iionam \\
\hline hiipajö & \{hi-VVpajö\} & 1P-tail.of.fish/bird/plane & iipajö \\
\hline hiiquet & \{hi- \(\varnothing\)-iiquet \(\}\) & 1P-PON-be.pregnant.with & iiquet, quiiquet \\
\hline hiiqui & \{hi-VVqui\} & 1P-toward & iiqui \\
\hline hiisax & \{hi-VVsax\} & 1P-? & iisax \\
\hline hiistox & \{hi-VVstox\} & 1P-?.PL & iisax \\
\hline hiixz & \{hi-VVxz\} & 1P-pet & iixz \\
\hline hiiye & \{hi-y-e \({ }_{\text {Irreg }}\) \} & 1P-ON-give.gift & iique \\
\hline hiizcam & \{hi-ø-azcam \(\}\) & 1P-PON-arrive.PL & caafp \\
\hline hiizix & \{hi- \(\varnothing\)-azix\} & 1P-PON-saw & quizix \\
\hline hilít & \{hi-lit \(\}\) & 1P-head/hair & ilít \\
\hline him caazi & \{him-c-i-aazi\} & 1SGDO-SN-Tr-carry & caazi \\
\hline him icatxla & \(\{\) him-i- \(\varnothing\)-catxla\} & 1SGDO-3P-PON-bite.[like.dog] & ccatxla \\
\hline him ihazt & \{him-iha \({ }_{\text {Abl }}\)-azt \(\}\) & 1SGDO-Inf.Tr-tattoo & quizt \\
\hline him iiyoj & \{him-yo-yoj \({ }_{\text {Irreg }}\) \} & 1SGDO-DT-give.gift.PL & iique \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline him imcazni & \{him-mi-cazni\} & 1SGDO-Px-bite & ccazni \\
\hline him imiixim & \{him-i-i-m-iixim \(\}\) & 1SGDO-SN-TR-N-fear & quiixim \\
\hline him ipal & \{him-po-aal \({ }_{\text {Irreg }}\) \} & 1SGDO-Ir.DP-accompany & ical \\
\hline him isal & \{him-si-aal \({ }_{\text {Irreg }}\) \} & 1SGDO-Ir.ID-accompany & ical \\
\hline him miih & \{him-mi-ah\} & 1SGDO-Px-say/do & quíh \\
\hline him miii & \{him-mi-aii\} & 1SGDO-Px-say.Pl & quíh \\
\hline him queaal & \{him qu-i-aaal\} & 1SGDO-SN-Tr-order & queaal \\
\hline him quiho & \{him qu-i-aho \(\}\) & 1SGDO-SN-Tr-see & quiho \\
\hline him quiiquet & \{him qu-i-iiquet\} & 1SGDO-SN-Tr-pregnant.with & quiiquet \\
\hline him quip & \{him-qu-i-ap\} & 1SGDO-SN-Tr-bite & quip \\
\hline him xomasnaapitim & \{him-xo-m-asnaapit-tim \(\}\) & 1SGDO-Em-N-bother-ImpF & casnaapit \\
\hline himaa & \(\{\mathrm{hi}-\varnothing-\mathrm{m}-\mathrm{aCa}\}\) & 1P-PON-N-know & quiya \\
\hline himaaj & \{hi-Ø-m-aCa-j\} & 1P-PON-N-know-PL & quiya \\
\hline himaaj & \{hi-Ø-m-aCa-j\} & 1P-ON-N-know-PL & quiya \\
\hline himacötoj & \{hi-Ø-m-\{aco\}-toj\} & 1P-PON-N-kill-PL & quicö \\
\hline himahit & \{hi-ø-m-ahit\} & 1P-PON-N-eat & quihit \\
\hline himasi & \{hi-Ø-m-asi\} & 1P-ON-N-drink & quisi \\
\hline himazcam & \{hi-ø-m-azcam \} & 1P-PON-N-arrive.PL & caafp \\
\hline himazix & \{hi-ø-m-azix \(\}\) & 1P-PON-N-saw & quizix \\
\hline himazix & \{hi-Ø-m-azix\} & 1P-ON-N-saw & quizix \\
\hline himiim & \{hi-ø-m-\{iima\}\} & 1P-PON-N-sleep & quiim \\
\hline himocaj & \{hi-mocaj\} & 1P-place.under.PL & imocl \\
\hline himocl & \{hi-mocl\} & 1P-place.under & imocl \\
\hline himoozix &  & 1P-PON-N-UO-saw & coozix, quizix \\
\hline himoz & \{hi-Vmoz\} & 1P-heart & imoz \\
\hline himt & \{hi-Vmt\} & 1P-breast & imt \\
\hline hin ntah & \{him-m-t-ah\} & 1SGDO-2SGS-RL-do & quíh \\
\hline hin ntaho & \{him-m-t-\{aho\}\} & 1SGDO-2SGS-Rl-see & quiho \\
\hline hin ntemapatje & \{him-m-t-m-a-patje\} & 1SGDO-2SGS-RL-N-AUG-open & capatje \\
\hline hin satoosiploj & \{him-si-atoosiploj\} & 1SGDO-Ir.ID-AUG-be.spotted.PL & caaspoj \\
\hline hin siih & \{him-si-ah\} & 1SGDO-Ir.Id-put.FL & quíh \\
\hline hin taanim & \{him-t-aanim\} & 1SGDO-RL-AUG.covered & caanim \\
\hline hin tah & \{him-t-ah\} & 1SGDO-RL-do & quíh \\
\hline hin taho & \{him-t-\{aho\}\} & 1SgDO-Rl-see & quiho \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline hin taht & \{him-t-\{aho\}-t \} & 1SGDO-RL-see.PL & quiho \\
\hline hin yaaipot & \{him-yo-aaipot\} & 1SGDO-Dt-Aug.be.paid & caaipot \\
\hline hin yaanim & \{him-yo-aanim \(\}\) & 1SGDO-Dt-AUG.covered & caanim \\
\hline hin yatolec & \{him-yo-atolec\} & 1SGDO-Dt-ask.for.help & catolec \\
\hline hin yocatxla & \{him-yo-catxla\} & 1SGDO-Dt-bite.[like.dog] & ccatxla \\
\hline hin yocazni & \{him-yo-cazni\} & 1SGDO-DT-bite.[snake] & ccazni \\
\hline hin yomaxpx & \{him-yo-m-axpx\} & 1SGDO-Dt-N-mad.at & quixpx \\
\hline hin yooh & \{him-yo-ah\} & 1SGDO-Dt-say & quih \\
\hline hinaail & \{hi-naail\} & 1P-skin/shell & inaail \\
\hline hinl & \(\{\) hi- \(\{\) Vnol\}- \(\varnothing\) \} & 1P-finger/hand/arm-PL & inol \\
\hline hino & \{hi-Vno\} & 1P-in/from & ano \\
\hline hintaac & \{hi-ntaac\} & 1P-mother's.younger.sister & antaac \\
\hline hinyaac & \{hi-nyaac \} & 1P-older.brother.ME & anyaac \\
\hline hinzeet & \{hi-nzeet \} & 1P-heel & inzeet \\
\hline hipac & \{hi-Vpac \(\}\) & 1P-back/place.behind & ipac \\
\hline hipajoj & \{hi-Vpajoj\} & 1P-back/place.behind-PL & ipac \\
\hline hipazt & \{ hi-p \(\mathbf{p l a b}^{\text {azt }}\) \} & 1P-PON-PV-tattoo & quizt \\
\hline hisaaco & \{hi-saaco\} & 1P-long.blouse & saaco \\
\hline hiscmazix & \{hi-si-m-azix\} & 1P-Ir.Id-N-saw & quizix \\
\hline hiscmoozix & \(\left\{\mathbf{h i - s i} \mathbf{- m - \mathbf { o } _ { \text { Abl } } { } ^ { \text { azix } } \}}\right.\) & 1P-Ir.Id-N-UO-saw & coozix, quizix \\
\hline hiseaaxoj & \{hi-si-\{âaix\}-toj\} & 1P-Ir.ID-go.away.from-PL & quiiix \\
\hline hisiihca & \{hi-si-ahca \} & 1P-Ir.ID-sit.PL & quiij \\
\hline hisiitax & \{hi-si-atax \(\}\) & 1P-Ir.ID-go & catax \\
\hline hisiizix & \{hi-si-azix \(\}\) & 1P-Ir.ID-saw & quizix \\
\hline hisoj & \{hi-Vsoj\} & 1P-body/self & isoj \\
\hline hisolca & \{hi-Vsolca \} & 1P-body/self.PL & isoj \\
\hline hisoozix & \(\left\{\mathbf{h i - s i - \mathbf { o } _ { \text { Abl } } - \mathbf { a z i x } \}}\right.\) & 1P-Ir.Id-UO-saw & coozix, quizix \\
\hline hispaaya & \{hi-spaaya\} & 1P-sword & haspaaya, (ispaaya) \\
\hline hita & \{hi-Vta\} & 1P-mother & ata \\
\hline hitaamt & \{hi-taamt \} & 1P-sandal(s) & itaamt \\
\hline hitaamt & \{h-i-taamt \(\}\) & Im-have-sandal(s) & quitaamt \\
\hline hiteen & \{hi-teen\} & 1P-mouth & iteen \\
\hline hitoaa & \{hi-toaa\} & 1P-foot/leg & itoaa \\
\hline hitoj & \{hi-Vto-j\} & \(1 \mathrm{P}-\mathrm{eye}-\mathrm{PL}\) & ito \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline hitóm & \{hi-tom \} & 1P-money & tom \\
\hline hitrooqui & \{hi-trooqui\} & 1P-vehicle & trooqui \\
\hline hiyaa & \{hi- \(\varnothing\)-yaa\} & 1P-PON-own & cyaa \\
\hline hiyal & \{hi-VCal\} & 1 P -spouse & aal \\
\hline hizi cmis & \{hizi-c-i-mis\} & 1PLDO-SN-Tr-resemble & cmis \\
\hline hizi ipaspoj & \{hizi-i- \(\varnothing\)-p \(\mathbf{p l a l}^{\text {abaspoj }}\) \} & 1PLDO-3P-PON-PV-AUG.spotted & caaspoj \\
\hline hizi iscompéhetim & \{hizi i-si-m-p \({ }_{\text {Abl }}-\mathbf{e}_{\text {Irreg }}\)-tim \(\}\) & 1PLDO-3:3-IR.ID-N-Pv-give.gift-IMPF & iique \\
\hline hizi iyopéhetim & \(\left\{\mathbf{h i z i ~ i - y o - p ~} \mathbf{p}_{\text {Abl }}-\mathbf{e}_{\text {Irreg }}\right.\)-tim \(\}\) & 1PLDO-3:3-DT-Pv-give.gift-ImpF & iique \\
\hline hizi matápolquim & \{hizi-mi-atápolquim\} & 1PlDO-Px-Aug.broken & catápolquim \\
\hline hizi mii & \{hizi-mi-ai\} & 1PLDO-Px-tell & quii \\
\hline hizi quíh & \{hizi-qu-i-ah\} & 1PLDO-SN-Tr-do/say/put.FL & quíh \\
\hline hizi quiinim & \{hizi-qu-i-âainim \(\}\) & 1PLDO-SN-Tr-mix.with & quiinim \\
\hline hizi smahmiiitim & \{hizi-si-m-ah-miiit-tim \(\}\) & 1PlDO-Ir.Id-N-Pv-ask-ImpF & cmiiit \\
\hline hizi yaaicot & \{hizi-yo-aaicot \(\}\) & 1PlDO-Dt-Aug.kill-? & caaicot \\
\hline hizi yahamsisiin & \{hizi-yo-ah-a-msisiin\} & 1PLDO-DT-Pv-Aug-pitiable & camsisiin \\
\hline hizi yahcazja & \{hizi-yo-ah-cazja\} & 1PlDO-Dt-Pv-bite.ImpF & ccazni \\
\hline hizi yahfaiilquim & \{hizi-yo-ah-faiilquim\} & 1PLDO-Dt-Pv-tie.up.ImpF & cfain \\
\hline hizi yahmiiitim & \{hizi-yo-ah-miiit-tim \(\}\) & 1PlDO-Dt-Pv-ask-ImpF & cmiiit \\
\hline hizi yahnífajquim & \{hizi-yo-ah-nifajquim\} & 1PLDO-DT-Pv-kick-IMPF & cnifz \\
\hline hizi yahzáxö & \{hizi-yo-ah-zaxö\} & 1PLDO-DT-Pv-discuss & czaxö \\
\hline hizi yonooptolca & \{hizi-yo-nooptolca\} & 1PLDO-DT-hit.Pl.IMPF & cnip \\
\hline hizi yooho & \{hizi-yo-\{aho\}\} & 1PLDO-Dt-see & quiho \\
\hline hizi yopázitim & \{hizi-yo-p Abl \(^{\text {azit-tim }}\) \} & 1PlDO-Dt-Pv-tattoo-ImPF & quizt \\
\hline hmcaa \({ }^{\text {pv }}\) & \{h-mi-caa\} & 1SGS.Tr-Px-look.for & ccaa \\
\hline hmeemjöc \({ }^{\text {pv }}\) & \{h-mi-eemjöc\} & 1SGS.Tr-Px-?.ImpF & queemoz \\
\hline hmiicö \({ }^{\text {pv }}\) & \{h-mi-\{acou\} & 1SGS.Tr-Px-kill & quicö \\
\hline hmiih \({ }^{\text {pv }}\) & \{h-mi-ah\} & 1SGS.Tr-Px-put.Fl & quíh \\
\hline hmiiha \({ }^{\text {pv }}\) & \{mo-hi-h-a Irreg \} & Twd-1P-PON-move & moca \\
\hline hmiihat \({ }^{\text {pv }}\) & \{mo-hi-h-a Irreg \(^{\text {- }}\) t \(\}\) & Twd-1P-PON-move-PL & moca \\
\hline hmiiho \({ }^{\text {pv }}\) & \{h-mi-aho \} & 1SGS.Tr-Px-see & quiho \\
\hline hmiimzo \({ }^{\text {pv }}\) & \{h-mi-amzo \} & 1SGS.Tr-Px-want & quimzo \\
\hline hmiiquim \({ }^{\text {pv }}\) & \{h-mi-aquim \} & 1SGS.Tr-Px-put.items & quiquim \\
\hline hmiya \({ }^{\text {pv }}\) & \{h-mi-aCa\} & 1SGS.Tr-Px-know & quiya \\
\hline hnyaa \({ }^{\text {pv }}\) & \{h-mi-yaa\} & 1SGS.Tr-Px-own & cyaa \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline hoaal & \(\left\{\mathbf{h i - o}_{\text {Abl }} \text {-aaal }\right\}^{16}\) & 1P-ON-order & queaal \\
\hline hocaaix & \{ hi-o abl \(\left.^{\text {- }} \mathbf{c a a i x}\right\}\) & 1P-ON-put.Cm & ccaaix \\
\hline hocoaa & \{hi-oco-aCa\} & 1P-ON-know & quiya \\
\hline hocoht & \{hi-oco-\{aho\}-t \} & 1P-ON-see-PL & quiho \\
\hline hoeenec & \{ hi-o abl \(^{\text {-oonec }}\) \} & 1P-ON-carry.PL & coon \\
\hline hoficj & \{ hi- \(\mathbf{o}_{\text {Abl }}\)-ficj \(\}\) & 1P-ON-wrap.oneself.with & cficj \\
\hline hoicö & \{hi-oicö\} & 1P-ON.kill & quicö \\
\hline hoocta & \{h-oocta \} & Im-look.at & coocta \\
\hline hooctam & \{h-oocta-m\} & Im-look.at-PL & coocta \\
\hline hoohit & \{hi-o abl \(^{\text {-ahit }}\) \} & 3P-ON-eat & quihit \\
\hline hoom & \(\left\{\mathbf{h i - o}_{\text {Abl }}-\mathbf{a m}\right\}\) & 3P-ON-swallow & quim \\
\hline hoom & \{h-oom \({ }_{\text {Irreg }}\) \} & Im-lie & coom \\
\hline hoomzo & \(\left\{\mathbf{h - o}_{\text {Abl }}-\mathbf{a m z o}\right\}\) & 1P-ON-want & quimzo \\
\hline hoon & \{h-oon\} & Im-carry.items & coon \\
\hline hoonl & \{h-00nl\} & Im-stir & coonl \\
\hline hoosi & \(\left\{\mathbf{h i - \mathbf { o } _ { \text { Abl } } - \mathbf { - a s i } \}}\right.\) & 1P-ON-drink & quisi \\
\hline hooxi & \(\left.\left\{\mathbf{h i - o ~}_{\text {Abl }}{ }^{-\{\mathbf{a x i}}\right\}\right\}\) & 1P-ON-finish & quixi \\
\hline hooxquim & \{hi-o abl \(_{\text {axquim }}\), & 1P-ON-shoot & quixquim \\
\hline hoozix & \{ \(\mathbf{h i - o}_{\text {Abl }}\)-azix \(\}\) & 1P-ON-saw & quizix \\
\hline hoyaat & \{ \(\mathbf{h i - o}_{\text {Abl }}\)-yaa-t \} & 1P-ON-own-PL & cyaa \\
\hline hoyacj &  & 1P-ON-call.sibling & cyacj \\
\hline hozáxö & \{hi-o \(\mathbf{o}_{\text {Abl }} \mathbf{z a x o ̈}\) \} & 1P-ON-discuss & czaxö \\
\hline hpancoje \({ }^{\text {pv }}\) & \{h-pancoje\} & Im-run. Pl & cpanzx \\
\hline hpexl \({ }^{\text {pv }}\) & \{h-p-ēxl\} & 1SGS.Tr-Ir.Dp-buy & queexl \\
\hline hpiin \({ }^{\text {pv }}\) & \{hp-po-iin\} & 1SGS.In-Ir.Dp-go & quiin \\
\hline hpmaacj \({ }^{\text {pv }}\) & \{hp-mi-a \(\mathbf{a b l l}^{\text {- }}\) (oocaj \(\}\) \} & 1SGS.In-Px-Times-two & caacj \\
\hline hpmahaatxo \({ }^{\text {pv }}\) & \{hp-mi-ah-atxo \} & 1SGS.In-Px-Times-many & cahaatxo \\
\hline hpmiimoz \({ }^{\text {pv }}\) & \{hp-mi-amoz\} & 1SGS.In-Px-think & camoz \\
\hline hpmopím \({ }^{\text {pv }}\) & \{ hp-mi-o \(\mathbf{A d b l}^{\text {-pim }}\) \} & 1SGS.In-Px-UO-make.sandal & copím, cpim \\
\hline hpmotj \({ }^{\text {pv }}\) & \{hp-mi-otj\} & 1SGS.In-Px-arise & cotj \\
\hline hpoaa \({ }^{\text {pv }}\) & \{h-po-aCa\} & 1SGS.Tr-Ir.Dp-know & quiya \\
\hline hpoocta \({ }^{\text {pv }}\) & \{h-po-oocta \(\}\) & 1SGS.Tr-Ir.Dp-look.at & coocta \\
\hline
\end{tabular}

\footnotetext{
\({ }^{16}\) This verb conjugates as if the root began with a short low vowel.
}
\begin{tabular}{|c|c|c|c|}
\hline hpoofp \({ }^{\text {pv }}\) & \{hp-po-\{afap \} \} & 1SGS.In-Ir.Dp-arrive & caafp \\
\hline hpoohit \({ }^{\mathrm{pv}}\) & \{h-po-ahit\} & 1SGS.Tr-Ir.Dp-eat & quihit \\
\hline hpooho \({ }^{\text {pv }}\) & \{h-po-\{aho\}\} & 1SGS.Tr-Ir.Dp-see & quiho \\
\hline hpsatolec \({ }^{\text {pv }}\) & \{hp-si-atolec\} & 1SGS.In-Ir.ID-ask.for.help & catolec \\
\hline hpscmaahit \({ }^{\text {pv }}\) & \{hp-si-m-a-ahit\} & 1SGS.In-Ir.Id-N-AUG-eat & caahit \\
\hline hpsiij \({ }^{\text {pv }}\) & \{hp-si-iij\} & 1SGS.In-Ir.Id-sit & quiij \\
\hline hpsiin \({ }^{\text {pv }}\) & \{hp-si-iin\} & 1SGS.In-Ir.Id-go & quiin \\
\hline hpsiitax \({ }^{\text {pv }}\) & \{hp-si-atax \(\}\) & 1SGS.In-Ir.Id-go & catax \\
\hline hpsoosi \({ }^{\text {pv }}\) & \{hp-si-o Abl \(^{\text {asisi }}\) \} & 1SGS.IN-Ir.Id-UO-drink & coosi, quisi \\
\hline hpsozám \({ }^{\text {pv }}\) & \{hp-si-o \(\left.{ }_{\text {Abl }} \mathbf{- z a m}\right\}\) & 1SGS.In-Ir.Id-UO-put.Vt & cozám, czam \\
\hline hptahahásaquim \({ }^{\mathrm{pv}}\) & \{hp-t-ah-ah-asaquim \} & 1SGS.In-RL-Pv-AUG-comb.one's.hair & cahásaquim \\
\hline hptap \({ }^{\text {pv }}\) & \{hp-t-ap \} & 1SGS.In-RL-stand & capp \\
\hline hptapoti \({ }^{\text {pv }}\) & \{hp-t-apoti\} & 1SGS.In-RL-duck.a.blow & capoti \\
\hline hptihiizat \({ }^{\text {pv }}\) & \{hp-t-ihiizat\} & 1SGS.In-RL-cast.shadow & quihiizat \\
\hline hptiihtim \({ }^{\text {pv }}\) & \{hp-t-iih-tim \} & 1SGS.In-RL-be.Fl-ImpF & quiih \\
\hline hptiim \({ }^{\text {pv }}\) & \{hp-t-\{iima\}\} & 1SGS.IN-RL-sleep & quiim \\
\hline hptooxnij \({ }^{\text {pv }}\) & \{hp-t-ooxnij\} & 1SGS.In-RL-snore & cooxnij \\
\hline hptozám \({ }^{\text {pv }}\) & \{hp-t-0 \(\mathbf{o d b l}^{\text {abezam }}\) \} & 1SGS.In-RL-UO-put.VT & cozám, czam \\
\hline hpyaanpx \({ }^{\text {pv }}\) & \{hp-yo-\{aanipx \(\}\) \} & 1SGS.In-DT-go.home & caanpx \\
\hline hpyaii \({ }^{\text {pv }}\) & \{hp-yo-āii\} & 1SGS.In-DT-wake.up.partially & caii \\
\hline hpyiij \({ }^{\text {pv }}\) & \{hp-yo-iij\} & 1SGS.In-DT-sit & quiij \\
\hline hpyiim \({ }^{\text {pv }}\) & \{hp-yo-\{iima\}\} & 1SGS.In-DT-sleep & quiim \\
\hline hpyomafp \({ }^{\text {pv }}\) & \{hp-yo-m-\{afap\}\} & 1SGS.IN-DT-N-arrive & caafp \\
\hline hpyoomoz \({ }^{\text {pv }}\) & \{hp-yo-amoz\} & 1SgS.In-DT-think & camoz \\
\hline hpyootax \({ }^{\text {pv }}\) & \{hp-yo-atax\} & 1SGS.In-DT-go & catax \\
\hline hsahaama \({ }^{\text {pv }}\) & \{h-si-ah-aama\} & 1SGS.Tr-Ir.Id-Aug-trickle & cahaama \\
\hline hsatázata \({ }^{\text {pv }}\) & \{h-si-atázata\} & 1SGS.Tr-Ir.Id-cut.into.strips & catázata \\
\hline hscmaa \({ }^{\text {pv }}\) & \{h-si-m-aCa\} & 1SGS.Tr-Ir.Id-N-know & quiya \\
\hline hsexl \({ }^{\text {pv }}\) & \{h-si-ēxl \(\}\) & 1SGS.Tr-Ir.ID-buy & queexl \\
\hline hsiih \({ }^{\text {pv }}\) & \{h-si-ah\} & 1SGS.Tr-Ir.ID-put.FL & quih \\
\hline hsiihit \({ }^{\mathrm{pv}}\) & \{h-si-ahit \(\}\) & 1SGS.Tr-Ir.ID-eat & quihit \\
\hline hsiiquim \({ }^{\text {pv }}\) & \{h-si-aquim \(\}\) & 1SGS.Tr-Ir.ID-put.items & quiquim \\
\hline htaai \({ }^{\text {pv }}\) & \{h-t-aai\} & 1SGS.Tr-RL-make & caai \\
\hline htacotim \({ }^{\text {pv }}\) & \{h-t-\{aco\}-tim \} & 1SGS.Tr-RL-kill-ImpF & quicö \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline htah \({ }^{\text {pv }}\) & \{h-t-ah\} & 1SGS.Tr-RL-put.Fl & quíh \\
\hline htahit \({ }^{\text {pv }}\) & \{h-t-ahit \(\}\) & 1SGS.Tr-RL-eat & quihit \\
\hline htaho \({ }^{\text {pv }}\) & \{h-t-aho\} & 1SGS.Tr-RL-see & quiho \\
\hline htaxi \({ }^{\text {pv }}\) & \{h-t-\{axi\}\} & 1SGS.Tr-RL-finish & quixi \\
\hline htemaa \({ }^{\text {pv }}\) & \{h-t-m-aCa\} & 1SGS.Tr-RL-N-know & quiya \\
\hline htcmaho \({ }^{\text {pv }}\) & \{h-t-m-aho\} & 1SGS.Tr-RL-N-see & quiho \\
\hline htcooz \({ }^{\text {pv }}\) & \{h-t-cooz\} & 1SGS.Tr-RL-steal & ccooz \\
\hline htitlim \({ }^{\text {pv }}\) & \{h-t-itlim \} & 1SGS.Tr-RL-kindle & quiitlim \\
\hline httaxz \({ }^{\text {pv }}\) & \{h-t-\{Caxaz \(\}\) & 1SGS.Tr-RL-hit.Hz & ccaxz \\
\hline hxomahit \({ }^{\text {pv }}\) & \{h-xo-m-ahit \} & 1SGS.Tr-Em-N-eat & quihit \\
\hline hxomaho \({ }^{\text {pv }}\) & \{h-xo-m-aho \} & 1SGS.Tr-Em-N-see & quiho \\
\hline hxoqueepe \({ }^{\text {pv }}\) & \(\left\{\mathbf{h - x o - q u} \mathbf{u m b l}^{\text {abiipe }}\right\}\) & 1SGS.Tr-EM-Aug-good & cqueepe \\
\hline hyaa \({ }^{\text {pv }}\) & \{hi-ø-yaa\} & 1P-ON-own & yaa, cyaa \\
\hline hyaazi \({ }^{\text {pv }}\) & \{hi-y-aazi\} & 1P-ON-carry & caazi \\
\hline hyahitim \({ }^{\text {pv }}\) & \(\left\{\mathbf{h - \mathbf { y } _ { \text { Abl } } - \mathbf { o } _ { \text { Abl } } - \mathbf { a h i t } - \text { tim }}\right.\) \} & 1P-PON-UO-eat-IMPF & coohit, quihit \\
\hline hyocaaix \({ }^{\text {pv }}\) & \{h-yo-caaix \(\}\) & 1SGS.Tr-Dt-put.Cm & ccaaix \\
\hline hyoímoz \({ }^{\text {pv }}\) & \{h-yo-Cimoz\} & 1SGS.Tr-Dt-think & cquimoz \\
\hline hyomaa \({ }^{\text {pv }}\) & \{ \(\mathbf{h - y o - m - a C a}\) \} & 1SGS.Tr-Dt-N-know & quiya \\
\hline hyomaho \({ }^{\text {pv }}\) & \{h-yo-m-aho \} & 1SGS.Tr-Dt-N-see & quiho \\
\hline hyomasi \({ }^{\text {pv }}\) & \{h-yo-m-asi\} & 1SGS.Tr-Dt-N-drink & quisi \\
\hline hyonyaa \({ }^{\text {pv }}\) & \{h-yo-m-yaa\} & 1SGS.Tr-Dt-N-own & cyaa \\
\hline hyoocatx \({ }^{\text {pv }}\) & \{h-yo-acatx\} & 1SGS.Tr-Dt-release & quicatx \\
\hline hyoohit \({ }^{\mathrm{pv}}\) & \{h-yo-ahit\} & 1SGS.Tr-Dt-eat & quihit \\
\hline hyooho \({ }^{\text {pv }}\) & \{h-yo-aho\} & 1SGS.Tr-Dt-see & quiho \\
\hline hyoomzo \({ }^{\text {pv }}\) & \{h-yo-amzo \} & 1SGS.Tr-Dt-want & quimzo \\
\hline hyooquim \({ }^{\text {pv }}\) & \{h-yo-aquim \} & 1SGS.Tr-Dt-put.items & quiquim \\
\hline hyoosi \({ }^{\text {pv }}\) & \{h-yo-asi\} & 1SGS.Tr-Dt-drink & quisi \\
\hline \multicolumn{4}{|l|}{I} \\
\hline icaacj & \{ica- a \(_{\text {Abl }}\) \{oocaj \(\}\) \} & Inf.In-Times-two & caacj \\
\hline icaacösxaj & \{ica-acösxaj\} & Inf.IN-long/tall & cacösxaj \\
\hline icaafp & \{ica-\{afap\}\} & Inf.In-arrive & caafp \\
\hline icaafp & \{i-Ø-ca-\{afap \(\}\) \} & 3P-PON-US-arrive & caafp \\
\hline icaahit & \{ica-a-ahit\} & Inf.In-Aug-eat & caahit \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline icaaij & \{i-Ø-ca-aaij\} & 3P-PON-US-UO-fetch.water & caaij \\
\hline icaaisx & \{i-Ø-ca-aaisx\} & 3P-PON-US-clean & caaisx \\
\hline icaaitim & \{i-Ø-ca-aai-tim\} & 3P-PON-US-make-IMPF & caai \\
\hline icaaitom & \{ica-âaitom\} & Inf.IN-speak & caaitom \\
\hline icaaitom & \{i-Ø-ca-âaitom \(\}\) & 3P-PON-US-speak & caaitom \\
\hline icaaje & \{ica-aajc\} & Inf.IN-yawn & caaje \\
\hline icaalx & \{ica-\{alax\}\} & Inf.In-go.Pl & catax \\
\hline icaalaxolca & \{ica-\{alax\}-tolca\} & Inf.In-go.Pl-Impf & catax \\
\hline icaamiz & \{i-caamiz\} & 3P-shirt & caamiz \\
\hline icaaspoj & \{i-Ø-ca-aaspoj\} & 3P-PON-US-AUG.spotted & caaspoj \\
\hline icaatax & \{ica-atax\} & Inf.In-go & catax \\
\hline icaataxim & \{ica-atax-tim\} & Inf.In-go-ImpF & catax \\
\hline icaatj & \{i-Ø-ca-aatj \(\}\) & 3P-PON-US-pound.flat & caatj \\
\hline icaatxo & \{ica-atxo\} & Inf.In-much/many & catxo \\
\hline icacat & \{ica-ācat\} & Inf.In-swim & cacat \\
\hline icacötim & \{i-Ø-ca-\{āco\}-tim \(\}\) & 3P-PON-US-cover.oneself-IMPF & cacötim \\
\hline icacozim & \{ica-a-cozim\} & Inf.In-AUg-hot & cacozim \\
\hline icahaapl & \{ica-ah-aapl\} & Inf.In-AUG-cold & cahaapl \\
\hline icahác & \{ica-hac\} & Inf.IN-blind & chac \\
\hline icahahásaquim & \{ica-ah-ah-\{asac\}-tim\} & Inf.In-Pv-AUG-comb.one's.hair-ImpF & cahásaquim \\
\hline icahamoc & \{ica-a-hamoc\} & Inf.IN-AUG-be.night & cahamoc \\
\hline icahcazja & \{ica-ah-cazja\} & Inf.In-Pv-bite.IMPF & ccazni \\
\hline icahcazjoj & \{ica-ah-cazjoj\} & Inf.In-Pv-bite.PL & ccazni \\
\hline icahcazni & \{ica-ah-cazni\} & Inf.In-Pv-bite & ccazni \\
\hline icahjiit & \{ica-ahjiit\} & Inf.In-fall & cahjiit \\
\hline icahsanj & \{ica-ah-sanj \} & Inf.In-PV-carry.on.back & csanj \\
\hline ical & \{c-i-al Irreg \} & SN-TR-accompany & ical \\
\hline icám & \{i-ø-cam \(\}\) & SN-PON-alive & ccam \\
\hline icáp & \{i-cap\} & 3P-stalk & icáp \\
\hline icapahit & \{ica-p \(\mathbf{p l a b}^{\text {-ahit }}\) \} & Inf.In-Pv-eat & quihit \\
\hline icapáncoje & \{ica-pancoje\} & Inf.In-run.PL & cpanzx \\
\hline icapáncoxlca & \{ica-pancoxlca\} & Inf.In-run.Pl.ImpF & cpanzx \\
\hline icapánozxim & \{ica-\{panozx\}-tim \} & Inf.In-run-ImpF & cpanzx \\
\hline icapanzx & \{ica-\{panozx\}\} & Inf.In-run & cpanzx \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline icapasi & \{ica-p \(\mathbf{p}_{\text {Abl }}\)-asi\} & Inf.In-Pv-drink & quisi \\
\hline icapazt & \{ica-p \(\mathbf{p a b l}^{\text {-azt }}\) \} & Inf.In-Pv-tattoo & quizt \\
\hline icás & \{ica-ās\} & Inf.In-err & cas \\
\hline icatázatoj & \{i-Ø-ca-atázatoj\} & 3P-PON-US-cut.into.strips.PL & catázata \\
\hline icaticpan & \{ica-aticpan\} & Inf.IN-work & caticpan \\
\hline icaticpan & \{i-ø-ca-aticpan\} & 3P-PON-US-work & caticpan \\
\hline icayeeno & \{i-Ø-ca-yeeno \(\}\) & 3P-PON-US-HAVE.face & cyeeno \\
\hline icazaahox & \{ica-zaah-ox\} & Inf.IN-sun-? & czaahox \\
\hline icazni & \{i-Ø-cazni\} & 3P-PON-bite & ccazni \\
\hline iemiiquet & \{i-Ø-cmiique-t \(\}\) & 3P-PON-person-? & -cmiiquet \\
\hline icmís & \{i-c-i-mis\} & 3:3-SN-Tr-resemble & cmis \\
\hline icocoho & \{i-Ø-ca-oco-aho\} & 3P-PON-US-UO-see & cocoho, quiho \\
\hline icocooz & \{ica-o \({ }_{\text {abl }} \mathbf{- c o o z}\) \} & Inf.In-UO-steal & cocooz, ccooz \\
\hline icocozyax & \{i-Ø-ca-oco--azyax \(\}\) & 3P-PON-US-UO-saw.ImPF & coozix, quizix \\
\hline icom & (ica-00m \({ }_{\text {Irreg }}\) \} & Inf.In-lie & coom \\
\hline icooha & \{ica-ooha\} & Inf.In-cry & cooha \\
\hline icoohit & \{ica-o abl \(_{\text {-ahit }}\) \} & Inf.IN-UO-eat & coohit, quihit \\
\hline icoohit & \{i-Ø-ca-o Abl \(^{\text {-ahit }}\) \} & 3P-PON-US-UO-eat & coohit, quihit \\
\hline icoohitim & \{i-Ø-ca-o \({ }_{\text {Abl }}\)-ahit-tim \(\}\) & 3P-PON-US-UO-eat-IMPF & coohit, quihit \\
\hline icooil & \{ica-ooil\} & InF.IN-blue/green & cooil \\
\hline icooit & \{ica-ooit\} & Inf.In-arrive & cooit \\
\hline icooit & \{ica-ooit\} & Inf.In-dance & cooit \\
\hline icoop & \(\left\{\mathbf{i c a - 0} \mathbf{o}_{\text {Abl }}\right.\)-ap \(\}\) & Inf.In-UO-sew.basket & coop, quip \\
\hline icoop & \{i-Ø-ca-o \(\mathbf{a d b}^{\text {-ap }}\) \} & 3P-PON-US-UO-sew.basket & coop, quip \\
\hline icoop & \{i- \(\varnothing\)-ca-o \(\mathbf{o d b l}^{\text {-apis }}\) \} & 3P-PON-US-UO-smoke & coopis, quipis \\
\hline icoopis & \{ica-o \({ }_{\text {Abl-apis }}\) \} & Inf.In-UO-smoke & coopis, quipis \\
\hline icoos & \{ica-\{oosi\}\} & Inf.In-sing & coos \\
\hline icoos & \{i-Ø-ca-\{oosi\}\} & 3P-PON-US-sing & coos \\
\hline icoosi & \{ica-\{oosi\}-Ø \} & Inf.IN-sing-PL & coos \\
\hline icooxi & \{i-Ø-ca-ooxi\} & 3P-PON-US-die & cooxi \\
\hline icooxp & \{ica-ooxp\} & Inf.In-white & cooxp \\
\hline icooz & \{i-Ø-cooz\} & 3P-PON-steal & ccooz \\
\hline icooza & \{ica-ooza\} & Inf.In-speak.PL & caaitom \\
\hline icoozlaje & \(\left\{\mathbf{i - \varnothing}-\mathbf{c a - 0} \mathbf{o}_{\text {Abl }}\right.\)-azlajc \(\}\) & 3P-PON-US-UO-pile.up.PL & coozje, quizje \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline icotís & \{ica- \({ }_{\text {Abl }}\)-tis \(\}\) & Inf.In-UO-point.at & cotís, ctis \\
\hline icozaplim & \{i-Ø-ca-o \(\mathbf{o d b l}^{\text {abl zaplim }}\) \} & 3P-PON-US-UO-sew & cozaplim, czaplim \\
\hline icozim & \{i-Ø-cozim \(\}\) & 3P-PON-hot.(weather) & ccozim \\
\hline ihaacoj & \{i-h-aacoj\} & 3P-PON-big & caacoj \\
\hline ihaacsx & \{iha \({ }_{\text {Abl }}\)-a-acsx\} & Inf.Tr-AUG-awaken & caacsx \\
\hline ihaacta & \(\left\{\right.\) iha \(_{\text {Abl }}\)-oocta \(\}\) & Inf.Tr-look.at & coocta \\
\hline ihaactim & \{iha \({ }_{\text {Abl }}\)-a-actim \} & Inf.Tr-AUG-be.cut & caactim \\
\hline ihaahit & \{iha Abl \(^{\text {-ahit }}\) \} & Inf.TR-eat & quihit \\
\hline ihaaho & \(\left\{\right.\) iha \(_{\text {Abl }}\)-aho \(\}\) & Inf.TR-see & quiho \\
\hline ihaai & \{i-h-aai\} & 3P-PON-make & caai \\
\hline ihaait & \{i-haait\} & 3P-blood & haait \\
\hline ihaanim & \{i-h-ah-aanim & 3P-PON-Pv-AUG.covered & caanim \\
\hline ihaaonam & \{iha abli-i-VVonam \(^{\text {d }}\) & Inf.TR-HAVE-hat & quiionam \\
\hline ihaapl & \{i-h-aapl\} & \(3 \mathrm{P}-\mathrm{PON}-\) cold & caapl \\
\hline ihaat \({ }^{17}\) & \{i-h-ihaat\} & \(3 \mathrm{P}-\mathrm{PON}\)-mature & quihaat \\
\hline ihaca & \(\left\{\right.\) iha \(_{\text {Abl }}\) aca \} & Inf.Tr-put.LQ & quica \\
\hline ihacaptax & \{i-h-ah-captax \(\}\) & 3P-PON-Pv-pierce.ImPF & ccaptxö \\
\hline ihamihzx & \{iha \({ }_{\text {Abl }}-\) mihzx \(\}\) & Inf.Tr-slip.on & cmihzx \\
\hline ihamoc & \{i-Ø-hamoc\} & 3P-PON-be.night & chamoc \\
\hline ihanaaij & \{iha abl \(^{\text {-naaij }}\) \} & Inf.TR-catch & cnaaij \\
\hline ihanaxz & \{i-h-ah-naxz\} & \(3 \mathrm{P}-\mathrm{PON}-\mathrm{PV}\)-rub & canaxz \\
\hline ihaneaaxot & \{iha \({ }_{\text {Abl }}\)-neaax-ot \({ }^{\text {a }}\) & Inf.TR-AUG-wash.one's.hands-? & caneaaxot \\
\hline ihapii & \{iha \({ }_{\text {Abl }}\)-pii\} & Inf.TR-taste & cpii \\
\hline ihapiz & \{iha \({ }_{\text {Abl }}\)-apiz \(^{\text {\% }}\) & Inf.TR-suck.juice.from & quipiz \\
\hline ihapooin & \{i-h-a-pooin\} & 3P-PON-Pv-AUG-closed & capooin \\
\hline ihaqueejc & \(\left\{\mathbf{i h a ~}_{\mathrm{Abl}^{\text {b }} \text {-qu }}^{\text {abl }}\right.\)-iije \} & Inf.Tr-Aug-wet & cqueejc \\
\hline ihasi & \{iha \({ }_{\text {Abl }}\)-asi\} & Inf.TR-drink & quisi \\
\hline ihasii & \{i-h-a-sii\} & 3P-PON-AUG-smell & casii \\
\hline ihataamatot & \{iha \({ }_{\text {Abl }}\)-a-i-taamat-ot\} & Inf.Tr-Aug-HAVE-sandal-? & cataamatot \\
\hline ihataamt & \{iha \({ }_{\text {Abl }}\)-i-taamt \} & Inf.Tr-HAVE-sandal & quitaamt \\
\hline ihatalhaa & \(\left\{\right.\) iha \(_{\text {Abl }}\)-italhaa \(\}\) & Inf.TR-buy/sell & quitalhaa \\
\hline iházitim & \{iha \({ }_{\text {Abl }}\) - azit \(\}\)-tim \(\}\) & Inf.Tr-tattoo-ImpF & quizt \\
\hline
\end{tabular}

\footnotetext{
\({ }^{17}\) This form is irregular; the expected form would be *ihiháat.
}
\begin{tabular}{|c|c|c|c|}
\hline ihazt & \{iha \({ }_{\text {Abl }}\)-azit\} \(\}\) & InF.Tr-tattoo & quizt \\
\hline ihcaa & \{h-caa\} & Im-look.for & ccaa \\
\hline ihcaaitajc & \{h-caaitajc \} & Im-put.Cm.PL & ccaaix \\
\hline ihee & \(\left\{\right.\) iha \(_{\text {Abl }} \mathbf{e C e}\) \} & Inf.Tr-give.food & quiye \\
\hline iheep & \{iha \({ }_{\text {Abl }}\)-iip \} & Inf.TR-carry.on.head & quiip \\
\hline ihic & \{i-Vhic\} & 3P-seed & ihic \\
\hline ihiha & \{i-h-iha\} & 3P-PON-fast & quiha \\
\hline ihiih & \{i-h-iih\} & 3P-PON-be.FL & quiih \\
\hline ihiij & \{i-h-iij\} & 3P-PON-sit & quiij \\
\hline ihiin & \{i-h-iin\} & 3P-PON-go & quiin \\
\hline ihiin & \{i-hiin\} & 3P-place.near & ihiin \\
\hline ihiinpx & \{i-hiinpx\} & 3P-place.near & ihiinpx \\
\hline ihiip & \{i-hi-ap\} & 3P-PON-stand & caap \\
\hline ihiliti & \{i-h-i-liti\} & 3P-PON-HAVE-hair & quiliti \\
\hline ihinej & \{i-h-inej\} & 3P-PON-empty & quinej \\
\hline ihipon & \{i-h-i-Vpon\} & 3P-PON-HAVE-voice & quipon \\
\hline ihisil & \{i-h-isil\} & 3P-PON-small & quisil \\
\hline ihít & \{i-hit\} & 3P-place.behind & ihít \\
\hline ihitj & \{i-h-i-Vtj\} & 3P-PON-HAVE-trunk.of.body & quitj \\
\hline ihmai & \{h-mai\} & Imp.be.quiet & cmai \\
\hline ihmcaa & \{h-mi-caa\} & 1SGS.Tr-Px-look.for & ccaa \\
\hline ihmexl & \{h-mi-exl\} & 1SGS.Tr-Px-take & quiix \\
\hline ihmiihit & \{h-mi-ahit\} & 1SGS.Tr-Px-eat & quihit \\
\hline ihmiiho & \{h-mi-aho \} & 1SGS.Tr-Px-see & quiho \\
\hline ihmiimjc & \{h-mi-amjc\} & 1SGS.Tr-Px-bring/take & quimje \\
\hline ihmiimzo & \{h-mi-amzo \} & 1SGS.Tr-PX-want & quimzo \\
\hline ihmiya & \{h-mi-aCa\} & 1SGS.Tr-Px-know & quiya \\
\hline ihmoocta & \{h-mi-oocta \(\}\) & 1SGS.Tr-Px-look.at & coocta \\
\hline ihmpii & \{h-mi-pii\} & 1SGS.Tr-Px-taste & cpii \\
\hline ihmqueepe & \(\left\{\mathrm{h}-\mathrm{mi}-\mathbf{q u} \mathbf{u m b l}_{\text {abl }}\right.\) \{iipe \(\left.\}\right\}\) & 1SGS.Tr-Px-AUg-good & cqueepe \\
\hline ihpaaitim & \{h-po-aai-tim \(\}\) & 1SGS.Tr-Ir.Dp-make-ImpF & caai \\
\hline ihpaatim & \{h-po-aa-tim \} & 1SGS.Tr-Ir.DP-?-ImPF & caa \\
\hline ihpaatj & \{h-po-aatj\} & 1SGS.Tr-Ir.Dp-pound.flat & caatj \\
\hline ihpamotjö & \{h-po-a-motjö\} & 1SGS.Tr-Ir.Dp-Aug-soft & camotjö \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline ihpanamj & \{h-po-anamj & 1SGS.Tr-Ir.Dp-hurry & canamj \\
\hline ihpásaquim & \{hp-po-āsaquim\} & 1SGS.In-Ir.DP-comb.one's.hair & casaquim \\
\hline ihpimhác & \{hp-mi-hac\} & 1SGS.In-Px-blind & chac \\
\hline ihpipje & \{hpo-Ø-ipje\} & 1SGDO-Im-wrestle & quiipjc \\
\hline ihpmaacj & \{hp-mi- \(\mathbf{a}_{\text {Abl }}\) \{oocaj\}\} & 1SGS.In-Px-Times-two & caacj \\
\hline ihpmeejim & \{hp-mi-eeejim \(\}\) & 1SGS.In-PX-old & queeejim \\
\hline ihpmiitax & \{hp-mi-atax\} & 1SGS.In-Px-go & catax \\
\hline ihpmopím & \{hp-mi-o \(\mathbf{o d b l}^{\text {- }} \mathbf{p i m}\) \} & 1SGS.In-Px-UO-make.sandal & copím, cpim \\
\hline ihpomazt & \{hpo-Ø-m-azt\} & 1SGDO-Im-N-tattoo & quizt \\
\hline ihpomoocta & \{hpo-Ø-m-oocta\} & 1SGDO-Im-N-look.at & coocta \\
\hline ihpoocatx & \{h-po-acatx\} & 1SGS.Tr-Ir.Dp-release & quicatx \\
\hline ihpoocta & \{hpo-Ø-oocta\} & 1SGDO-Im-look.at & coocta \\
\hline ihpooho & \{h-po-\{aho\}\} & 1SGS.Tr-Ir.Dp-see & quiho \\
\hline ihpooij & \{hp-po-âaij\} & 1SGS.In-Ir.Dp-UO.fetch.water & caaij \\
\hline ihpooitom & \{hp-po-âaitom \(\}\) & 1SGS.In-Ir.Dp-speak & caaitom \\
\hline ihpooxi & \{h-po-\{axi\}\} & 1SGS.Tr-Ir.Dp-finish & quixi \\
\hline ihpoozt & \{hpo- \(\varnothing\)-azt \} & 1SGDO-Im-tattoo & quizt \\
\hline ihposanj & \{hpo-Ø-sanj\} & 1SGDO-Im-carry.on.back & csanj \\
\hline ihpsaticpan & \{hp-si-aticpan\} & 1SGS.In-Ir.Id-work & caticpan \\
\hline ihpsematax & \{hp-si-m-atax\} & 1SGS.In-Ir.Id-N-go & catax \\
\hline ihpsiifp & \{hp-si-\{afap\}\} & 1SGS.In-Ir.ID-arrive & caafp \\
\hline ihpsiij & \{hp-si-âaij\} & 1SGS.IN-Ir.Id-UO.fetch.water & caaij \\
\hline ihpsiij & \{hp-si-iij\} & 1SGS.In-Ir.Id-sit & quiij \\
\hline ihpsiitax & \{hp-si-atax\} & 1SGS.In-Ir.Id-go & catax \\
\hline ihpsooca & \(\left\{\mathbf{h p - s i - o _ { \text { Abl } } - \mathbf { a c a } \}}\right.\) & 1SGS.In-Ir.Id-UO-put.LQ & cooca \\
\hline ihpsoos & \{hp-si-\{oosi\}\} & 1SGS.IN-Ir.Id-sing & coos \\
\hline ihptaacj & \{hp-t-a \(\mathbf{a m b l}^{\text {A }}\) \{oocaj \(\}\) \} & 1SGS.In-Rl-Times-two & caacj \\
\hline ihptaalim & \{hp-t-aalim & 1SGS.In-RL-play & caalim \\
\hline ihptahcazni & \{hp-t-ah-cazni\} & 1SGS.In-Pv-bite & ccazni \\
\hline ihptahjiit & \{hp-t-ahjiit\} & 1SGS.IN-RL-fall & cahjiit \\
\hline ihptásaquim & \{hp-t-asaquim \(\}\) & 1SGS.In-RL-comb.one's.hair & casaquim \\
\hline ihptaticpan & \{hp-t-aticpan\} & 1SGS.In-RL-work & caticpan \\
\hline ihptematax & \{hp-t-m-atax\} & 1SGS.In-RL-N-go & catax \\
\hline ihpteectim & \{hp-t-eectim \} & 1SGS.IN-RL-travel & queectim \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline ihpthaxz & \{hp-t-haxz\} & 1SGS.In-RL-irritable & chaxz \\
\hline ihptiim & \{hp-t-iim \(\}\) & 1SGS.In-RL-sleep & quiim \\
\hline ihptmoqueepe & \{hp-t-moqueepe\} & 1SGS.In-RL-sick & cmoqueepe \\
\hline ihptoop & \(\left\{\mathrm{hp-t-o}_{\text {Abl }}-\mathbf{a p}\right\}\) & 1SGS.In-RL-UO-sew.basket & coop, quip \\
\hline ihptoos & \{hp-t-\{oosi\}\} & 1SGS.In-RL-sing & coos \\
\hline ihptooxi & \{hp-t-0oxi\} & 1SGS.In-RL-die & cooxi \\
\hline ihpxahjiit & \{hp-xo-ahjiit\} & 1SGS.IN-Em-fall & cahjiit \\
\hline ihpxaptasa & \{hp-xo-aptasa\} & 1SGS.In-Em-have.bad.luck & captasa \\
\hline ihpxocám & \{hp-xo-cam \(\}\) & 1SGS.In-Em-full & ccam \\
\hline ihpxöaxi & \{hp-xo-ooxi\} & 1SGS.In-Em-die & cooxi \\
\hline ihpxoop & \{hp-xo-ap \} & 1SGS.In-Em-stand & caap \\
\hline ihpyaajc & \{hp-yo-aajc\} & 1SGS.In-DT-yawn & caajc \\
\hline ihpyahamsisiin & \{hp-yo-ah-a-msisiin\} & 1SGS.In-Dt-Pv-Aug-pitiable & camsisiin \\
\hline ihpyahfain & \{hp-yo-ah-fain\} & 1SGS.in-Dt-Pv-tie.up & cfain \\
\hline ihpyahmiiit & \{hp-yo-ah-miiit\} & 1SGS.In-Dt-Pv-ask & cmiiit \\
\hline ihpyahnifz & \{hp-yo-ah-nifz\} & 1SGS.In-DT-Pv-kick & cnifz \\
\hline ihpyahzáxö & \{hp-yo-ah-zaxö\} & 1SGS-In-Dt-Pv-discuss & czaxö \\
\hline ihpyás & \{hp-yo-\{0osi\}\} & 1SGS.In-Dt-sing & coos \\
\hline ihpyazaplc & \{hp-yo-azaplc\} & 1SGS-In-DT-paralyzed.in.legs & cazaplc \\
\hline ihpyiim & \{hp-yo-\{iima\}\} & 1SGS.In-DT-sleep & quiim \\
\hline ihpyomatax & \{hp-yo-m-atax\} & 1SGS.In-Dt-N-go & catax \\
\hline ihpyootax & \{hp-yo-atax\} & 1SGS.In-DT-go & catax \\
\hline ihpyopazt & \{hp-yo-p \({ }_{\text {Abl }}\)-azt \} & 1SGS.In-Dt-Pv-tattoo & quizt \\
\hline ihsaamlquim & \{h-si-aam-lquim & 1SGS.Tr-Ir.Id-cut.Hz-ImpF & caam \\
\hline ihsáp & \{h-sap\} & Im-shoo & csap \\
\hline ihscmazix & \{h-si-m-azix\} & 1SGS.Tr-Ir.Id-N-saw & quizix \\
\hline ihscmexl & \{h-si-m-ēxl\} & 1SGS.Tr-Ir.Id-N-buy & queex \\
\hline ihsexl & \{h-si-ēxl\} & 1SGS.Tr-Ir.ID-buy & queexl \\
\hline ihsiih & \{h-si-ah\} & 1SGS.Tr-Ir.Id-say/put.Fl/do & quih \\
\hline ihsiihit & \{h-si-ahit\} & 1SGS.Tr-Ir.Id-eat & quihit \\
\hline ihsiizix & \{h-si-azix\} & 1SGS.Tr-Ir.ID-saw & quizix \\
\hline ihtaactim & \{h-t-a-actim \(\}\) & 1SGS.Tr-RL-AUG-be.cut & caactim \\
\hline ihtácatx & \{h-t-acatx\} & 1SGS.Tr-RL-release & quicatx \\
\hline ihtacoxl & \{h-t-acoxl\} & 1SGS.Tr-RL-tend & cacoxl \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline ihtahit & \{h-t-ahit \} & 1SGS.Tr-RL-eat & quihit \\
\hline ihtahojöz & \{h-t-ah-ojöz\} & 1SGS.Tr-RL-AUG-mounded & cahojöz \\
\hline ihtamihj & \{h-t-a-omihj \} & 1SGS.Tr-RL-AUG-smooth & camihj \\
\hline ihtamzo & \{h-t-amzo \} & 1SGS.Tr-RL-want & quimzo \\
\hline ihtasi & \{h-t-\{asi\}\} & 1SGS.Tr-RL-drink & quisi \\
\hline ihtaxi & \{h-t-\{axi\}\} & 1SGS.Tr-Rl-finish & quixi \\
\hline ihtemaa & \{h-t-m-aCa\} & 1SgS.Tr-Rl-N-know & quiya \\
\hline ihtemaho & \{h-t-m-aho\} & 1SGS.Tr-Rl-N-see & quiho \\
\hline ihtemamzo & \{h-t-m-amzo \} & 1SGS.Tr-RL-N-want & quimzo \\
\hline ihtemaxi & \{h-t-m-axi\} & 1SGS.Tr-Rl-N-finish & quixi \\
\hline ihtemii & \{h-t-m-ii\} & 1SGS.Tr-Rl-N-hear & quii \\
\hline ihtemiixim & \{h-t-m-iixim \} & 1SGS.Tr-Rl-N-fear & quiixim \\
\hline ihtcomqueepe & \{h-t-m-qu \({ }_{\text {Abl }}\) \{iipe\} \(\}\) & 1SgS.Tr-RL-N-Aug-good & cqueepe \\
\hline ihtíp & \{h-t-ip \} & 1SGS.Tr-Rl-straighten & quiip \\
\hline ihtís & \{h-tis\} & Imp-point.at & ctis \\
\hline ihtitlim & \{h-t-itlim \} & 1SGS.Tr-Rl-kindle & quiitlim \\
\hline ihxomamzo & \{h-xo-m-amzo\} & 1SgS.Tr-Em-N-want & quimzo \\
\hline ihxoqueepe & \{ \(\left.\left.\mathbf{h - x 0 - q u} \mathbf{u s b l}_{\text {abl }} \mathbf{i i p e}\right\}\right\}\) & 1SgS.Tr-Em-AUG-good & cqueepe \\
\hline ihyaa & \{hi-Ø-yaa\} & 1P-ON-own & cyaa \\
\hline ihyaaco & \{hi-yaaco\} & 1P-house & yaaco, haaco \\
\hline ihyaactim & \{h-yo-a-actim \(\}\) & 1SGS.Tr-Dt-AUG-be.cut & caactim \\
\hline ihyaahazxim & \(\left\{h^{\text {- }} \mathbf{y}_{\text {Abl }}\right.\)-ahazxim \} & 1P-PON-sneeze.ImPF & caahzx \\
\hline ihyaalim & \{hi- \(\mathbf{y ~}_{\text {Abl }}\)-aalim \} & 1P-PON-play & caalim \\
\hline ihyaaspoj & \{ \(\mathbf{h i - y}_{\text {- }}^{\text {dul }}\)-aaspoj \} & 1P-PON-AUG.spotted & caaspoj \\
\hline ihyaazi & \{hi-y-aazi\} & 1P-ON-carry & caazi \\
\hline ihyamsisiin & \{h-yo-a-msisiin \(\}\) & 1SgS.Tr-Dt-AUG-pitiable & camsisiin \\
\hline ihyaniicp & \{hi-yaniicp\} & 1P-place.in.front.of & yaniicp \\
\hline ihyás &  & 1P-PON-sing & coos \\
\hline ihyatápolquim & \{h-yo-atápolquim\} & 1SgS.Tr-Dt-Aug.broken & catápolquim \\
\hline ihyaticpan & \{hi-y Abl \(^{\text {aticpan }}\) \} & 1P-PON-work & caticpan \\
\hline ihyatj & \{ \(\mathbf{h i - \mathbf { y } _ { \text { Abl } } \mathbf { 0 t j } \text { \} }}\) & 1P-PON-arise & cotj \\
\hline ihyatólejquim & \{h-yo-atólejquim\} & 1SGS.Tr-Dt-ask.for.help.ImpF & catolec \\
\hline ihyazix & \(\left\{\mathbf{h i}^{\left.-\mathbf{y}_{\text {Abl }}-\mathbf{O}_{\text {Abl }}-\mathbf{a z i x}\right\}}\right.\) & 1P-PON-UO-saw & coozix, quizix \\
\hline ihyexl & \{h-yo-ēxl\} & 1SGS.Tr-Dt-take & quiix \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline ihyisxö & \{h-yo-isxö \(\}\) & 1SGS.Tr-Dt-hide & quiisxö \\
\hline ihyoaa & \{h-yo-aCa\} & 1SGS.Tr-Dt-know & quiya \\
\hline ihyoáxz & \{h-yo-Caxz\} & 1SGS.Tr-Dt-hit.Hz & ccaxz \\
\hline ihyoii & \{h-yo-Cii\} & 1SGS.Tr-Dt-feel & cquii \\
\hline ihyomaa & \{h-yo-m-aCa\} & 1SGS.Tr-Dt-N-know & quiya \\
\hline ihyomaamac & \{h-yo-m-aamac\} & 1SGS.Tr-Dt-N-? & caamac \\
\hline ihyomamzo & \{h-yo-m-amzo\} & 1SgS.Tr-Dt-N-want & quimzo \\
\hline ihyomoozi & \{h-yo-moozi\} & 1SGS-Tr-dream.about & cmoozi \\
\hline ihyomqueepe & \{h-yo-m-qu \(\mathbf{A b l}_{\text {abl }}\) \{iipe \(\}\) \} & 1SGS.Tr-Dt-N-AUG-good & cqueepe \\
\hline ihyoníp & \{h-yo-\{nipa\}\} & 1SGS.Tr-Dt-hit & cnip \\
\hline ihyonípatim & \{h-yo-\{nipa\}-tim & 1SGS.Tr-Dt-hit-ImpF & cnip \\
\hline ihyoohit & \{h-yo-ahit\} & 1SgS.Tr-Dt-eat & quihit \\
\hline ihyooho & \{h-yo-\{aho\}\} & 1SgS.Tr-Dt-see & quiho \\
\hline ihyooxi & \{h-yo-\{axi\}\} & 1SGS.Tr-Dt-finish & quixi \\
\hline ihyoqueepe & \{ \(\mathbf{h - y o} \mathbf{- q u} \mathbf{u s b l}_{\text {Abl }}\) \{iipe \(\left.\}\right\}\) & 1SgS.Tr-Dt-Aug-good & cqueepe \\
\hline iicöla & \{i-Ø-acöla\} & \(3 \mathrm{P}-\mathrm{PON}-\mathrm{long} /\) tall & cacöla \\
\hline iicom & \{i-Ø-ca-oom \(\left.{ }_{\text {Irreg }}\right\}\) & 3P-PON-US-lie & coom \\
\hline iicot & \{i-VVcot\} & 3P-between & iicot \\
\hline iicot & \{i-VVcot\} & 3P-with.PL & iihax \\
\hline iicp \({ }^{18}\) & \{i-VVcp\} & 3P-place.next.to & iicp \\
\hline iictim & \{i-Ø-iictim\} & 3P-PON-be.cut & iictim, cactim \\
\hline iicto & \{i-Ø-iicto \(\}\) & 3P-ON-pregnant.with.ImPF & quiiquet \\
\hline iif & \{i-VVf \(\}\) & \(3 \mathrm{P}-\mathrm{nose}\) & iif \\
\hline iifa & \{i-VVfa\} & 3P-peninsula & iifa \\
\hline iifp & \{i-Ø-\{afap\}\} & \(3 \mathrm{P}-\mathrm{PON}\)-arrive & caafp \\
\hline iihax & \{i-VVhax\} & 3P-with.SG & iihax \\
\hline iihca & \{i-Ø-ahca\} & 3P-PON-be.located & cahca \\
\hline iihca & \{i-Ø-ahca\} & \(3 \mathrm{P}-\mathrm{PON}\)-sit.PL & quiij \\
\hline iihjoj & \{i-VVhjoj \(\}\) & 3P-limb.Pl & iiha \\
\hline iihom & \{i-h-oom \({ }_{\text {Irreg }}\) \} & 3P-PON-lie & coom \\
\hline iima & \{i-Ø-âama\} & \(3 \mathrm{P}-\mathrm{PON}\)-? & cama \\
\hline iime & \{i-VVme\} & 3P-home & iime \\
\hline
\end{tabular}

\footnotetext{
\({ }^{18}\) See also the adverb iicp towards.
}
\begin{tabular}{|c|c|c|c|}
\hline iimx & \{i-Ø-amx \(\}\) & 3P-PON-say & quimx \\
\hline iimzo & \{i-Ø-amzo & 3P-PON-want & quimzo \\
\hline iionam & \{i-VVonam \(\}\) & 3P-hat & iionam \\
\hline iipca & \{i-Ø-apea \(\}\) & 3P-PON-rain & capca \\
\hline iiquet & \{i-Ø-iiquet\} & 3P-ON-pregnant.with & quiiquet \\
\hline iiqui & \{i-VVqui\} & 3P-toward/with & iiqui \\
\hline iisax & \{i-VVsax\} & 3P-? & iisax \\
\hline iiseja & \{i-VVseja\} & 3P-wing/branch & iiseja \\
\hline iiselca & \{i-VVselca\} & 3P-wing/branch.PL & iiseja \\
\hline iistox & \{i-VVstox\} & 3P-?.PL & iisax \\
\hline iitax & \{i-Ø-atax \(\}\) & 3P-PON-go & catax \\
\hline iitom & \{i-Ø-âaitom \(\}\) & 3P-PON-speak & caaitom \\
\hline iitxo & \(\{\mathrm{i}-\varnothing\)-atxo \(\}\) & 3P-PON-many/much & catxo \\
\hline iix & \(\{\mathrm{i}-\mathrm{VV} \mathbf{x}\) \} & 3P-water & iix, hax \\
\hline iixaj & \{i-Ø-âaixaj\} & 3P-PON-strong & caaixaj \\
\hline iixquim & \{i-Ø-axquim \(\}\) & 3P-PON-put.Hz & quixquim \\
\hline iiye & \{i-yo-e \({ }_{\text {Irreg }}\) \} & 3:3-DT-give.gift & iique \\
\hline iizax \({ }^{19}\) & \{i-VVzax\} & 3P-moon/month & iizax \\
\hline iize & \{i-VVzc\} & 3P-front.(as of body)/wall & iize \\
\hline iizcam & \{i-Ø-azcam\} & 3P-PON-arrive.PL & caafp \\
\hline iizix & \{i-Ø-azix \(\}\) & 3P-PON-saw & quizix \\
\hline iiztox & \{i-VVztox \(\}\) & 3P-moon/month.PL & iizax \\
\hline ilít & \{i-lit\} & 3P-head/hair & ilít \\
\hline ima & \{i-m-a \(\mathbf{I I r r e g}\) \} & \(3 \mathrm{P}-\mathrm{N}-\mathrm{be}\) Irreg & haa \\
\hline imaa & \(\{\mathbf{i}-\varnothing\)-m-aCa \(\}\) & 3P-PON-N-know & quiya \\
\hline imaa & \{i-i-m-aCa\} & SN-Tr-N-know & quiya \\
\hline imaafe & \{i-mi-aafc \} & 3:3-Px-pound & caafe \\
\hline imaait & \{i-mi-aait\} & 3:3-Px-pass.by.Pl & caao \\
\hline imaaitom & \{i-m-aaitom \(\}\) & SN-N-speak & caaitom \\
\hline imaaitom & \{i-mi-aaitom \(\}\) & 3:3-Px-Aug.five & caaitom \\
\hline
\end{tabular}

\footnotetext{
\({ }^{19}\) Nouns such as this one (beginning with \(\mathbf{i}\) or ii) could be analyzed as possessed nouns (which for obvious reasons only occur with third person possessor) or simple nouns. The 2005 dictionary listed iizax as a simple noun. However, the use of iizax with various expressions in the names of months (see chapter 15 ) seem to indicate that the word may in fact be a possessed noun, as shown here.
}
\begin{tabular}{|c|c|c|c|}
\hline imaaixaj & \{i-m-âaixaj\} & SN-N-strong & caaixaj \\
\hline imaaizi & \{i-mi-aai-zi\} & 3:3-Px-make-PL & caai \\
\hline imaasij & \(\{\mathbf{i}-\varnothing\)-maasij \(\}\) & 3:3-PON-roll & cmaasij \\
\hline imaaspoj \(^{\text {20 }}\) & \{i-m-aaspoj\} & SN-N-AUG.spotted & caaspoj \\
\hline imac & \{i-Vmac\} & 3P-midst/middle & imac \\
\hline imacaaitic & \{i-mi-ac-âaitic\} & 3:3-Px-AUG-soft & cacaaitic \\
\hline imacaalim & \{i-mi-ac-aalim \(\}\) & 3:3-Px-Aug-play & cacaalim \\
\hline imacapat & \{i-m-a-\{capa\}-ot\} & SN-N-AUG-fly-? & cacapat \\
\hline imacösxaj & \{i-m-acösxaj\} & SN-N-tall/long & cacösxaj \\
\hline imafitot & \{i-mi-a-fit-ot\} & 3:3-Px-Aug-stand-? & cafitot \\
\hline imahatalhaa & \{i-m-ah-italhaa\} & SN-N-Pv-buy/sell & quitalhaa \\
\hline imahca & \{i-m-ahca \(\}\) & SN-N-be.located & cahca \\
\hline imahit & \{i-i-m-ahit\} & SN-Tr-N-eat & quihit \\
\hline imahit & \{i-Ø-m-ahit\} & 3P-ON-N-eat & quihit \\
\hline imaho & \{i-i-m-aho \} & SN-Tr-N-see & quiho \\
\hline imahtai & \{i-m-ah-itai\} & SN-N-PV-overcome & quitai \\
\hline imal & \{i-i-m-al \(\left.{ }_{\text {Irreg }}\right\}\) & 3SN-TR-N-accompany & ical \\
\hline imám & \{i-mam \} & 3P-fruit & imám \\
\hline imám & \{i-Ø-m-am\} & 3P-PON-N-swallow & quim \\
\hline imám & \{i-Ø-mam\} & 3P-PON-ripe/cooked & cmam \\
\hline imamaai & \{i-m-amaai\} & 3:3-Px-roast.with.brush.on.top & camaai \\
\hline imapii & \{i-m-a-pii\} & SN-N-AUG-taste & capii \\
\hline imasi & \{i-m-asi\} & SN-N-drink & quisi \\
\hline imatax & \{i-m-atax\} & SN-N-go & catax \\
\hline imatolec & \{i-mi-atolec\} & 3:3-Px-ask.for.help & catolec \\
\hline imazeee & \{i-mi-a-zeee \(\}\) & 3:3-Px-AUG-coil.filler & cazeee \\
\hline imazix & \{i-i-m-azix\} & SN-Tr-N-saw & quizix \\
\hline imcaatax & \{i- \(\varnothing\)-m-ca-atax \(\}\) & \(3 \mathrm{P}-\mathrm{PON}-\mathrm{N}-\mathrm{US}-\mathrm{go}\) & catax \\
\hline imcahaatxo & \{mi-ca-ah-atxo \(\}\) & Px-1Em.S.In-Times-many & cahaatxo \\
\hline imcám & \{i-m-cam & SN-N-full & ccam \\
\hline imcofeaa & \{m-c-ofeaa\} & 2SGS-SN-have.good.eyesight & cofeaa \\
\hline imcooit & \{mo-c-ooit & Twd-SN-arrive & imcooit \\
\hline
\end{tabular}

\footnotetext{
\({ }^{20}\) This could also be transitive and putatively have the prefix i- (§14.1.1) after the nominalizer, but it does not show up for phonological reasons.
}
\begin{tabular}{|c|c|c|c|}
\hline imex & \{i-i-m-ēxl \(\}\) & SN-Tr-N-buy & queex \\
\hline imexl & \{i-i-m-ēxl\} & SN-Tr-N-take & quiix \\
\hline imexl & \{i-mi-ēxl\} & 3:3-Px-take & quiix \\
\hline imfain & \{i-mi-fain\} & 3:3-Px-tie.up & cfain \\
\hline imhaa & \{i-m-has \(\}\) & SN-N-EQ & chaa \\
\hline imhaa & \{mi-haa\} & Px-EQ & chaa \\
\hline imhaait & \{mi-haait \({ }^{\text {d }}\) & Px-blood & chaait \\
\hline imhamoc & \{mi-hamoc\} & Px-night & chamoc \\
\hline imheel & \{mi-heel\} & Px-red & cheel \\
\hline imhoozi & \{mo-h-00zi\} & Twd-Im-carry & imcoozi \\
\hline imihiimtoj & \{i-m-\{ihiimet\}-toj \} & SN-N-married-PL & quihiimet \\
\hline imii & \{i-mi-ai\} & 3:3-Px-tell & quii \\
\hline imii & \{i-mi-ii\} & 3:3-Px-hear & quii \\
\hline imiicmolca & \{i-mi-acmolca\} & 3:3-Px-put.items.Pl.ImpF & quiquim \\
\hline imiicö & \{i-mi-acö\} & 3:3-Px-kill & quicö \\
\hline imiih & \{i-mi-ah\} & 3:3-Px-say/do/put.FL & quíh \\
\hline imiih & \{i-m-iih\} & SN-N-be.Fl & quiih \\
\hline imiih & \{i-Ø-miih \({ }^{21}\) \} & 3P-PON-not.be.FL & cmiih \\
\hline imiihit & \{i-mi-ahit\} & 3:3-Px-eat & quihit \\
\hline imiiho & \{i-mi-\{aho\}\} & 3:3-Px-see & quiho \\
\hline imiiht & \{i-mi-\{aho\}-ot\} & 3:3-Px-see-Pl & quiho \\
\hline imiii & \{i-mi-aii\} & 3:3-Px-say.Pl & quíh \\
\hline imiiitoj & \{i-mi-aiitoj\} & 3:3-Px-eat.PL & quihit \\
\hline imiiix & \{i-mi-âaix\} & 3:3-Px-go.away.from & quiiix \\
\hline imiimcajc & \{i-mi-amcajc\} & 3:3-Px-want.PL & quimzo \\
\hline imiimje & \{i-mi-amjc\} & 3:3-Px-bring/take & quimjc \\
\hline imiimlajc & \{i-mi-amlaje\} & 3:3-Px-bring/take.PL & quimjc \\
\hline imiimzo & \{i-mi-amzo \(\}\) & 3:3-Px-want & quimzo \\
\hline imiipala & \{i-Ø-miipala \} & 3P-PON-bad.ImPF & cmiipla \\
\hline imiipe & \{i-m-\{iipe\}\} & SN-N-good & quiipe \\
\hline imiipla & \{i-Ø-miipla\} & 3P-PON-bad & cmiipla \\
\hline imiipox & \{i-mi-apox\} & 3:3-Px-pull.out & quipox \\
\hline
\end{tabular}

\footnotetext{
\({ }^{21}\) The stem is historically derived from the negative prefix \(\mathbf{m}\) - and the root iih (be.FL). See Marlett (2002).
}
\begin{tabular}{|c|c|c|c|}
\hline imiiquim & \{i-mi-aquim \(\}\) & 3:3-Px-put.items & quiquim \\
\hline imiisi & \{i-mi-asi\} & 3:3-Px-drink & quisi \\
\hline imiixim & \{i-mi-iixim \(\}\) & 3:3-Px-fear & quiixim \\
\hline imiixquim & \{i-mi-axquim\} & 3:3-Px-put.Hz & quixquim \\
\hline imiiznij & \{i-mi-aznij\} & 3:3-Px-stew & quiznij \\
\hline imisil & \{i-m-isil\} & SN-N-small & quisil \\
\hline imitaaicol & \{i-i-m-itaai-col \(\}\) & SN-Tr-N-compare.with-PL & quitai \\
\hline imitaamt & \{i-m-i-taamt \(\}\) & SN-N-HAVE-sandal(s) & quitaamt \\
\hline imiya & \{i-mi-aCa\} & 3:3-Px-know & quiya \\
\hline imiye & \{i-mi-eCe\} & 3:3-Px-give.food & quiye \\
\hline immám & \{i-m-mam\} & SN-N-cooked/ripe & cmam \\
\hline immám & \{mi-mam & Px-cooked/ripe & cmam \\
\hline immamsisiin & \{m-mi-a-msisiin\} & 2SGS-Px-Aug-pitiable & camsisiin \\
\hline immátiscal & \{i-m-matiscal\} & SN-N-braggart.IMPF & cmatsj \\
\hline immiih & \{i-m-miiih \({ }^{22}\) \} & SN-N-not.be.FL & cmiih \\
\hline immiih & \(\left\{\mathrm{mi}-\mathrm{miih}{ }^{23}\right.\) \} & Px-not.be.FL & cmiih \\
\hline immiih & \{m-mi-iih & 2SGS-Px-be.Fl & quiih \\
\hline immiipla & \{i-Ø-m-miipla\} & 3P-PON-N-bad & cmiipla \\
\hline immimjöc & \{i-mi-Cimjöc\} & 3:3-Px-think.PL & cquimoz \\
\hline immís & \{i-i-m-mis\} & SN-Tr-N-resemble & cmis \\
\hline immís & \{i-mi-mis\} & 3:3-Px-resemble & cmis \\
\hline immisa & \{mo-m-si- \(\mathrm{a}_{\text {Irreg }}\) \} & Twd-2SGS-Ir.Id-move & moca \\
\hline immooit & \{mo-mi-ooit \({ }^{\text {d }}\) & Twd-Px-arrive & imcooit \\
\hline imocaj & \{i-mocaj\} & 3P-place.under.PL & imocl \\
\hline imocl & \{i-mocl\} & 3P-place.under & imocl \\
\hline imoocta & \{i-i-m-oocta \(\}\) & SN-Tr-N-look.at & coocta \\
\hline imoocta & \{i-mi-oocta \(\}\) & 3:3-Px-look.at & coocta \\
\hline imooctam & \{i-mi-oocta-m\} & 3:3-Px-look.at-PL & coocta \\
\hline imooit & \{i-m-ooit\} & SN-N-arrive & cooit \\
\hline imoopol & \{i-m-oopol\} & SN-N-black & coopol \\
\hline imoos & \{i-m-\{oosi \(\}\) \} & SN-N-sing & coos \\
\hline
\end{tabular}

\footnotetext{
\({ }^{22}\) The stem is historically derived from the negative prefix m- and the root iih (be.FL). See Marlett (2002).
\({ }^{23}\) The stem is historically derived from the negative prefix \(\mathbf{m}\) - and the root iih (be.FL). See Marlett (2002).
}
\begin{tabular}{|c|c|c|c|}
\hline imooxp & \{i-m-00xp \(\}\) & SN-N-white & cooxp \\
\hline imoozix & \{i-m-o \(\mathbf{o l b l}^{\text {azix }}\) - \({ }^{\text {a }}\) \} & SN-N-UO-saw & coozix, quizix \\
\hline imoqueepe & \{i-Ø-moqueepe\} & 3P-PON-sick & cmoqueepe \\
\hline imoz & \{i-Vmoz\} & 3P-heart & imoz \\
\hline imozaainim & \{i-m-ozaainim\} & SN-N-anchored & cozaainim \\
\hline imozít & \{i-mozít\} & 3P-middle/half & imozít \\
\hline impaapxa & \(\left\{\mathbf{m - p o - a} \mathbf{a b l}^{\text {appxa }}\right.\) \} & 2SGS-Ir.Dp-times-three & caapxa \\
\hline impacat & \{m-po-ācat & 2SGS-Ir.Dp-swim & cacat \\
\hline impacta & \(\left\{\mathrm{i}-\mathrm{m}-\mathbf{p}_{\text {Abl }} \mathbf{0 o c t a}\right\}\) & SN-N-Pv.look.at & coocta \\
\hline impacta & \{i-m-pacta\} & SN-N-be.in.appearance & hapacta \\
\hline impacta & \{mi-pacta\} & Px-be.in.appearance & hapacta \\
\hline Impafc & \(\left\{\mathbf{i - m}-\mathbf{p}_{\text {Abl }} \mathbf{- a a f c}\right\}\) & SN-N-Pv-pound & caafe \\
\hline impáh & \(\left\{\mathbf{m i}^{\left.-\mathbf{p}_{\text {Abl }}-\mathbf{a h}\right\}}\right.\) & Px-PV-say & quih \\
\hline impaho & \(\left\{\mathbf{i - m - \mathbf { p } _ { \text { Abl } } - \mathbf { a h o }}\right.\) \} & SN-N-PV-see & quiho \\
\hline impaii & \(\left\{\mathbf{i}-\varnothing\right.\)-m-p \(\mathbf{p}_{\text {Abl }}\)-aai \(\}\) & 3P-PON-N-PV-make & caai \\
\hline impanaaaij & \{m-po-onaaaij\} & 2SGS-Ir.Dp-return & conaaaij \\
\hline impás & \{m-po-oos\} & 2SGS-Ir.Dp-sing & coos \\
\hline impaxpx & \(\left\{\mathbf{i}-\varnothing\right.\)-m-p \(\mathbf{p a b l}^{\text {axpx }}\) \} & 3P-ON-PV-mad.at & quixpx \\
\hline impazix & \{i-m-p \(\mathbf{p a b l}^{\text {-azix }}\) \} & SN-N-PV-saw & quizix \\
\hline impazix & \{i-Ø-m-p \(\mathbf{p a b l}^{\mathbf{a z i x}}\) \} & 3P-PON-N-PV-saw & quizix \\
\hline impezi & \(\left\{\mathbf{i}-\mathbf{m}-\mathbf{p}_{\text {Abl }} \mathbf{i z i}\right\}\) & SN-N-PV-defeat & quiizi \\
\hline impoct & \{mi-poct \({ }^{\text {d }}\) & Px-full & cpoct \\
\hline impomoos & \{m-po-m-\{0osi\}\} & 2SGS-Ir.Dp-N-sing & coos \\
\hline impoofp & \{m-po-\{afap\}\} & 2SGS-Ir.Dp-arrive & caafp \\
\hline impoohit & \{m-po-ahit \(\}\) & 2SGS-Ir.Dp-eat & quihit \\
\hline impooho & \{m-po-aho \} & 2SGS-Ir.Dp-see & quiho \\
\hline impoom & \{m-po-am \(\}\) & 2SGS-Ir.Dp-swallow & quim \\
\hline impoomzo & \{m-po-amzo \(\}\) & 2SGS-Ir.Dp-want & quimzo \\
\hline impooxi & \{m-po-\{axi\}\} & 2SGS-Ir.Dp-finish & quixi \\
\hline impopanzx & \{m-po-panzx\} & 2SGS-Ir.Dp-run & cpanzx \\
\hline impoqueejc & \(\left\{\mathbf{m - p o - q u} \mathbf{u m b l}^{\text {- }}\right.\) iije \(\left.\mathbf{c}\right\}\) & 2SGS-Ir.Dp-Aug-wet & cqueejc \\
\hline imqueepe & \(\{\mathbf{i - m i - q u} \mathbf{A b l}\) \{iipe \(\}\}\) & 3:3-PX-AUG-good & cqueepe \\
\hline imquiin & \{mo-qu-iin\} & Twd-SN-go & imquiin \\
\hline imxanoocaj & \{m-xo-anoocaj\} & 2SGS-Em-carry.in.arms & canoocaj \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline imxoma & \{mo-xo-m- \(\mathbf{a l}_{\text {Irreg }}\) \} & Twd-Em-N-move & moca \\
\hline imxomotet & \{m-xo-motet \(\}\) & 2SGS-Em-heavy & cmotet \\
\hline ina & \{i-Vna\} & 3P-feather/fur & ina \\
\hline inaail & \{i-naail\} & 3P-skin/shell & inaail \\
\hline ine & \{i-Vne\} & 3P-mucus & ine \\
\hline innopin & \{i-m-nopin\} & SN-N-convex & cnopin \\
\hline innopin & \{mi-nopin\} & Px-convex & cnopin \\
\hline inol & \{i-Vnol\} & 3P-finger/hand/arm & inol \\
\hline inoohcö & \{i-Ø-noohcö\} & 3P-PON-concave & cnoohcö \\
\hline inoosj & \{i-noosj\} & 3P-fingernail & inoosj \\
\hline insaai & \{m-si-aai\} & 2SGS-Ir.ID-make & caai \\
\hline insahiti & \{m-si-ah-iti\} & 2SGS-Ir.Id-Aug-connected & cahiti \\
\hline insanzaait & \{m-si-anzaait \(\}\) & 2SGS-Ir.ID-careful.with & canzaait \\
\hline insaticpan & \{m-si-aticpan\} & 2SGS-Ir.ID-work & caticpan \\
\hline inscmaa & \{m-si-m-aCa\} & 2SGS-Ir.Id-N-know & quiya \\
\hline inscmaai & \{m-si-m-aai\} & 2SGS-Ir.Id-N-make & caai \\
\hline inscmácatx & \{m-si-m-acatx \(\}\) & 2SGS-Ir.Id-N-release & quicatx \\
\hline inscmexl & \{m-si-m-ēxl\} & 2SGS-Ir.Id-N-take & quiixl \\
\hline inscmimoz & \{m-si-m-i-Vmoz\} & 2SGS-Ir.Id-N-HAVE-heart & quimoz \\
\hline insexl & \{m-si-ēxl\} & 2SGS-Ir.ID-buy & queex \\
\hline insexl & \{m-si-ēxl\} & 2SGS-Ir.Id-take & quiix \\
\hline insiifp & \{m-si-\{afap \(\}\) \} & 2SGS-Ir.ID-arrive & caafp \\
\hline insiihit & \{m-si-ahit\} & 2SGS-Ir.ID-eat & quihit \\
\hline insiimje & \{m-si-amjc\} & 2SGS-Ir.Id-bring & quimjc \\
\hline insiisi & \{m-si-asi\} & 2SGS-Ir.ID-drink & quisi \\
\hline insiitax & \{m-si-atax \(\}\) & 2SGS-Ir.Id-go & catax \\
\hline insiixi & \{m-si-axi\} & 2SGS-Ir.ID-finish & quixi \\
\hline insiizquim & \{m-si-azquim \(\}\) & 2SGS-Ir.Id-enter & cazquim \\
\hline insiya & \{m-si-aCa \(\}\) & 2SGS-Ir.Id-know & quiya \\
\hline insmoqueepe & \{m-si-moqueepe \(\}\) & 2SGS-Ir.ID-sick & cmoqueepe \\
\hline insoocta & \{m-si-oocta \(\}\) & 2SGS-Ir.ID-look.at & coocta \\
\hline insooha & \{m-si-ooha\} & 2SGS-Ir.ID-cry & cooha \\
\hline insooploj & \{mi-soop-loj \} & Px-thick-PL & csoop \\
\hline inszáxö & \{m-si-zaxö\} & 2SGS-Ir.ID-discuss & czaxö \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline intaactim & \{m-t-a-actim \(\}\) & 2SGS-RL-AUG-be.cut & caactim \\
\hline intácatx & \{m-t-acatx\} & 2SGS-RL-release & quicatx \\
\hline intahahásaquim & \{m-t-ah-ah-asaquim \(\}\) & 2SGS-RL-Pv-AUG-comb.one's.hair & cahásaquim \\
\hline intahit & \{m-t-ahit \(\}\) & 2SGS-Rl-eat & quihit \\
\hline intaho & \{m-t-aho \} & 2SGS-RL-see & quiho \\
\hline intahoaatjö & \{m-t-ah-oaatjö\} & 2SGS-RL-AUG-sweet & cahoaatjö \\
\hline intamsisiin & \{m-t-a-msisiin\} & 2SGS-RL-AUG-pitiable & camsisiin \\
\hline intamzo & \{m-t-amzo \} & 2SGS-RL-want & quimzo \\
\hline intaxi & \{m-t-\{axi\}\} & 2SGS-Rl-finish & quixi \\
\hline intazooxöc & \{m-t-a \(\mathbf{a b l b l}^{\text {-zooxöc }}\) \} & 2SGS-Rl-Times-four & cazooxöc \\
\hline intemaa & \{m-t-m-aCa\} & 2SGS-RL-N-know & quiya \\
\hline intemaho & \{m-t-m-aho \} & 2SGS-RL-N-see & quiho \\
\hline intconzám & \{m-t-m-zam \(\}\) & 2SGS-RL-N-put.VT & czam \\
\hline intheyahaazi & \{nt-he-yo-ah-aazi\} & Aw-3IO+1DO-Dt-Pv-carry & caazi \\
\hline intiom & \{m-t-\{iima\}\} & 2SGS-RL-sleep & quiim \\
\hline intisil & \{m-t-isil\} & 2SGS-RL-small & quisil \\
\hline intita & \{nt-t-a Irreg \} & Aw-RL-move & intica \\
\hline intíyatoj & \{nt-yo-a \(\mathbf{a}_{\text {Irreg }}\)-toj \(\}\) & Aw-Dt-move-Pl.Impf & intica \\
\hline intmesoozi & \{nt-me-si-oozi\} & Aw-3IO+2DO-Ir.ID-carry & contcoozi \\
\hline intmoqueepe & \{m-t-moqueepe\} & 2SGS-RL-sick & cmoqueepe \\
\hline intooit & \{mo-t-ooit\} & Twd-RL-arrive & imcooit \\
\hline intpaxi & \{m-t-p \({ }_{\text {Abl }} \mathbf{a x i}\) \} & 2SGS-Rl-Pv-finish & quixi \\
\hline intqueepe & \{m-t-qu Abl \(^{\text {- }}\) (iipe \(\left.\}\right\}\) & 2SGS-RL-AUG-good & cqueepe \\
\hline inttii & \{m-t-Cii \(\}\) & 2SGS-RL-feel & cquii \\
\hline inyaa & \{mi- \(\varnothing\)-yaa\} & 2P-ON-own & yaa, cyaa \\
\hline inyaacj & \(\left\{\mathbf{m i}^{\left.\left.-\mathbf{y}_{\text {Abl }} \mathbf{a}_{\text {Abl }} \text { \{oocaj }\right\}\right\}}\right.\) & 2P-PON-Times-two & caacj \\
\hline inyaacni & \{mi-yaacni\} & 2P-bow & yaacni, haacni \\
\hline inyaaco & \{mi-yaaco \} & 2P-house & yaaco, haaco \\
\hline inyaait & \{mo-yo-ooit \(\}\) & Twd-Dt-arrive & imcooit \\
\hline inyaazi & \{mi-y-aazi\} & 2P-ON-carry & caazi, yaazi \\
\hline inyaazoj & \{mi-y \(\left.\mathbf{y}_{\text {Abl }} \mathbf{- a}_{\text {Abl }}-\mathbf{a z o j}\right\}\) & 2P-PON-TimES-alone/one & caazoj \\
\hline inyahaatxo & \{m-yo-ah-atx0 \(\}\) & 2SgS-Dt-Times-many & cahaatxo \\
\hline inyáhitim & \{mi- \(\mathbf{y ~}_{\text {Abl }} \mathbf{0}_{\text {Abl }}\)-ahit-tim \(\}\) & 2P-PON-UO-eat & coohit, quihit \\
\hline inyazix & \(\left\{\mathbf{m i}-\mathbf{y}_{\mathrm{Abl}}-\mathbf{0}_{\text {Abl }}-\mathbf{a z i x}\right\}\) & 2P-PON-UO-saw & coozix, quizix \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline inyompezi & \{m-yo-m-p \({ }_{\text {Abl }}\)-izi \(\}\) & 2SGS-DT-N-PV-defeat & quiizi \\
\hline inzooxöc & \{mi-zooxöc\} & Px-four & czooxöc \\
\hline ipaai & \{i-po-aai\} & 3:3-Ir.Dp-make & caai \\
\hline ipaainj & \{i-Ø-paainj\} & 3P-PON-tumble & cpaainj \\
\hline ipac & \{i-Vpac\} & 3P-back/place.behind & ipac \\
\hline ipácotim & \{i-Ø-p \(\mathbf{p}_{\text {Abl }}\)-aco-tim \(\}\) & 3P-PON-Pv-kill-ImpF & quicö \\
\hline ipacta & \{i-Ø-pacta\} & 3P-PON-be.in.appearance & hapacta \\
\hline ipaho & \(\left\{\mathbf{i}-\varnothing-\mathbf{p}_{\text {Abl }} \mathbf{- a h o}\right\}\) & 3P-PON-PV-see & quiho \\
\hline ipaloj & \{i-\{Vpal\}-0j\} & 3P-tongue-PL & ipl \\
\hline ipanzx & \{i-Ø-panzx\} & \(3 \mathrm{P}-\mathrm{PON}\)-run & cpanzx \\
\hline ipapjö & \{i-Ø-p \(\mathbf{p a b l}_{\text {Abapjö }}\) \} & 3P-PON-Pv-illuminate & caapjö \\
\hline ipasi & \(\left\{\mathbf{i}-\varnothing\right.\)-p \(\mathbf{p a b l}^{\text {asi }}\) \} & \(3 \mathrm{P}-\mathrm{PON}-\mathrm{PV}\)-drink & quisi \\
\hline ipazix & \(\left\{\mathbf{i}-\varnothing-\mathbf{p}_{\text {Abl }}-\mathbf{a z i x}\right\}\) & 3P-PON-PV-saw & quizix \\
\hline ipemt & \{i-Ø-p \(\mathbf{p}_{\text {Abl }} \mathbf{i m t}\) \} & \(3 \mathrm{P}-\mathrm{PON}-\mathrm{PV}\)-rub & quiimt \\
\hline ipén & \{i-Ø-p \(\left.\mathbf{p}_{\text {Abl }} \mathbf{- o o n}\right\}\) & 3P-PON-PV-carry.items & coon \\
\hline ipl & \{i-\{Vpal\} \(\}\) & 3P-tongue & ipl \\
\hline ipocaat & \{i-po-caat\} & 3:3-Ir.Dp-yank & ccaat \\
\hline ipocaiit & \{i-po-caiit\} & 3:3-Ir.Dp-spear/shoot & ccaiit \\
\hline ipoocötoj & \{i-po-acö-toj\} & 3:3-Ir.Dp-kill-PL & quicö \\
\hline ipoohit & \{i-po-ahit\} & 3:3-Ir.Dp-eat & quihit \\
\hline ipooho & \{i-po-aho \(\}\) & 3:3-Ir.Dp-see & quiho \\
\hline ipoopox & \{i-po-apox\} & 3:3-Ir.DP-pull.out & quipox \\
\hline ipooxi & \{i-po-\{axi\}\} & 3:3-Ir.Dp-finish & quixi \\
\hline ipot & \{i-Vpot\} & 3P-bottom & ipot \\
\hline ipxasi & \{i-pxasi\} & 3P-flesh & ipxasi \\
\hline iquícolim & \{i-ca-Ø-icolim \(\}\) & 3P-US-PON-sit.ImPF & quiij \\
\hline iquihehe & \{ica-i-hehe \} & Inf.IN-HAVE-stick/plant & quihehe \\
\hline iquihit & \{i-qu-i-ahit\} & 3:3-SN-Tr-eat & quihit \\
\hline iquiht & \{i-qu-i-\{aho\}-t \(\}\) & 3:3-SN-Tr-see-PL & quiho \\
\hline iquiih & \{ica-iih\} & Inf.In-be.Fl & quiih \\
\hline iquiim & \{ica-\{ima\}\} & Inf.In-sleep & quiim \\
\hline iquiin & \{ica-iin\} & Inf.In-go & quiin \\
\hline iquiionam & \{ica-i-VVonam \(\}\) & Inf.IN-HAVE-hat & quiionam \\
\hline iquiip & \{ica-\{iipe\}\} & Inf.In-good & quiipe \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline iquiisax & \{i-ca-Ø-iisax\} & 3P-US-PON-have.life & ihiisax \\
\hline iquiisaxim & \{ica-iisax-tim\} & Inf.In-have.life-ImpF & quiisax \\
\hline iquiistox & \{i-ca-Ø-iistox\} & 3P-US-PON-have.life-PL & iquiisax \\
\hline iquiixim & \{i-qu-i-iixim \(\}\) & 3:3-SN-Tr-fear & quiixim \\
\hline iquitaamt & \{ica-i-taamt \({ }^{\text {a }}\) & Inf.IN-HAVE-sandal(s) & quitaamt \\
\hline iquitj & \{i-Ø-ca-i-Vtj \(\}\) & 3:3-PON-US-HAVE-trunk.of.body & quitj \\
\hline iquitzil & \{i-Ø-ca-i-Vtzil\} & 3P-PON-HAVE-trunk.of. body.PL & quitj \\
\hline isaai & \{i-si-aai\} & 3:3-Ir.Id-make & caai \\
\hline isaazi & \{i-si-aazi\} & 3:3-Ir.ID-carry & caazi \\
\hline isahaapl & \{i-si-ah-aapl\} & 3:3-Ir.ID-AUG-cold & cahaapl \\
\hline isahii & \{i-si-ah-Cii\} & 3P-Ir.Id-Pv-feel & cquii \\
\hline isaraapi & \{i-saraapi\} & 3P-blanket & saraapi \\
\hline isataaho & \{i-si-ataaho \} & 3:3-Ir.Id-Aug.be.ready & cataaho \\
\hline iscmáhitim & \{i-si-m-ahit-tim \} & 3:3-Ir.Id-N-eat-ImpF & quihit \\
\hline iscmaho & \{i-si-m-\{aho\}\} & 3P-Ir.ID-N-see & quiho \\
\hline iscmexl & \{i-si-m-ēxl\} & 3:3-Ir.ID-N-take & quiixl \\
\hline iscompazix & \{i-si-m-p \(\left.{ }_{\text {Abl }}-\mathbf{a z i x}\right\}\) & 3P-Ir.Id-N-PV-saw & quizix \\
\hline isct & \{i-Vsct \(\}\) & 3P-lung & isct \\
\hline isexl & \{i-si-ēxl\} & 3:3-Ir.ID-buy & queexl \\
\hline isiifp & \{i-si-\{afap \(\}\) \} & 3P-IR.ID-arrive & caafp \\
\hline isiihit & \{i-si-ahit\} & 3:3-Ir.ID-eat & quihit \\
\hline isiiho & \{i-si-aho \(\}\) & 3:3-Ir.ID-see & quiho \\
\hline isiiitoj & \{i-si-aiitoj\} & 3:3-Ir.ID-eat.PL & quihit \\
\hline isiilx & \{i-si-\{alax \} & 3P-Ir.Id-go.PL & catax \\
\hline isiimje & \{i-si-amjc \(\}\) & 3:3-Ir.Id-bring & quimjc \\
\hline isiimlaje & \{i-si-amlajc\} & 3:3-Ir.ID-bring.PL & quimjc \\
\hline isiip & \{i-si-ap \(\}\) & 3:3-IR.ID-dig.up & quip \\
\hline isiipca & \{i-si-apca\} & 3P-IR.ID-rain & capca \\
\hline isiipox & \{i-si-apox\} & 3:3-Ir.Id-pull.out & quipox \\
\hline isiipt & \{i-si-ap-t\} & 3:3-IR.ID-dig.up-IMPF & quip \\
\hline isiiptaje & \{i-si-aptajc\} & 3:3-Ir.ID-pull.out.PL & quipox \\
\hline isiizt & \{i-si-azt\} & 3:3-Ir.ID-tattoo & quizt \\
\hline isíxö & \{i-si-ixö\} & 3:3-Ir.ID-jump.over & quiixö \\
\hline isnaap & \{i-snaap\} & 3P-chest/breastmeat & isnaap \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline isníp & \{i-si-\{nipa \(\}\) \} & 3:3-Ir.Id-hit & cnip \\
\hline isoj & \{i-Vsoj\} & 3P-body/self & isoj \\
\hline isolca & \{i-Vsolca \} & 3P-body/self.PL & isoj \\
\hline ispazix & \{i-si-p \(\mathbf{m b l}^{\text {azix }}\), \} & 3P-Ir.Id-Pv-saw & quizix \\
\hline isquiih & \{i-si-ca-iih\} & 3P-Ir.Id-US-be.Fl & quiih \\
\hline istj & \{i-Vstj \(\}\) & 3P-leaf & istj \\
\hline isyaa & \{i-si-yaa\} & 3:3-Ir.ID-own & cyaa \\
\hline it (prevocalic) & \{i-Vti\} & 3P-on & iti \\
\hline itaa & \{i-t-aCa\} & 3:3-RL-know & quiya \\
\hline itaaaxoj & \{i-t-\{âaix\}-toj\} & 3:3-RL-go.away.from-PL & quiiix \\
\hline itaacöim & \{i-t-aacöim\} & 3:3-RL-make.balsa.ready & caacöim \\
\hline itaacloj & \{i-t-a-acloj\} & 3:3-RL-AUG-be.cut.? & caactim \\
\hline itaact & \{i-t-a-act \(\}\) & 3:3-RL-AUG-be.cut.? & caactim \\
\hline itaactim & \{i-t-a-act-tim\} & 3:3-RL-AUG-be.cut-? & caactim \\
\hline itaafe & \{i-t-aafc \(\}\) & 3:3-RL-pound & caafe \\
\hline itaai & \{i-t-aai\} & 3:3-RL-make & caai \\
\hline itaai & \{i-taai\} & 3P-to & itaai \\
\hline itaaitoj & \{i-t-\{ahit\}-toj\} & 3:3-RL-eat-PL & quihit \\
\hline itaaitoj & \{i-t-a-\{ahit\}-toj \} & 3:3-RL-AUG-eat-PL & caahit \\
\hline itaaizi & \{i-t-aai-zi\} & 3:3-RL-make-PL & caai \\
\hline itaaizilca & \{i-t-aai-zilca \(\}\) & 3:3-RL-make-Pl.ImpF & caai \\
\hline itaalajc & \{i-t-aalajc\} & 3:3-RL-release.PL & quicatx \\
\hline itaamalca & \{i-taamalca\} & 3P-antler(s) & itaamalca \\
\hline itaamt & \{i-taamt \({ }^{\text {a }}\) & 3P-sandal(s) & itaamt \\
\hline itaao & \{i-t-aao \(\}\) & 3:3-RL-pass.by & caao \\
\hline itaaom & \{i-t-âaom \(\}\) & 3:3-RL-beg & quiiom \\
\hline itaaplim & \{i-t-aaplim \(\}\) & 3:3-RL-cover.(passively) & caaplim \\
\hline itaasi & \{i-taasi\} & 3P-name & itaasi \\
\hline itaaspoj & \{i-t-aaspox\} & 3:3-RL-AUG.spotted & caaspoj \\
\hline itaast & \{i-taast\} & 3:3-tooth & itaast \\
\hline itaazi & \{i-t-aazi\} & 3:3-RL-carry & caazi \\
\hline itac & \{i-Vtac\} & 3P-bone/trunk & itac \\
\hline itaca & \{i-t-aca \(\}\) & 3:3-RL-put.LQ & quica \\
\hline itacaatax & \{i-t-acaatax\} & 3:3-RL-AUG.go & cacaatax \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline itacaj & \{i-tacaj \} & 3P-surface/place.above.PL & itacl \\
\hline itacáp & \{i-t-acáp \} & 3:3-RL-lift.heavy.item & cacáp \\
\hline itácatx & \{i-t-acatx\} & 3:3-RL-release & quicatx \\
\hline itacl & \{i-tacl \(\}\) & 3P-surface/place.above & itacl \\
\hline itácmolca & \{i-t-acmolca \(\}\) & 3:3-Rl-put.Hz.Pl.ImpF & quixquim \\
\hline itácmolca & \{i-t-acmolca\} & 3:3-RL-put.items.PL.IMPF & quiquim \\
\hline itácö & \{i-t-\{aco\}\} & 3:3-RL-kill & quicö \\
\hline itácotim & \{i-t-\{aco\}-tim \(\}\) & 3:3-RL-kill-ImpF & quicö \\
\hline itacötoj & \{i-t-aco-toj\} & 3:3-RL-kill-PL & quicö \\
\hline itacoxaj & \{i-t-acoxaj\} & 3:3-RL-tend.PL & cacoxl \\
\hline itacoxl & \{i-t-acoxl\} & 3:3-RL-tend & cacoxl \\
\hline itáh & \{i-t-ah \(\}\) & 3:3-RL-put.FL/tell/do & quíh \\
\hline itahaa & \{i-t-a-haa\} & 3:3-RL-AUG-EQ & cahaa \\
\hline itahasjoj & \{i-t-ahasjoj\} & 3:3-RL-transport.in.vehicle.PL & cahasquim \\
\hline itahiipet & \{i-t-ah-iipe-ot \(\}\) & 3:3-RL-Aug-good-? & cahiipet \\
\hline itahiix & \{i-t-ah-iix\} & 3:3-RL-AUG-be.inflated & cahiix \\
\hline itahit & \{i-t-ahit\} & 3:3-RL-eat & quihit \\
\hline itaho & \{i-t-aho \} & 3:3-RL-see & quiho \\
\hline itaht & \{i-t-\{aho\}-t\} & 3:3-RL-see-PL & quiho \\
\hline itai & \{i-t-ai\} & 3:3-RL-tell & quii \\
\hline ítajc & \{i-Vtaje\} & 3P-bone/trunk.PL & itac \\
\hline ital & \{i-t-al\} & 3:3-RL-accompany & ical \\
\hline itamiihtaj & \{i-t-a-miih \({ }^{24}\)-taj \(\}\) & 3:3-RL-AUG-not.be.Fl-Pl & camiih \\
\hline itamje & \{i-t-amjc\} & 3:3-RL-bring & quimje \\
\hline itámlaje & \{i-t-amlaje\} & 3:3-RL-bring.PL & quimje \\
\hline itamsisiijc & \{i-t-a-msisiijc\} & 3:3-RL-AUG-pitiable.PL & camsisiin \\
\hline itamsisiin & \{i-t-a-msisiin\} & 3:3-RL-AUG-pitiable & camsisiin \\
\hline itamzo & \{i-t-amzo\} & 3:3-RL-want & quimzo \\
\hline itapacta & \{i-t-a-pacta \(\}\) & 3:3-RL-AUG-be.in.appearance & capacta \\
\hline itápolquim & \{i-Ø-tapolquim\} & 3P-PON-broken & ctapolquim \\
\hline itapox & \{i-t-apox \(\}\) & 3:3-RL-pull.out & quipox \\
\hline itaquim & \{i-t-aquim \} & 3:3-RL-put.items & quiquim \\
\hline
\end{tabular}

\footnotetext{
\({ }^{24}\) The stem is historically derived from the negative prefix \(\mathbf{m}\) - and the root iih (be.FL). See Marlett (2002).
}
\begin{tabular}{|c|c|c|c|}
\hline itásaquim & \{i-t-asaquim \(\}\) & 3:3-RL-brush & quisaquim \\
\hline itasi & \{i-t-asi\} & 3:3-RL-drink & quisi \\
\hline itasnan & \{i-t-asnan\} & 3:3-RL-? & quisnan \\
\hline itataamalca & \{i-t-ataamalca\} & 3:3-RL-AUG.HAVE.antler(s)/horn(s) & cataamalca \\
\hline itatni & \{i-t-atni\} & 3:3-RL-make.contact & quitni \\
\hline itatoocalam & \{i-t-atoocalam & 3:3-RL-AUG.be.cut.Pl.ImpF & caactim \\
\hline itatoocl & \{i-t-atoocl\} & 3:3-RL-AUG.be.cut.PL & caactim \\
\hline itatooct & \{i-t-atooct\} & 3:3-RL-AUG.be.cut.Pl.ImpF & caactim \\
\hline itaxi & \{i-t-\{axi\}\} & 3:3-RL-finish & quixi \\
\hline itaxquim & \{i-t-axquim \(\}\) & 3:3-RL-put.Hz & quixquim \\
\hline itazt & \{i-t-azt\} & 3:3-RL-tattoo & quizt \\
\hline itcaaix & \{i-t-caaix \(\}\) & 3:3-RL-take & ccaaix \\
\hline itcaiilam & \{i-t-caiilam \(\}\) & 3:3-RL-shoot.PL.ImPF & ccaiit \\
\hline itcaiit & \{i-t-caiit\} & 3:3-RL-shoot & ccaiit \\
\hline itcmaa & \{i-t-m-aCa\} & 3:3-RL-N-know & quiya \\
\hline itcmaaj & \{i-t-m-aCa-j \(\}\) & 3:3-RL-N-know-PL & quiya \\
\hline itcmácatx & \{i-t-m-acatx \(\}\) & 3:3-RL-N-release & quicatx \\
\hline itcmácö & \{i-t-m-acö\} & 3:3-RL-N-kill & quicö \\
\hline itemahit & \{i-t-m-ahit\} & 3:3-RL-N-eat & quihit \\
\hline itemaho & \{i-t-m-aho \} & 3:3-RL-N-see & quiho \\
\hline itcmaht & \{i-t-m-\{aho\}-t \(\}\) & 3:3-RL-N-see-PL & quiho \\
\hline itemajíz & \{i-t-m-a-\{jizi\}\} & 3:3-RL-N-AUG-painful & cajíz \\
\hline itcmapox & \{i-t-m-apox \(\}\) & 3:3-RL-N-pull.out & quipox \\
\hline itcmaxi & \{i-t-m-\{axi\}\} & 3:3-RL-N-finish & quixi \\
\hline itcmeque & \{i-t-m-eque\} & 3:3-RL-N-give.gift & quique \\
\hline itcommactim & \{i-t-m-Cactim \(\}\) & 3:3-RL-N-handle & ccactim \\
\hline itcompii & \{i-t-m-pii\} & 3:3-RL-N-taste & cpii \\
\hline itconnooptolca & \{i-t-m-nooptolca\} & 3:3-RL-N-hit.Pl.ImpF & enip \\
\hline itcooz & \{i-t-cooz\} & 3:3-RL-steal & ccooz \\
\hline iteel & \{i-teel\} & 3P-edge & iteel \\
\hline iteemet & \{i-t-a-eme-t \(\}\) & 3:3-RL-AUG-depleted-PL & queeme \\
\hline iteen & \{i-teen\} & 3P-mouth & iteen \\
\hline iteetol & \{i-t-eetol\} & 3:3-RL-push & queetol \\
\hline itexl & \{i-t-ex \(\mathbf{x}\) \} & 3:3-RL-take & quiix \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline iti & \{i-Vti\} & 3P-on & iti \\
\hline itii & \{i-t-ii\} & 3:3-Rl-hear & quii \\
\hline itiii & \{i-t-iii\} & 3:3-RL-hear.PL & quii \\
\hline itiip & \{i-t-iip \(\}\) & 3:3-RL-straighten & quiip \\
\hline itimla & \{i-t-imla \} & 3:3-RL-open-PL & quiimt \\
\hline itíp & \{i-t-ip\} & 3:3-RL-carry.on.head & quiip \\
\hline itipje & \{i-t-ipje\} & 3:3-RL-grab & quiipjc \\
\hline itisxö & \{i-t-isxö\} & 3:3-RL-hide & quiisxö \\
\hline ititaamt & \{i-t-i-taamt & 3:3-RL-HAVE-sandal(s) & quitaamt \\
\hline itíxö & \{i-t-ixö\} & 3:3-RL-jump.over & quiixö \\
\hline itníp & \{i-t-\{nipa\}\} & 3:3-RL-hit & cnip \\
\hline ito & \{i-Vto\} & \(3 \mathrm{P}-\) eye & ito \\
\hline itoaa & \{i-toaa\} & 3P-foot/leg & itoaa \\
\hline itoocatam & \{i-t-\{oocat\}-tam \(\}\) & 3:3-RL-look.at-Pl.IMPF & coocta \\
\hline itoocatim & \{i-t-\{oocat\}-tim \(\}\) & 3:3-RL-look.at-ImPF & coocta \\
\hline itoocta & \{i-t-\{oocat \(\}\)-a\} & 3:3-RL-look.at-? & coocta \\
\hline itooctam & \{i-t-\{oocat\}-tam \(\}\) & 3:3-RL-look.at-PL & coocta \\
\hline itooit & \{i-tooit\} & 3P-foot/leg.PL & itoaa \\
\hline itoon & \{i-t-oon\} & 3:3-RL-carry.items & coon \\
\hline itoonec & \{i-t-oonec\} & 3:3-RL-carry-Pl & caazi \\
\hline itoozj & \{i-toozj\} & 3P-intestine & itoozj \\
\hline itrooqui & \{i-trooqui\} & 3P-vehicle & trooqui \\
\hline ittii & \{i-t-Cii) & 3:3-RL-feel & cquii \\
\hline ittiix & \{i-t-Cii-x \(\}\) & 3:3-RL-feel-PL & cquii \\
\hline ityaai & \{i-t-yaai\} & 3:3-RL-go.to & cyaai \\
\hline itzamlcam & \{i-t-zam-lcam\} & 3:3-RL-put.VT-PL & czam \\
\hline itzáxö & \{i-t-zaxö\} & 3:3-RL-discuss & czaxö \\
\hline ix & \(\{\mathbf{i}-\mathrm{Vx}\) \} & 3P-liquid & ix \\
\hline ixaap & \{i-Ø-xaap \(\}\) & 3P-PON-spend.night & cxaap \\
\hline ixacomcaac & \{i-xo-a-comcaac\} & 3:3-Em-Aug-Seri.person.Pl & cacmiiquet \\
\hline ixamiihitim & \{i-xo-a-miihi \({ }^{\text {25 }}\)-t-tim \(\}\) & 3:3-Em-AUG-not.be.Fl-?-ImPF & camiihit \\
\hline ixanaaaij & \{ixo-a-onaaaij\} & 3:3-Em-Aug-return & canaaaij \\
\hline
\end{tabular}

\footnotetext{
\({ }^{25}\) The stem is historically derived from the negative prefix \(\mathbf{m}\) - and the root iih (be.FL). See Marlett (2002).
}
\begin{tabular}{|c|c|c|c|}
\hline ixoohit & \{i-xo-ahit & 3:3-EM-eat & quihit \\
\hline ixoomzo & \{i-x0-amzo \(\}\) & 3:3-EM-want & quimzo \\
\hline ixoopox & \{i-x0-apox\} & 3:3-EM-pull.out & quipox \\
\hline ixoqueepe & \{i-xo-qu Abl \(^{\text {- }}\) iipe \(\}\) \} & 3:3-Em-Aug-good & cqueepe \\
\hline ixoyai & \{i-xo-yai\} & 3:3-Ем-? & cyai \\
\hline ixtamt & \{i-Ø-xtamt\} & 3P-PON-abundant & cxtamt \\
\hline iyaacatim & \{i-yo-aaca-tim & 3:3-DT-send-ImPF & caaca \\
\hline iyaactim & \{i-yo-a-actim\} & 3:3-DT-AUG-be.cut & caactim \\
\hline iyaai & \{i-yo-aai\} & 3:3-Dt-make & caai \\
\hline iyaaihjö & \{i-yo-a-Cihjö\} & 3:3-DT-Aug-red & caaihjö \\
\hline iyaasj & \{i-yo-aasj\} & 3:3-DT-spread.out.to.dry & caasj \\
\hline iyacospoj & \{i-yo-acospoj \} & 3:3-Dt-AuG.write \({ }^{26}\) & cacospoj \\
\hline iyahaa & \{i-yo-a-haa\} & 3:3-Dt-Aug-EQ & cahaa \\
\hline iyahácotim & \{i-yo-ah-\{āco\}-tim \} & 3:3-DT-AUG-cover.oneself-ImpF & cahácotim \\
\hline iyahojöz & \{i-yo-ah-ojöz\} & 3:3-DT-AUG-mounded & cahojöz \\
\hline iyamsisiin & \{i-yo-a-msisiin\} & 3:3-DT-AUG-pitiable & camsisiin \\
\hline iyas & \{i-Vyas\} & 3:3-liver & iyas \\
\hline iyasaacajam & \{i-yo-asaacajam\} & 3:3-DT-use.arms.to.support & casaacajam \\
\hline iyasaacalcam & \{i-yo-asaacalcam\} & 3:3-DT-use.arms.to.support.PL & casaacajam \\
\hline iyat & \{i-Vyat\} & 3P-tip & iyat \\
\hline iyeemoz & \{i-yo-eemoz\} & 3:3-Dт-? & queemoz \\
\hline iyexl & \{i-yo-ēxl\} & 3:3-DT-take & quiixl \\
\hline iyiixim & \{i-yo-iixim\} & 3:3-Dт-fear & quiixim \\
\hline iyipje & \{i-yo-ipjc\} & 3:3-Dт-grab & quiipje \\
\hline iyizi & \{i-yo-izi\} & 3:3-Dt-defeat/earn & quiizi \\
\hline iyoaaj & \{i-yo-aCa-j \} & 3:3-DT-know-PL & quiya \\
\hline iyocaaitax & \{i-yo-caaitax\} & 3:3-Dt-put.Cm.Pl & ccaaix \\
\hline iyocaaitaxlca & \{i-yo-caaitaxlca\} & 3:3-Dt-put.Cm.Pl.ImPF & ccaaix \\
\hline iyocaao & \{i-yo-caao\} & 3:3-DT-chew & ccaao \\
\hline iyocafz & \{i-yo-cafz\} & 3:3-DT-bite.with.front.teeth & ccafz \\
\hline iyoee & \{i-yo-eCe\} & 3:3-Dt-give.food & quiye \\
\hline iyoi & \{i-yo-ai\} & 3:3-Dt-tell & quii \\
\hline
\end{tabular}

\footnotetext{
\({ }^{26}\) See \(\sqrt{ }\) aaspoj (AUG-spotted) write.
}
\begin{tabular}{|c|c|c|c|}
\hline iyomaa & \{i-yo-m-aCa\} & 3:3-DT-N-know & quiya \\
\hline iyomácatx & \{i-yo-m-acatx\} & 3:3-Dt-N-release & quicatx \\
\hline iyomahit & \{i-yo-m-ahit\} & 3:3-Dт-N-eat & quihit \\
\hline iyonípatim & \{i-yo-\{nipa\}-tim \(\}\) & 3:3-Dt-hit-IMPF & cnip \\
\hline iyonooptolca & \{i-yo-noop-tolca\} & 3:3-Dt-hit.Pl-ImpF & cnip \\
\hline iyonyaa & \{i-yo-m-yaa\} & 3:3-DT-N-own & cyaa \\
\hline iyoocatx & \{i-yo-acatx\} & 3:3-DT-release & quicatx \\
\hline iyoocmolca & \{i-yo-acmolca\} & 3:3-Dt-put.Hz.PL.IMPF & quixquim \\
\hline iyoocmolca & \{i-yo-acmolca\} & 3:3-Dt-put.items.PL.ImPF & quiquim \\
\hline iyoocöim & \{i-yo-acöim\} & 3:3-DT-grind.dry & cacöim \\
\hline iyoocta & \{i-yo-oocta\} & 3:3-DT-look.at & coocta \\
\hline iyoohit & \{i-yo-ahit\} & 3:3-DT-eat & quihit \\
\hline iyooho & \{i-yo-aho \(\}\) & 3:3-Dt-see & quiho \\
\hline iyoopox & \{i-yo-apox\} & 3:3-DT-pull.out & quipox \\
\hline iyootyajc & \{i-yo-atyajc\} & 3:3-DT-stretch.out.IMPF & quitox \\
\hline iyooxi & \{i-yo-\{axi\}\} & 3:3-DT-finish & quixi \\
\hline iyooxquim & \{i-yo-axquim\} & 3:3-Dт-put.Hz & quixquim \\
\hline iyoozaj & \{i-yo-azaj\} & 3:3-DT-do.back.and.forth & quizaj \\
\hline iyopehe & \{i-yo-p \(\mathbf{A}_{\text {Al }}-\mathbf{e l}_{\text {Irreg }}\) \} & 3:3-Dt-Pv-give.gift & iique \\
\hline iyopéhetim & \(\left\{\mathbf{i}-\mathbf{y o}-\mathbf{p}_{\text {Abl }} \mathbf{- e}_{\text {Irreg }}-\mathbf{t i m}\right\}\) & 3:3-DT-Pv-give.gift-ImPF & iique \\
\hline iyoqueepe & \(\left\{\mathbf{i - y o - q u} \mathbf{A b l l}^{\text {- }}\right.\) iipe \(\left.\}\right\}\) & 3:3-Dt-Aug-good & cqueepe \\
\hline iyoqueetx & \{i-yo-queetx\} & 3:3-DT-take & co|cqueetx \\
\hline iyotiis & \{i-yo-tiis\} & 3:3-DT-push.under.water & ctiis \\
\hline iyotís & \{i-yo-tis\} & 3:3-DT-signal.with.finger & ctis \\
\hline iyozám & \{i-yo-zam \(\}\) & 3:3-Dт-put.Vт & czam \\
\hline iyozáxö & \{i-yo-zaxö\} & 3:3-Dt-discuss & czaxö \\
\hline izcapxla & \{i-zcapxla \(\}\) & 3P-armpit & izcapxla \\
\hline izxócatim & \{i-Ø-\{zxoca\}-tim \(\}\) & 3P-PON-chop-IMPF & czxoc \\
\hline
\end{tabular}
\begin{tabular}{llll} 
M & & \\
ma cmistaj & \{ma-c-i-mis-taj \(\}\) & 2SGDO-SN-TR-resemble-PL & cmis \\
ma hiiye & \(\left\{\right.\) ma-hi- \(\left.-\mathbf{e c}_{\text {Irreg }}\right\}\) & 2SGDO-1P-ON-give.gift & iique \\
ma hiizt & \(\{\) ma-hi- -azt \(\}\) & 2SGDO-1P-PON-tattoo & quizt \\
ma hmiiho & \(\{\) ma-h-mi-aho \(\}\) & 2SGDO-1SGS.TR-PX-see & quiho
\end{tabular}
\begin{tabular}{|c|c|}
\hline ma hnzaxö & \{ma-h-mi-zaxö\} \\
\hline ma hsaaipot & \{ma-h-si-aaipot\} \\
\hline ma hsaconxot & \{ma-h-si-aconxot \(\}\) \\
\hline ma hsacooomot & \{ma-h-si-acooomot\} \\
\hline ma hsiye & \{ma-h-si-eCe\} \\
\hline ma hsnip & \{ma-h-si-nip\} \\
\hline ma htah & \{ma-h-t-ah \\
\hline ma htemaho & \{ma-h-t-m-\{aho\}\} \\
\hline ma hxooh & \{ma-h-xo-ah\} \\
\hline ma hyomaho & \{ma-h-yo-m-\{aho\}\} \\
\hline ma ihasanj & \{ma-iha \({ }_{\text {Abl }}\)-sanj \} \\
\hline ma ihee & \{ma-iha \({ }_{\text {Abl }}\) - e Ce \(\}\) \\
\hline ma iiye & \{ma-i-y- elirreg \} \\
\hline ma miih & \{ma-mi-ah\} \\
\hline ma quiho & \{ma quiho \} \\
\hline ma saai & \{ma-si-aai\} \\
\hline ma sconsacj & \{ma-si-m-sacj\} \\
\hline ma sconsanj & \{ma-si-m-sanj \} \\
\hline ma seenj & \{ma-si- \(\chi_{\text {Abl }} \mathbf{i n j}\) \} \\
\hline ma siiho & \{ma-si-\{aho\}\} \\
\hline ma tacoxaj & \{ma-t-acoxaj\} \\
\hline ma tacoxl & \{ma-t-acoxl\} \\
\hline ma taho & \{ma-t-\{aho\}\} \\
\hline matap & \{ma-t-ap \(\}\) \\
\hline ma temácatx & \{ma-t-m-ácatx \(\}\) \\
\hline maa & \{mi-aa\} \\
\hline maacta & \{m-a \(\mathbf{a}_{\text {Abl }}\)-oocta \(\}\) \\
\hline maahit & \{mi-a-ahit\} \\
\hline maaimoz & \{mi-a \(\mathbf{a}_{\text {Abl }}-\mathbf{C i m o z}\) \} \\
\hline maal & \{ma-VCal\} \\
\hline maapxa &  \\
\hline macoii & \{ma-c-oii\} \\
\hline mahaatxo & \{mi-ah-atx \({ }^{\text {a }}\) \\
\hline mahjiit & \{mi-ahjiit\} \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline 2SGDO-1SGS.Tr-Px-discuss & czaxö \\
\hline 2SGDO-1SGS.Tr-Ir.Id-pay & caaipot \\
\hline 2SGDO-1SGS.TR-Ir.ID-help.carry & caconxot \\
\hline 2SGDO-1SGS.Tr-Ir.Id-request.for & cacooomot \\
\hline 2SGDO-1SGS.Tr-Ir.Id-give.food & quiye \\
\hline 2SGDO-1SGS.Tr-Ir.Id-hit & cnip \\
\hline 2SGDO-1SGS.Tr-RL-do/say/put.Fl & quíh \\
\hline 2SGDO-1SGS.Tr-RL-N-see & quiho \\
\hline 2SGDO-1SGS.Tr-Em-do/say/put.Fl & quíh \\
\hline 2SGDO-1SGS.Tr-Dt-N-see & quiho \\
\hline 2SGDO-Inf.Tr-carry.on.back & csanj \\
\hline 2SGDO-Inf.Tr-give.food & quiye \\
\hline 2SGDO-3P-ON-give.gift & iique \\
\hline 2SGDO-Px-say & quíh \\
\hline 2SGDO-SN-Tr-see & quiho \\
\hline 2SGDO-Ir.Id-make & caai \\
\hline 2SGDO-Ir.ID-N-carry.on.hip & csacj \\
\hline 2SGDO-Ir.Id-N-carry.on.back & csanj \\
\hline 2SGDO-Ir.ID-1Em.S.Tr-yell.at & quiinj \\
\hline 2SGDO-Ir.ID-see & quiho \\
\hline 2SGDO-RL-tend.PL & cacoxl \\
\hline 2SGDO-RL-tend & cacoxl \\
\hline 2SGDO-RL-see & quiho \\
\hline 2SGDO-RL-bite & quip \\
\hline 2SGDO-RL-N-release & quicatx \\
\hline Px-be & haa \\
\hline Px-1Em.S.Tr-look.at & coocta \\
\hline Px-Aug-eat & caahit \\
\hline Px-1Em.S.Tr-think & cquimoz \\
\hline 2P-spouse & aal \\
\hline Px-Times-three & caapxa \\
\hline 2PLS-SN-be.FL/stand.PL & quiih \\
\hline Px-Times-many/much & cahaatxo \\
\hline Px-fall & cahjiit \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline mahqueecöl & \{mi-ah-\{queecol\} \(\}\) & Px-Pv-listen.to & cqueecöl \\
\hline mai & \{ma-Vi\} & 2P-father.ME & ai \\
\hline mamaz & \{ma-Vmaz\} & 2P-father's.mother & amaz \\
\hline mapacj & \{ma-po-oocj\} & 2SGS-Ir.Dp-two & coocj \\
\hline mapaii & \{ma-po-oii\} & 2SGS-Ir.Dp-stand/be.Fl.Pl & caap, quiih \\
\hline mapomoonec & \{ma-po-m-oonec \(\}\) & 2PlS-Ir.Dp-N-carry.items.Pl & coon \\
\hline masiiht & \{ma-si-\{aho\}-t & 2PLS-Ir.ID-see-Pl & quiho \\
\hline masiilx & \{ma-si-\{alax\}\} & 2PLS-Ir.ID-go.PL & catax \\
\hline masiitax & \{ma-si-atax \(\}\) & 2PLS-Ir.Id-go & catax \\
\hline masmoqueept & \{ma-si-\{moqueepe \({ }^{27}\)-t \} & 2PlS-Ir.Id-sick-Pl & cmoqueepe \\
\hline masoii & \{ma-si-oii\} & 2PlS-Ir.ID-be.Fl.PL/stand.PL & quiih, caap \\
\hline masooza & \{ma-si-0oza \(\}\) & 2PlS-Ir.ID-speak.Pl & caaitom \\
\hline mata & \{ma-Vta\} & 2P-mother & ata \\
\hline mataainim & \{ma-t-âainim\} & 2PlS-Rl-mix.in & quiinim \\
\hline mataaitoj & \{ma-t-aiitoj \(\}^{28}\) & 2PLS-RL-eat-PL & quihit \\
\hline matalx & \{ma-t-\{alax\} & 2PLS-RL-go.Pl & catax \\
\hline matatoohajoj & \{ma-t-atoohajoj\} & 2PLS-RL-cause.be.located-PL & caahca \\
\hline maticpan & \{mi-aticpan\} & Px-work & caticpan \\
\hline matiima & \(\{\) ma-t-\{iima\}- \(\varnothing\) \} & 2PLS-RL-sleep-PL & quiim \\
\hline matoii & \{ma-t-oii\} & 2PlS-Rl-stand/be.Fl.Pl & caap, quiih \\
\hline matooctam & \{ma-t-oocta-m & 2PLS-RL-look.at-PL & coocta \\
\hline matooza & \{ma-t-ooza \(\}\) & 2PLS-Rl-speak.PL & caaitom \\
\hline matqueept & \{ma-t-qu Abl \(^{\text {- }}\) iipe \(\left.\}-\mathbf{t}\right\}\) & 2PLS-RL-AUG-good-PL & cqueepe \\
\hline mayomatax & \{ma-yo-m-atax\} & 2PLS-DT-N-go & catax \\
\hline mazcz & \{ma-Vzcz\} & 2P-younger.brother.ME & azcz \\
\hline mazi cnooptolca & \{mazi-c-i-\{nipa\}-tolca\} & 2PlDO-SN-Tr-hit.Pl.ImpF & cnip \\
\hline mazi hamiixant & \{mazi-ha-mi-iixant \({ }^{\text {a }}\) & 2PLDO-1PLS-Px-fear.Pl & quiixim \\
\hline mazi hiityoj & \{mazi-h-t-yoj \({ }_{\text {Irreg }}\) \} & 2PLDO-1PLS-RL-give.gift.Pl & iique \\
\hline mazi hisanzil & \{mazi-hi- \(\varnothing\)-sanzil\} & 2PLDO-1P-PON-carry.on.back.PL & csanj \\
\hline mazi hiiyoj & \{mazi-hi- \(\varnothing\)-yoj \({ }_{\text {Irreg }}\) \} & 2PLDO-1P-PON-give.gift.PL & iique \\
\hline mazi hxooh & \{mazi-h-xo-ah\} & 2PlDO-1SGS.Tr-Em-say & quíh \\
\hline
\end{tabular}

\footnotetext{
\({ }^{27}\) This stem has a negative prefix etymologically and is related to voqueepe comfortable. See note 50 in \(\S 17.1 .4\) and Marlett (2002).
\({ }^{28}\) The difference between the root nucleus aii and the nucleus in the surface form aii
}
\begin{tabular}{|c|c|c|c|}
\hline mazi ihasanzil mazi smahcazja & \begin{tabular}{l}
\{mazi-iha-sanzil\} \\
\{mazi-si-m-ah-cazja\}
\end{tabular} & 2PlDO-InF.Tr-carry.on.back.Pl
2PlDO-Ir.Id-N-Pv-bite.IMPF & csanj
ccazni \\
\hline mazi tconzamlcam & \{mazi-t-m-zam-lcam\} & 2PLDO-Rl-N-put.Vt-PL & czam \\
\hline mazi tpazitim & \{mazi-t-p \(\mathbf{A l b l}^{\text {a }}\) azit\}-tim \(\}\) & 2PLDO-Rl-Pv-tattoo-ImPF & quizt \\
\hline mazi tzamlcam & \{mazi-t-zam-lcam \(\}\) & 2PLDO-Rl-put.VT-Pl & czam \\
\hline mazi yooho & \{mazi-yo-\{aho\}\} & 2PLDO-DT-see & quiho \\
\hline maziim & \{mi-a-ziim \(\}\) & PX-AUG-appreciate & caziim \\
\hline me cocaai & \{me-c-ocaai\} & \(2 \mathrm{IO}-\mathrm{SN}\)-? & cöcaai \\
\hline me hpmiifp & \{me-hp-mi-\{afap\}\} & 2IO-1SGS.In-Px-arrive & caafp \\
\hline me hpoomjc & \{me-h-po-amjc\} & 2IO-1SGS.Tr-Ir.Dp-bring & quimjc \\
\hline me hpyaaco & \{me-hp-yo-aaco\} & 2IO-1SGS.In-Dt-have.house & caaco \\
\hline me hpyooitom & \{me-hp-yo-âaitom\} & 2IO-1SGS.In-Dt-speak & caaitom \\
\hline me hsacohot & \{me-h-si-aco-\{aho\}-ot\} & 2IO-1SgS.Tr-Ir.Id-Aug-see-? & cöcacohot \\
\hline me hsii & \{me-h-si-ai\} & 2IO-1SGS.Tr-Ir.ID-tell & quii \\
\hline me hsnip & \{me-h-si-nip \(\}\) & 3IO+2DO-1SGS.Tr-Ir.Id-hit & cnip \\
\hline me hxomiiit & \{me-h-xo-miiit \(\}\) & 2IO-1SGS.Tr-Em-ask & co|cmiiit \\
\hline me hyaamx & \{me-h-yo-a-amx\} & 2IO-1SgS.Tr-Dt-say+IO & caamx \\
\hline me iyacócamot & \{me-i-yo-acócamot\} & 2IO-3:3-Dt-Aug.put.things & cö|cacócamot \\
\hline me sahcaail & \{me-si-ahcaail\} & 2IO-Ir.ID-remain/lacking & cahcaail \\
\hline me scmazt & \{me-si-m-azt\} & 31O+2DO-Ir.ID-N-tattoo & quizt \\
\hline me smahníp & \{me-si-m-ah-\{nipa\}\} & 3IO+2DO-Ir.Id-N-Pv-hit & co|cnip \\
\hline me tacoaat & \{me-t-aco-\{aCa\}-ot\} & 2IO-RL-Aug-know-? & cöcacoaat \\
\hline me tahaxz & \{me-t-ah-\{Caxaz\}\} & 3IO+2DO-RL-Pv-hit.Hz & ccaxz \\
\hline me tooit & \{me-t-ooit\} & 2IO-RL-arrive & cooit \\
\hline me tpazt & \{me-t-p \(\mathbf{A l b l}^{\text {- }}\) azit \(\}\) \} & 3IO+2DO-RL-Pv-tattoo & quizt \\
\hline me xopanzx & \{me-xo-panzx \(\}\) & 2IO-Em-run & cpanzx \\
\hline me yapxazl & \{me-yo-apxazl\} & \(3 \mathrm{IO}+2 \mathrm{SGDO}\) DT-put.on.top.of & capxazl \\
\hline me yas & \{me-yo-\{oosi\}\} & 2IO-DT-sing & coos \\
\hline meaacalca & \{mi-Vaacalca \(\}\) & 2P-clothing & hacalca \\
\hline mee & \{mi-ee\} & PX-say & quee \\
\hline mee & \{mi-ee-yo \} & Px-say-PL & quee \\
\hline meye & \{m-yo-e \(\mathbf{e l r r e g}\) \} & 2SGS-Dt-say & teeque \\
\hline mhata \({ }^{p v}\) & \{mo-h-t-a \(\mathrm{a}_{\text {Irreg }}\) \} & Twd-1SgS-Rl-move & moca \\
\hline mheemt \({ }^{\text {pv }}\) & \{mi-heemt \({ }^{\text {a }}\) & Px-stink & cheemt \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline \begin{tabular}{l}
micmiiquet \\
mihaa
\end{tabular} & \{mi-Ø-cmiique-t \(\}\)
\{mi-Ø-haa \(\}\) & 2P-PON-person-?
2P-PON-EQ & \begin{tabular}{l}
-cmiiquet \\
chaa
\end{tabular} \\
\hline mihaactim & \{mi-h-a-actim \(\}\) & 2P-PON-Aug-be.cut & caactim \\
\hline mihacaacat & \{mi-h-ac-acat \(\}\) & 2P-PON-AUG-salty & cacaacat \\
\hline mihaníp & \{mi-h-ah-nip\} & 2P-PON-Pv-hit & cnip \\
\hline mihexl & \{mi-h-ēxl\} & 1P-PON-take & quiixl \\
\hline mihiin & \{mi-hiin\} & 2P-place.near & ihiin \\
\hline mihiinpx & \{mi-hiinpx & 2P-place.near & ihiinpx \\
\hline mihiip & \{mi-hi-ap & 2P-PON-stand & caap \\
\hline mihisil & \{mi-h-isil\} & 2P-PON-small & quisil \\
\hline miica & \{mo-ica- \(\mathbf{a}_{\text {Irreg }}\) \} & Twd-Inf.In-move & moca \\
\hline miica & \{mi-VVca \} & 2 P -next.to & iica \\
\hline miicp & \{mi-VVcp \(\}\) & 2P-place.next.to & iicp \\
\hline miictim & \{mi-actim \(\}\) & Px-be.cut & cactim \\
\hline miifp & \{mi-\{afap\}\} & Px-arrive & caafp \\
\hline miih & \{mi-iih & Px-be.Fl & quiih \\
\hline miiha & \{mo-i-h-a \(\mathbf{a}_{\text {Irreg }}\) \} & Twd-3P-PON-move & moca \\
\hline miihit & \{mi-Ø-ahit\} & 2P-PON-eat & quihit \\
\hline miihjoj & \{mi-VVhjoj\} & 2P-limb.PL & iiha \\
\hline miihtolca & \{mi-iih-tolca \} & Px-be.Fl-Pl.ImpF & quiih \\
\hline miij & \{mi-iij \(\}\) & Px-sit & quiij \\
\hline miijc & \{mi-iijc\} & Px-explode & quiije \\
\hline miilx & \{mi-\{alax\} & Px-go.PL & catax \\
\hline miimalim & \{mi-Ø-amal-im \(\}\) & 2P-PON-observe-IMPF & quimaj \\
\hline miime & \{mi-eme\} & Px-depleted & queme \\
\hline miime & \{mi-VVme\} & 2P-home & iime \\
\hline miimoz & \{mi-amoz\} & Px-think & camoz \\
\hline miimyam & \{mi-Ø-amyam \(\}\) & 2P-PON-swallow.ImpF & quim \\
\hline miimzo & \{mi-Ø-amzo \(\}\) & 2P-PON-want & quimzo \\
\hline miin & \{mi-iin & Px-go & quiin \\
\hline miionam & \{mi-VVonam\} & 2P-hat & iionam \\
\hline miip & \{mi-ap \(\}\) & Px-stand & caap \\
\hline miipe & \{mi-iipe \(\}\) & Px-good & quiipe \\
\hline miipxa & \{mi-apxa\} & Px-three & capxa \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline miiquet & \{mi-Ø-iiquet\} & 2P-ON-pregnant.with & quiiquet \\
\hline miiqui & \{mi-VVqui\} & 2P-toward & iiqui \\
\hline miiquim & \{mi-Ø-aquim \(\}\) & 2P-PON-put.items & quiquim \\
\hline miisaquim & \{mi-Ø-asaquim \(\}\) & 2P-PON-brush & quisaquim \\
\hline miisi & \{mi-Ø-asi\} & 2P-PON-drink & quisi \\
\hline miisj & \{mi-VVsj \(\}\) & 2P-basket & iisj, hasaj \\
\hline miistox & \{mi-VVstox\} & 2P-?.PL & iisax \\
\hline miitax & \{mi-Ø-atax\} & 2P-PON-go & catax \\
\hline miitxo & \{mi-atxo \(\}\) & PX-many/much & catxo \\
\hline miixaj & \{mi-âaixaj\} & PX-strong & caaixaj \\
\hline miixaj & \{mi-Ø-âaixaj\} & 2P-PON-strong & caaixaj \\
\hline miixax & \{mi-i-VVxax\} & PX-HAVE-snout & quiixax \\
\hline miixz & \{mi-VVxz \(\}\) & 2P-pet & iixz \\
\hline miiye & \{mi-y-e Irreg \({ }^{\text {a }}\) & 2P-ON-give.gift & iique \\
\hline miizcam & \{mi-azcam \(\}\) & Px-arrive.Pl & caafp \\
\hline miizix & \{mi-Ø-azix \(\}\) & 2P-PON-saw & quizix \\
\hline mimaa & \(\{\mathbf{m i}-\varnothing-\mathrm{m}-\mathrm{aCa}\}\) & 2P-PON-N-know & quiya \\
\hline mimac & \{mi-Vmac\} & 2P-midst & imac \\
\hline mimazcam & \{mi-Ø-m-azcam \(\}\) & 2P-PON-N-arrive.PL & caafp \\
\hline mimhác & \{m-mi-hac & 2SGS-Px-blind & chac \\
\hline mimiih & \{mi-Ø-miiih \({ }^{29}\) \} & 2P-PON-not.be.FL & cmiih \\
\hline mimjöc & \{mi-i-Vmjöc\} & PX-HAVE-heart.PL & quimoz \\
\hline mimocl & \{mi-mocl\} & 2P-place.under & imocl \\
\hline mimofeaa & \{m-i-m-ofeaa\} & 2SGS-SN-N-have.good.eyeseight & cofeaa \\
\hline mimoz & \{mi-i-Vmoz\} & PX-HAVE-heart & quimoz \\
\hline mimoz & \{mi-Vmoz\} & 2P-heart & imoz \\
\hline minaail & \{mi-naail\} & 2P-skin/shell & inaail \\
\hline minl & \{mi-Vnl\} & 2P-finger/hand/arm-PL & inol \\
\hline minol & \{mi-Vnol\} & 2P-finger/hand/arm & inol \\
\hline mipazaatoj & \{mi-pazaato-j \(\}\) & 2P-shoe-PL & pazaato \\
\hline mipnaail & \{mi-pnaail\} & 2P-skirt & ipnaail \\
\hline miroocö & \{mi-Ø-\{roocot\} & 2P-PON-crazy & croocö \\
\hline
\end{tabular}

\footnotetext{
\({ }^{29}\) The stem is historically derived from the negative prefix \(\mathbf{m}\) - and the root iih (be.FL). See Marlett (2002).
}
\begin{tabular}{|c|c|c|c|}
\hline miscmaho & \{mi-si-m-\{aho \}\} & 2P-Ir.Id-N-see & quiho \\
\hline misiitax & \{mi-si-atax \(\}\) & 2P-Ir.Id-go & catax \\
\hline misiizix & \{mi-si-azix \(\}\) & 2P-Ir.ID-saw & quizix \\
\hline misil & \{mi-isil\} & Px-small & quisil \\
\hline misoj & \{mi-Vsoj\} & 2P-body/self & isoj \\
\hline misolca & \{mi-Vsolca \(\}\) & 2P-body/self.Pl & isoj \\
\hline misxeen & \{mi-sxeen\} & 2P-abdomen & isxeen \\
\hline mitacl & \{mi-tacl\} & 2P-surface/place.above & itacl \\
\hline mitajij & \{mi-ita-jij\} & PX-sharp-PL & quita \\
\hline miteejöc & \{mi-iteejöc \(\}\) & Px-thin & quiteejöc \\
\hline miti & \{mi-Vti\} & 2P-on & iti \\
\hline mito & \{mi-Vto\} & 2P-eye & ito \\
\hline mitooij & \{mi-itooij \(\}\) & Px-go.Pl & quiin \\
\hline mitoozi & \{mo-i-t-oozi\} & Twd-3:3-RL-carry & imcoozi \\
\hline mizaah & \{mi-zaah \(\}\) & 2P-sun/day & izaah, zaah \\
\hline mmita \({ }^{\text {pv }}\) & \{mo-m-t-a \(\mathrm{a}_{\text {Ireg }}\) \} & Twd-2SGS-RL-move & moca \\
\hline mmizi \({ }^{\text {pv }}\) & \{m-mi-izi \(\}\) & 2SGS-Px-defeat & quiizi \\
\hline moaah \({ }^{30}\) & \(\left\{\mathbf{m i - \mathbf { o } _ { \text { Abl } } \mathbf { - a h } \}}\right.\) & 2P-ON-do/say/put.FL & quih \\
\hline moca & \{mo-c-a \(\mathbf{a}_{\text {Irreg }}\) \} & Twd-SN-move & moca \\
\hline mocat & \{mo-c-a Irreg \(^{\text {- }}\) \} & Twd-SN-move-Pl & moca \\
\hline mocoht & \{mi-oco-aht \(\}\) & 2P-ON-see.Pl & quiho \\
\hline mocqueetx & \{mo-c-i-queetx\} & Twd-SN-Tr-bring & mocqueetx \\
\hline moficj & \{mi-o \(\mathbf{o}_{\text {Abl }}\)-ficj \(\}\) & 2P-ON-wrap.oneself.with & coficj \\
\hline moha & \{mo-h-a \(\mathbf{a}_{\text {Irreg }}\) \} & Twd-Im-move & moca \\
\hline mohat & \{mo-h-a Irreg \(^{\text {- }}\) t \(\}\) & Twd-Im-move-PL & moca \\
\hline moii & \{mi-oii\} & Px-be.Fl.Pl/stand.Pl & quiih, caap \\
\hline mójocam & \{mi-ojocam \({ }^{\text {a }}\) & Px-flee.PL & cojoz \\
\hline moma & \{mo-mi-a Irreg \} & Twd-Px-move & moca \\
\hline montoozi & \{mo-m-t-oozi\} & Twd-2SGS-RL-carry & imcoozi \\
\hline moocj & \{mi-oocj \(\}\) & Px-two & coocj \\
\hline mooha & \{mi-ooha\} & Px-cry & cooha \\
\hline mooin & \{mi-0 \({ }_{\text {Abl }}\) âain \} & 2P-ON-have.in.cheek.of.mouth & quiin \\
\hline
\end{tabular}

\footnotetext{
\({ }^{30}\) This form is irregular; see §14.3.1.
}
\begin{tabular}{|c|c|c|c|}
\hline mooit & \{mi-00it\} & Px-arrive & cooit \\
\hline moopox & \(\left\{\mathbf{m i - \mathbf { o } _ { \text { Abl } } \text { appox } \}}\right.\) & Px-UO-pull.out & coopox, quipox \\
\hline moos & \{mi-\{oosi\}\} & Px-sing & coos \\
\hline moosi & \(\left\{\mathbf{m i}^{-\mathbf{o}_{\text {Abl }}-\mathbf{a s i}}\right.\) \} & 2P-ON-drink & quisi \\
\hline mooxi & \(\left\{\mathbf{m i - \mathbf { o } _ { \text { Abl } } - \{ \mathbf { a x i } \} \}}\right.\) & 2P-ON-finish & quixi \\
\hline mooxp & \{mi-ooxp \(\}\) & Px-white & cooxp \\
\hline mooza & \{mi-ooza\} & PX-speak.Pl & caaitom \\
\hline moozix & \{mi-o \(\mathbf{o d b l}^{\text {-azix }}\) \} & 2P-ON-saw & quizix \\
\hline mosa & \{mo-si- \(\mathbf{a}_{\text {Irreg }}\) \} & Twd-Ir.ID-move & moca \\
\hline mota & \{mo-t-a \(\mathrm{a}_{\text {Irreg }}\) \} & Twd-RL-move & moca \\
\hline motat & \{mo-t- \(\mathbf{a l r r e g}^{\text {- }}\) t \} & Twd-Rl-move-Pl & moca \\
\hline moyaai & \{mi-o abl \(_{\text {- }}^{\text {- }}\) aai \} & 2P-ON-travel.to & cyaai \\
\hline moyaat & \{mi-0 abl-yaa-t \(^{\text {d }}\) & 2P-ON-own-PL & cyaa \\
\hline mozám & \{mi-o \({ }_{\text {abl }} \mathbf{z a m}\) \} & Px-UO-put.VT & cozám, czam \\
\hline mpaai \({ }^{\text {pv }}\) & \{m-po-aai\} & 2SGS-Ir.Dp-make & caai \\
\hline mpaait \({ }^{\mathrm{pv}}\) & \{mo-po-ooit\} & Twd-Ir.Dp-arrive & imcooit \\
\hline mpacta \({ }^{\text {pv }}\) & \{mi-pacta \(\}\) & Px-be.in.appearance & hapacta \\
\hline mpam \({ }^{\text {pv }}\) & \(\left\{\mathbf{m i} \mathbf{-} \mathbf{p}_{\text {Abl }} \mathbf{- a m}\right\}\) & Px-PV-swallow & quim \\
\hline mpapacta \({ }^{\text {pv }}\) & \{m-po-a-pacta\} & 2SGS-Ir.Dp-AUG-be.in.appearance & capacta \\
\hline mpomaactim \({ }^{\text {pv }}\) & \{m-po-m-a-actim \(\}\) & 2SGS-Ir.Dp-N-Aug-be.cut & caactim \\
\hline mpomatax \({ }^{\text {pv }}\) & \{m-po-m-atax\} & 2SGS-Ir.Dp-N-go & catax \\
\hline mpoofp \({ }^{\text {pv }}\) & \{m-po-\{afap\}\} & 2SGS-Ir.Dp-arrive & caafp \\
\hline mpooh \({ }^{\mathrm{pv}}\) & \{m-po-ah\} & 2SGS-Ir.Dp-do/say/put.FL & quih \\
\hline mpoomzo \({ }^{\text {pv }}\) & \{m-po-amzo \} & 2SGS-Ir.Dp-want & quimzo \\
\hline mxocozim \({ }^{\text {pv }}\) & \{m-xo-cozim \(\}\) & 2SGS-Em-hot.weather & ccozim \\
\hline \multicolumn{4}{|l|}{N} \\
\hline noosile & \{noosi-lc\} & mourning.dove-PL & noosi \\
\hline nsaaco \({ }^{\text {pv }}\) & \{m-si-aaco \(\}\) & 2SGS-Ir.ID-build.house & caaco \\
\hline nsaai \({ }^{\text {pv }}\) & \{m-si-aai\} & 2SGS-Ir.Id-make & caai \\
\hline nscontiis \({ }^{\text {pv }}\) & \{m-si-m-tiis\} & 2SGS-Ir.ID-push.under.water & ctiis \\
\hline nsexl \({ }^{\text {pv }}\) & \{m-si-ēxl\} & 2SGS-Ir.ID-buy & queex \\
\hline nsexl \({ }^{\text {pv }}\) & \{m-si-ēxl\} & 2SGS-Ir.ID-take & quiixl \\
\hline nsiifp \({ }^{\text {pv }}\) & \{m-si-\{afap \} \} & 2SGS-Ir.ID-arrive & caafp \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline nsiihit \({ }^{\text {pv }}\) & \{m-si-ahit & 2SGS-Ir.Id-eat & quihit \\
\hline nsiiho \({ }^{\text {pv }}\) & \{m-si-aho \(\}\) & 2SGS-Ir.ID-see & quiho \\
\hline nsiisi \({ }^{\text {pv }}\) & \{m-si-asi\} & 2SGS-Ir.ID-drink & quisi \\
\hline nsiitax \({ }^{\text {pv }}\) & \{m-si-atax \(\}\) & 2SGS-Ir.Id-go & catax \\
\hline nsiitom \({ }^{\text {pv }}\) & \{m-si-âaitom \(\}\) & 2SGS-Ir.ID-speak & caaitom \\
\hline nsiixi \({ }^{\text {pv }}\) & \{m-si-axi\} & 2SGS-Ir.Id-finish & quixi \\
\hline nsyaai \({ }^{\text {pv }}\) & \{m-si-yaai\} & 2SGS-Ir.Id-travel.to & cyaai \\
\hline nt hazi moozi & \{nt-hazi-mi-oozi\} & Aw-1PLDO-Px-carry & contcoozi \\
\hline ntacoxl \({ }^{\text {pv }}\) & \{m-t-acoxl\} & 2SGS-RL-tend & cacoxl \\
\hline ntafp \({ }^{p v}\) & \{m-t-\{afap \}\} & 2SGS-RL-arrive & caafp \\
\hline ntah \({ }^{\text {pv }}\) & \{m-t-ah \(\}\) & 2SGS-RL-do & quíh \\
\hline ntahipi \({ }^{\text {pv }}\) & \{m-t-ah-ipi\} & 2SGS-RL-AUG-? & cahipi \\
\hline ntahit \({ }^{\text {pv }}\) & \{m-t-ahit & 2SGS-RL-eat & quihit \\
\hline ntaho \({ }^{\text {pv }}\) & \{m-t-aho \} & 2SGS-RL-see & quiho \\
\hline ntamoz \({ }^{\text {pv }}\) & \{m-t-amoz\} & 2SGS-RL-think & camoz \\
\hline ntamzo \({ }^{\text {pv }}\) & \{m-t-amzo \(\}\) & 2SGS-RL-want & quimzo \\
\hline ntapacta \({ }^{\text {pv }}\) & \{m-t-a-pacta \(\}\) & 2SGS-RL-AUG-be.in.appearance & capacta \\
\hline ntapii \({ }^{\text {pv }}\) & \{m-t-a-pii\} & 2SGS-RL-AUG-taste & capii \\
\hline ntasi \({ }^{\text {pv }}\) & \{m-t-asi\} & 2SGS-RL-drink & quisi \\
\hline ntemaa \({ }^{\text {pv }}\) & \{m-t-m-aCa \(\}\) & 2SGS-RL-N-know & quiya \\
\hline ntcompezi \({ }^{\text {pv }}\) & \{m-t-m-p Abl \(^{\mathbf{- i z i} \mathbf{i}\}}\) & 2SGS-RL-N-PV-defeat & quiizi \\
\hline ntconyaa & \{m-t-m-yaa \(\}\) & 2SGS-RL-N-own & cyaa \\
\hline ntee \({ }^{\text {pv }}\) & \{m-t-ee\} & 2SGS-RL-say & quee \\
\hline nthamat \({ }^{\text {pv }}\) & \{nt-ha-m- \(\mathbf{a}_{\text {Irreg }} \mathbf{t}\) t \(\}\) & Aw-1PLS-Px-move-PL & intica \\
\hline nthiihat \({ }^{\text {pv }}\) & \{nt-hi-h- \(\mathbf{a}_{\text {Irreg }}-\mathbf{t}\) \} & Aw-1P-PON-move-PL & intica \\
\hline ntica \({ }^{\text {pv }}\) & \{nt-c-a \(\mathbf{I I r r e g}\}\) & Aw-SN-move & intica \\
\hline ntiih \({ }^{\text {pv }}\) & \{m-t-iih\} & 2SGS-RL-be.Fl & quiih \\
\hline ntiiha \({ }^{\text {pv }}\) & \{nt-i-h-a Irreg \} & Aw-3P-PON-move & intica \\
\hline ntiihat \({ }^{\text {pv }}\) & \{nt-i-h-a \(\mathbf{a}_{\text {Irreg }} \mathbf{t} \boldsymbol{t}\) \} & Aw-3P-PON-move-PL & intica \\
\hline ntimoz \({ }^{\text {pv }}\) & \{m-t-i-Vmoz \(\}\) & 2SGS-RL-HAVE-heart & quimoz \\
\hline ntisa \({ }^{\text {pv }}\) & \{nt-si-a \(\mathbf{a}_{\text {Irreg }}\) \} & Aw-Ir.Id-move & intica \\
\hline ntita \({ }^{\text {pv }}\) & \{nt-t-2 \(\mathbf{I}_{\text {Irreg }}\) \} & Aw-RL-move & intica \\
\hline ntiya \({ }^{\text {pv }}\) & \{nt-yo-a \(\mathbf{I I r r e g}\) \} & Aw-Dt-move & intica \\
\hline ntizi \({ }^{\text {pv }}\) & \{m-t-izi\} & 2SGS-RL-defeat & quiizi \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline nttimoz \({ }^{\text {pv }}\) & \{m-t-Cimoz\} & 2SGS-RL-think & cquimoz \\
\hline ntyaa \({ }^{\text {pv }}\) & \{m-t-yaa & 2SGS-RL-own & cyaa \\
\hline nxizi \({ }^{\text {pv }}\) & \{m-xo-izi\} & 2SGS-Em-defeat & quiizi \\
\hline nyaa \({ }^{\text {pv }}\) & \{mi-Ø-yaa\} & 2P-ON-own & yaa, cyaa \\
\hline nyaaco \({ }^{\text {pv }}\) & \{m-yaaco \(\}\) & 2P-house & yaaco \\
\hline nyaalim \({ }^{\text {pv }}\) & \{mi-y-aalim \} & 2P-PON-play & caalim \\
\hline nyaaspoj \({ }^{\text {pv }}\) & \{mi-y-aaspoj\} & 2P-PON-AUG.spotted & caaspoj \\
\hline nyizi \({ }^{\text {pv }}\) & \{m-yo-izi \(\}\) & 2SGS-DT-defeat & quiizi \\
\hline \multicolumn{4}{|l|}{0} \\
\hline oaacta & \{i-0 Abl \(\left.^{\text {oocta }}\right\}\) & 3P-ON-look.at & coocta \\
\hline oaactim & \[
\left\{\mathbf{i}-\mathbf{o}_{\mathrm{Abl}}-\text { Cactim }\right\}
\] & 3P-ON-use & ccactim \\
\hline \[
\mathbf{o a a h}^{31}
\] & \{i-0 \(\left.\mathbf{o b l}_{\text {abl }} \mathbf{- a h}\right\}\) & 3P-ON-do/say/put.FL & quih \\
\hline ocoaa & \{i-oco-aCa\} & 3P-ON-know & quiya \\
\hline ocoaaj & \{i-oco-aCa-j \} & 3P-ON-know-PL & quiya \\
\hline ocoho & \{i-oco-aho \} & 3P-ON-see & quiho \\
\hline oeen & \{i-0 \(\mathbf{o s b l}_{\text {Abl }} \mathbf{- 0 0 n}\) \} & 3P-ON-carry.items & coon \\
\hline oficj & \{i-0 \(\left.\mathbf{o}_{\text {Abl }}-\mathbf{f i c j}\right\}\) & 3P-ON-wear.shirt & cficj \\
\hline oiitoj & \{i-0 \(\mathbf{o}_{\text {Abl }}\)-aiitoj \} & 3P-ON-eat.PL & quihit \\
\hline oímjöc & \(\left\{\mathbf{i - 0} \mathbf{o d b l}^{\text {¢ }}\right.\) Cimjöc \(\}\) & 3P-ON-think.PL & cquimoz \\
\hline oohit & \{i-o Abl \(^{\text {-ahit }}\) \} & 3P-ON-eat & quihit \\
\hline \[
\mathbf{o o i c o s}^{32}
\] & \(\left\{\mathbf{i - 0} \mathbf{o}_{\text {Abl }} \mathbf{- a c o ̈}\right\}\) & \(3 \mathrm{P}-\mathrm{ON}\)-kill & quicö \\
\hline oom & \(\left\{\mathbf{i - \mathbf { o } _ { \text { Abl } } - \mathbf { a m } \}}\right.\) & 3P-ON-swallow & quim \\
\hline oomzo & \(\left\{\mathbf{i - 0} \mathbf{o l b l}_{\text {Abl }} \mathbf{- a m z o}\right\}\) & 3P-ON-want & quimzo \\
\hline oop & \{i-o \(\mathbf{o d b l}_{\text {abl }} \mathbf{a p}\) \} & 3P-ON-bite & quip \\
\hline oop & \{i-o \(\left.\mathbf{o b b l}_{\text {abl }} \mathbf{- a p}\right\}\) & 3P-ON-sew.basket & quip \\
\hline oosi & \(\left\{\mathbf{i - 0} \mathbf{o}_{\text {Abl }}\right.\)-asi \(\}\) & 3P-ON-drink & quisi \\
\hline ooxi & \(\left\{\mathbf{i - 0} \mathbf{o b l l}^{\text {- }}\right.\) axi \(\left.\}\right\}\) & 3P-ON-finish & quixi \\
\hline oozix & \(\left\{\mathbf{i - 0} \mathbf{o l b l}^{\text {azix }}\right.\), & 3P-ON-saw & quizix \\
\hline oozt & \(\left\{\mathbf{i - 0} \mathbf{o}_{\text {Abl }}\right.\)-azt \(\}\) & 3P-ON-tattoo & quizt \\
\hline 0oztoj & \{i-0 \(\left.\mathbf{o}_{\text {Abl }} \mathbf{- a z t o j}\right\}\) & 3P-ON-cook.in.water & quiztoj \\
\hline
\end{tabular}

\footnotetext{
\({ }^{31}\) This form is irregular. See §28.3.4.
\({ }^{32}\) This form is irregular; see §14.3.1.
}
\begin{tabular}{|c|c|c|c|}
\hline oyácalcam oуacj & \[
\begin{aligned}
& \left\{\mathbf{i - \mathbf { o } _ { \mathrm { Abl } } - \{ \mathbf { y a c a j } \} - \mathrm { tam } \}}\right. \\
& \left\{\mathbf{i}-\mathbf{o}_{\mathrm{Abl}}-\{\mathbf{y a c a j}\}\right\}
\end{aligned}
\] & \begin{tabular}{l}
3P-ON-call.sibling.PL \\
3P-ON-call.sibling
\end{tabular} & cyacj cyacj \\
\hline \multicolumn{4}{|l|}{P} \\
\hline paa & \{po-aa\} & IR.Dp-be & haa \\
\hline paait & \{po-ooit\} & IR.DP-arrive & cooit \\
\hline paaizi & \{po-a \(\mathbf{a d b l}^{\text {-aai-zi }}\) \} & Ir.Dp-1Em.S.Tr-make-PL & caai \\
\hline pacataj & \{po-ācat-taj\} & IR.Dp-swim-PL & cacat \\
\hline paha & \{po-ooha\} & IR.DP-cry & cooha \\
\hline pahaatxo & \{po-ah-atxo \} & Ir.Dp-TIMES-many & cahaatxo \\
\hline pahcaa & \{po-ah-caa\} & IR.DP-Pv-look.for & ccaa \\
\hline pahcaacat & \{po-ah-ac-acat \(\}\) & Ir.Dp-Pv-Aug-bitter/salty & cacaacat \\
\hline pahcazni & \{po-ah-cazni\} & Ir.Dp-Pv-bite & ccazni \\
\hline pahcoxl & \{po-ah-acoxl\} & Ir.Dp-PV-tend & cacoxl \\
\hline paii & \{po-oii\} & Ir.DP-stand/be.Fl.Pl & caap, quiih \\
\hline pas & \{po-\{oosi\} \} & Ir.DP-sing & coos \\
\hline paticpan & \{po-aticpan\} & IR.DP-work & caticpan \\
\hline paziim & \{po-a-ziim\} & Ir.Dp-AUG-enjoy & caziim \\
\hline paziit & \{po-a abl \(^{\text {oziit }}\) \} & Ir.Dp-1Em.S.Tr-go.to.PL & cyaai \\
\hline piih & \{po-iih\} & Ir.Dp-be.FL & quiih \\
\hline piij & \{po-iij\} & Ir.Dp-sit & quiij \\
\hline pocaalx & \{po-ca-\{alax\}\} & Ir.Dp-1Em.S.In-go.Pl & catax \\
\hline pocahaatxo & \{po-ca-ah-atxo \} & Ir.Dp-US-Times-many & cahaatxo \\
\hline pocooxi & \{po-ca-0oxi\} & Ir.Dp-US-die & cooxi \\
\hline pofii & \{po-fii\} & Ir.Dp-? & cfii \\
\hline pohaa & \{po-haa\} & IR.DP-EQ & chaa \\
\hline pohamoc & \{po-hamoc\} & IR.Dp-be.night & chamoc \\
\hline pojizi & \{po-jizi\} & IR.Dp-hurt/sour/spoiled/picante & cjizi \\
\hline pomapca & \{po-m-apca\} & Ir.DP-N-rain & capca \\
\hline pomhaa & \{po-m-haa\} & Ir.Dp-N-EQ & chaa \\
\hline poofp & \{po-\{afap\}\} & IR.DP-arrive & caafp \\
\hline pooixaj & \{po-âaixaj\} & Ir.DP-strong & caaixaj \\
\hline poom & \{po-00m \({ }_{\text {Irreg }}\) \} & Ir.Dp-lie & coom \\
\hline poop & \{po-ap \(\}\) & Ir.Dp-stand & caap \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline poopea & \{po-apca \(\}\) & Ir.Dp-rain & capea \\
\hline poopxa & \{po-apxa\} & IR.DP-three & capxa \\
\hline poosim & \{po-asim \(\}\) & Ir.Dp-laugh & casim \\
\hline pootax & \{po-atax \(\}\) & Ir.Dp-go & catax \\
\hline pootxo & \{po-atxo \(\}\) & Ir.Dp-many & catxo \\
\hline poozoj & \{po-azoj\} & Ir.Dp-alone & cazoj \\
\hline popacta & \{po-pacta\} & IR.DP-be.in.appearance & hapacta \\
\hline popaho & \{po-p \(\mathbf{p l a b}^{\text {aho }}\) \} & Ir.Dp-Pv-see & quiho \\
\hline popamzo & \{po-p \(\mathbf{p a l}_{\text {-amzo }}\) \} & Ir.Dp-Pv-want & quimzo \\
\hline popasi & \{po-p Abl \(^{\text {-asi }}\) \} & Ir.Dp-Pv-drink & quisi \\
\hline popóc & \{po-poc\} & IR.DP-fall & cpoc \\
\hline poquiih & \{po-ca-iih\} & Ir.Dp-US-be.Fl & quiih \\
\hline poquiihtim & \{po-ca-iih-tim\} & Ir.Dp-US-be.Fl-ImpF & quiih \\
\hline poxtamt & \{po-xtamt\} & Ir.DP-abundant & cxtamt \\
\hline poyaam & \{po-yaam \(\}\) & IR.Dp-later & cyaam \\
\hline pozatx & \{po-zatx\} & IR.Dp-have.glochids & czatx \\
\hline pte caaitim & \{pte-caaitim \(\}\) & RCP+3IO-SN-chase & cöcaaitim \\
\hline pte htaafc & \{pte-h-t-aafc \} & RCP+3IO-1SGS.Tr-Rl-pound & caafe \\
\hline pte immiiitim & \{pte-i-mi-miiit-tim \(\}\) & RCP+3IO-3:3-Px-ask-IMPF & cmiiit \\
\hline pte itacaatoj & \{pte-i-t-ac-aato-j\} & RCP +3 IO-3:3-RL-AUG-fight-PL & cöcacaato \\
\hline pte itcmaafc & \{pte-i-t-m-aafc \(\}\) & RCP+3IO-3:3-RL-N-pound & caafc \\
\hline pte masamsisiin & \{pte-ma-si-a-msisiin\} & RCP+3IO-2PLS-Ir.ID-AUG-pitiable & camsisiin \\
\hline pte mascmaai & \{pte-ma-si-m-aii\} & RCP +3IO-2PLS-Ir.ID-N-make.PL & quih \\
\hline pte miistox & \{pte-mi-iistox\} & RCP+3IO-Px-have.life.PL & quiistox \\
\hline pte tmiipe & \{pte t-m-iipe \(\}\) & RCP+3IO-RL-N-good & quiipe \\
\hline \multicolumn{4}{|l|}{Qu} \\
\hline queaal & \{qu-i-aaal\} & SN-TR-order & queaal \\
\hline queelcam & \{qu-eelcam\} & SN-old.PL & queejim \\
\hline queexl & \{qu-i-ēxl\} & SN-Tr-buy & queexl \\
\hline queme & \{qu-eme\} & SN-depleted & queme \\
\hline quemen & \{qu-emen\} & Im-shake.back.and.forth & quimen \\
\hline quicaayot & \{qui-icaayot\} & SN-go.on.four.feet & quicaayot \\
\hline quicápota & \{qu-i-i-cápota\} & SN-Tr-HAVE-jacket & quicápota \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline quicatx & \{qu-i-acatx\} & SN-Tr-release & quicatx \\
\hline quicö & \{qu-i-\{aco\}\} & SN-TR-kill & quicö \\
\hline quicös & \{qu-i-Vcös\} & SN-have-thorn & quicös \\
\hline quícotim & \{qu-i-\{aco\}-tim \(\}\) & SN-Tr-kill-ImpF & quicö \\
\hline quicötoj & \{qu-i-\{aco\}-toj\} & SN-Tr-kill-PL & quicö \\
\hline quictamo & \{qu-ictamo\} & SN-ferocious & quictamo \\
\hline quiha & \{qu-iha\} & SN-fast & quiha \\
\hline quihehe & \{qu-i-hehe\} & SN-HAVE-plant/stick & quihehe \\
\hline quihic & \{qu-i-Vhic\} & SN-HAVE-seed & quihic \\
\hline quihit & \{qu-i-ahit \(\}\) & SN-Tr-eat & quihit \\
\hline quiho & \{qu-i-\{aho\}\} & SN-Tr-see & quiho \\
\hline quiht & \{qu-i-\{aho\}-t\} & SN-Tr-see-Pl & quiho \\
\hline quiih & \{qu-iih\} & SN-be.Fl & quiih \\
\hline quiihtim & \{qu-iih-tim\} & SN-be.Fl-ImpF & quiih \\
\hline quiiitoj & \{qu-i-aiitoj\} & SN-Tr-eat.PL & quihit \\
\hline quiij & \{qu-iij\} & SN-sit & quiij \\
\hline quiime & \{qu-i-Vme\} & SN-HAVE-home & quiime \\
\hline quiimla & \{qu-i-imla\} & SN-Tr-open-PL & quiimt \\
\hline quiip & \{qu-i-iip\} & SN-Tr-straighten & quiip \\
\hline quiip & \{qu-i-ip\} & SN-Tr-carry.on.head & quiip \\
\hline quiipa & \{qu-i-\{VVpa\}-coj\} & SN-have-tail & quiipa \\
\hline quiipcoj & \{qu-i-\{VVpa\}-coj\} & SN-have-tail-PL & quiipa \\
\hline quiipe & \{qu-\{iipe\}\} & SN-good & quiipe \\
\hline quiisax & \{qu-i-VVsax\} & SN-HAVE-? & quiisax \\
\hline quiistox & \{qu-i-VVstox\} & SN- HAVE-?-PL & quiisax \\
\hline quiiziloj & \{qu-iiziloj\} & SN-drizzle & quiiziloj \\
\hline quiizitoj & \{qu-i-izi-toj\} & SN-Tr-defeat/earn-PL & quiizi \\
\hline quilít & \{qu-i-lit\} & US-3P-head/hair & ilít \\
\hline quimaaxat & \{qu-imaaxat\} & SN-gray & quimaaxat \\
\hline químcaje & \{qu-i-ámcajc\} & SN-Tr-want.PL & quimzo \\
\hline quimzo & \{qu-i-amzo\} & SN-Tr-want & quimzo \\
\hline quino & \{qui-Vno\} & 3P.in & ano \\
\hline quip & \{qu-i-ap\} & SN-Tr-bite (like mosquito) & quip \\
\hline quip & \{qu-i-ap\} & SN-Tr-dig & quip \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline quipi & \{qu-ipi\} \\
\hline quipnaail & \{qu-i-pnaail\} \\
\hline quipox & \{qu-i-apox\} \\
\hline quis & \{qu-is\} \\
\hline quisi & \{qu-i-\{asi\}\} \\
\hline quisil & \{qu-isil\} \\
\hline quisoj & \{qu-i-Vsoj\} \\
\hline quitaj & \{qu-itaj\} \\
\hline quiteejöc & \{qu-iteejöc\} \\
\hline quixaaza & \{qu-ixaaza\} \\
\hline quixaazjoj & \{qu-ixaazjoj\} \\
\hline quixi & \{qu-i-\{axi\}\} \\
\hline quixpjaj & \{qu-ixpjaj\} \\
\hline quixquim & \{qu-i-axquim \\
\hline quixt & \{qu-ixt \({ }^{\text {d }}\) \\
\hline quiya & \{qu-i-aCa\} \\
\hline quizix & \{qu-i-azix\} \\
\hline quizp & \{qu-i-azp \(\}\) \\
\hline
\end{tabular}
\begin{tabular}{ll} 
SN-? & quipi \\
SN-HAVE-skirt & quipnaail \\
SN-TR-pull.out & quipox \\
SN-raw & quis \\
SN-TR-drink & quisi \\
SN-small & quisil \\
US-3P-body/self & isoj \\
SN-burn (intransitive) & quitaj \\
SN-thin & quiteejöc \\
SN-have.weapon & quixaaza \\
SN-have.weapon-PL & quixaaza \\
SN-Tr-finish & quixi \\
SN-soft.like.gelatin & quixpjaj \\
SN-TR-put.Hz & quixquim \\
SN-small.PL & quisil \\
SN-Tr-know & quiya \\
SN-TR-saw & quizix \\
SN-TR-expel.like.diarrhea & quizp
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|l|}{S} \\
\hline saa & \{si-aa\} & IR.ID-? & caa \\
\hline saactam & \{si- \(\mathbf{a}_{\text {Abl }} \mathbf{- o o c t a - m}\) \} & Ir.Id-1Em.S.Tr-look.at-Pl & coocta \\
\hline saahit & \{si-a-ahit \(\}\) & IR.ID-AUG-eat & caahit \\
\hline saai & \{si-aai\} & Ir.ID-make & caai \\
\hline saaitoj & \{si-a-\{ahit\}-toj \} & Ir.ID-AUG-eat-PL & caahit \\
\hline saaitoj & \{si- \(\mathbf{a}_{\text {Abl }}\) - \(\left.\mathbf{a h i t}\right\}\)-toj \(\}\) & Ir.ID-1Em.S.Tr-eat-PL & quihit \\
\hline saalim & \{si-aalim \(\}\) & Ir.Id-play & caalim \\
\hline saanl & \{si- \(\left.\mathbf{a}_{\text {Abl }} \mathbf{- o o n l}\right\}\) & Ir.ID-1Em.S.Tr-stir & coonl \\
\hline saapl & \{si-aapl\} & Ir.ID-cold & caapl \\
\hline saazi & \{si-aazi\} & IR.ID-carry & caazi \\
\hline sacaalam & \{si-ac-aalam \(\}\) & Ir.Id-Aug-play.Pl & cacaalim \\
\hline safeaacol & \{si-a-ofeaa-col\} & IR.ID-AUG-have.good.sight-PL & cafeaa \\
\hline
\end{tabular}

\footnotetext{
\({ }^{33}\) This word was not in the 2005 dictionary.
}
\begin{tabular}{|c|c|c|c|}
\hline sahcaa & \{si-ah-caa\} & IR.ID-PV-look.for & ccaa \\
\hline sahcapzx & \{si-ah-capzx \(\}\) & IR.ID-PV-pull.out & ccapzx \\
\hline sahiti & \{si-ah-iti\} & IR.ID-AUG-connected & cahiti \\
\hline sahjiit & \{si-ahjiit\} & IR.ID-fall & cahjiit \\
\hline sahníp & \{si-ah-\{nipa\}\} & IR.ID-Pv-hit & cnip \\
\hline sahnzaait & \{si-ah-anzaait\} & IR.ID-Pv-careful.with & canzaait \\
\hline sahpaaisx & \{si-ah-a-paaisx\} & Ir.ID-Pv-AUG-clean & capaaisx \\
\hline sahtaaho & \{si-ah-ataho \(\}\) & Ir.Id-Pv-Aug.get.ready & cataaho \\
\hline santaaroj & \{santaar-oj\} & soldier-PL & santaar \\
\hline sapii & \{si- \(\left.\mathbf{a}_{\text {Abl }}-\mathbf{p i i}\right\}\) & Ir.Id-1Em.S.Tr-taste & cpii \\
\hline saptajc & \{si-a \(\mathbf{a}_{\text {Abl }}\)-aptaje \(\}\) & Ir.ID-1Em.S.Tr-pull.out.PL & quipox \\
\hline saticpan & \{si-aticpan\} & IR.ID-work & caticpan \\
\hline sazt & \{si- \(\mathbf{a}_{\text {Abl }} \mathbf{- a z t}\) \} & IR.ID-1Em.S.Tr-tattoo & quizt \\
\hline scaacalcam & \{si-ca-a \({ }_{\text {Abl }}\)-\{oocaj\}-tam \(\}\) & Ir.Id-1Em.S.In-Times-two-PL & caacj \\
\hline scaahit & \{si-ca-a-ahit \(\}\) & Ir.Id-1Em.S.In-Aug-eat & caahit \\
\hline scaaix & \{si-caaix \(\}\) & Ir.Id-put.CM & ccaaix \\
\hline scaalx & \{si-ca-\{alax\} \} & Ir.Id-1Em.S.In-go.PL & catax \\
\hline scaat & \{si-caa-t \(\}\) & IR.ID-look.for-PL & ccaa \\
\hline scaatax & \{si-ca-atax\} & Ir.Id-1Em.S.In-go & catax \\
\hline scafít & \{si-ca-fit\} & Ir.Id-1Em.S.In-stand.up & cfit \\
\hline scamiih & \{si-ca-miih \({ }^{34}\) \} & Ir.Id-US-not.be.FL & cmiih \\
\hline scapazt & \{si-ca-p-azt\} & Ir.Id-1Em.S.In-Pv-tattoo & quizt \\
\hline scozim & \{si-cozim \(\}\) & IR.ID-hot.(weather) & ccozim \\
\hline seaatoj & \{seaato-j\} & goat-PL & seaato \\
\hline seemen & \{si- \(\left.\mathbf{a}_{\text {Abl }}-\mathbf{e m e n}\right\}\) & Ir.Id-1Em.S.Tr-toss.back.and.forth & quimen \\
\hline seenj & \(\left\{\mathbf{s i}-\varnothing_{\text {Abl }} \mathbf{- i n j}\right\}\) & Ir.ID-1Em.S.Tr-yell.at & quiinj \\
\hline sexl & \{si-ēel \(\}\) & IR.ID-buy & queexl \\
\hline shaa & \{si-haa \(\}\) & IR.ID-EQ & chaa, haa \\
\hline siic & \{si-iic\} & IR.ID-be.killed & quiic \\
\hline siifp & \{si-\{afap\}\} & IR.ID-arrive & caafp \\
\hline siihca & \{si-ahca\} & Ir.Id-be.located & caahca \\
\hline siihit & \{si-ahit\} & IR.ID-eat & quihit \\
\hline
\end{tabular}

\footnotetext{
\({ }^{34}\) The stem is historically derived from the negative prefix \(\mathbf{m}\) - and the root iih (be.FL). See Marlett (2002).
}
\begin{tabular}{|c|c|c|c|}
\hline siiho & \{si-\{aho\}\} & Ir.ID-see & quiho \\
\hline siij & \{si-iij\} & IR.ID-sit & quiij \\
\hline siilx & \{si-\{alax\} \(\}\) & Ir.ID-go.PL & catax \\
\hline siime & \{si-eme\} & IR.ID-depleted & queme \\
\hline siimjc & \{si-amjc \(\}\) & IR.ID-bring & quimje \\
\hline siimoz & \{si-amoz\} & IR.ID-think & camoz \\
\hline siin & \{si-iin\} & IR.ID-go & quiin \\
\hline siip & \{si-ap\} & IR.ID-stand & caap \\
\hline siipile & \{ \(\{\) siipi\}lc \(\}\) & young.man-PL` & siip \\
\hline siipox & \{si-apox\} & IR.ID-pull.out & quipox \\
\hline siiscan & \{si-âaiscan\} & Ir.Id-hard & caaiscan \\
\hline siitax & \{si-atax \(\}\) & IR.ID-go & catax \\
\hline siitom & \{si-âaitom \(\}\) & IR.ID-speak & caaitom \\
\hline siixaj & \{si-âaixaj\} & IR.ID-strong & caaixaj \\
\hline siizcam & \{si-azcam \(\}\) & IR.ID-arrive.PL & caafp \\
\hline siizix & \{si-azix \(\}\) & IR.ID-saw & quizix \\
\hline siizquim & \{si-azquim \} & IR.ID-enter & cazquim \\
\hline siizt & \{si-azt \({ }^{\text {d }}\) & IR.ID-tattoo & quizt \\
\hline sit & \{si-it\} & Ir.Id-dull & quit \\
\hline sita & \{si-ita\} & IR.ID-sharp & quita \\
\hline sixoaaj & \{si-ixoaa-j\} & Ir.Id-plan.to.fight-PL & quixoaa \\
\hline siya & \(\{\mathbf{s i - a C a}\}\) & IR.ID-know & quiya \\
\hline smaa & \{si-m-aCa\} & IR.ID-N-know & quiya \\
\hline smaahit & \{si-m-a \(\mathbf{a b l}_{\text {abl }}\)-ahit \(\}\) & Ir.Id-N-1Em.S.Tr-eat & quihit \\
\hline smaahit & \{si-m-a-ahit\} & Ir.ID-N-AUG-eat & caahit \\
\hline smaaitoj & \{si-m-a-\{ahit\}-toj\} & Ir.ID-N-AUG-eat-PL & caahit \\
\hline smalx & \{si-m-\{alax \(\}\) \} & IR.ID-N-go.Pl & catax \\
\hline smatax & \{si-m-atax \(\}\) & Ir.Id-N-go & catax \\
\hline smeet & \{si-meet\} & Ir.Id-? & cmeet \\
\hline smiih & \{si-m-iih\} & IR.ID-N-be.FL & quiih \\
\hline smis & \{si-mis\} & IR.ID-resemble & cmis \\
\hline smoos & \{si-m-00s\} & Ir.Id-N-sing & coos \\
\hline smoozix &  & Ir.Id-N-UO-saw & coozix, quizix \\
\hline somcaatax & \{si-m-ca-atax \(\}\) & Ir.Id-N-1Em.S.In-go & catax \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline somcamiih & \{si-m-ca-miih \({ }^{35}\) \} & Ir.Id-N-US-not.be.FL & cmiih \\
\hline somcapjoee & \{si-m-ca-apjoee\} & Ir.Id-N-US-gossip & capjoee \\
\hline somcoohitim & \{si-m-ca-o-ahit-tim \(\}\) & Ir.Id-N-1Em.S.In-UO-eat-ImPF & coohit, quihit \\
\hline somcooxi & \{si-m-ca-ooxi\} & Ir.Id-N-US-die & cooxi \\
\hline sompazix & \{si-m-p \({ }_{\text {Abl }}\)-azix \(\}\) & Ir.Id-N-Pv-saw & quizix \\
\hline somquee & \{si-m-ca-ee\} & Ir.Id-N-US-say & quee \\
\hline sooit & \{si-ooit\} & Ir.ID-arrive & cooit \\
\hline soomen & \{si-o abl \(_{\text {- }}\) emen \(\}\) & Ir.Id-UO-toss.sideways & coomen, quimen \\
\hline soos & \{si-\{oosi\}\} & Ir.ID-sing & coos \\
\hline soosi & \(\{\mathbf{s i - \{ 0 o s i \} - \varnothing \}}\) & Ir.ID-sing-Pl & coos \\
\hline sooxi & \{si-\{00xi\}\} & Ir.ID-die & cooxi \\
\hline sooxyat & \{si-ooxyat\} & IR.ID-die.PL & cooxi \\
\hline soozix & \(\left\{\mathbf{s i -}_{\text {A }}^{\text {Abl }}\right.\)-azix \(\}\) & IR.ID-UO-saw & coozix, quizix \\
\hline sozámlcam & \{si-o \(\mathbf{o d b l}^{\text {dezam-Icam }}\) \} & IR.ID-UO-put.VT-PL & cozám, czam \\
\hline spaailx & \{si-paailx \(\}\) & IR.ID-arrive.Pl & cooit \\
\hline spacta & \(\left\{\mathbf{s i}^{\mathbf{-}} \mathbf{p}_{\text {Abl }} \mathbf{- o o c t a}\right\}\) & IR.ID-Pv-look.at & coocta \\
\hline spahit & \{si-p Abl \(^{\text {ahit }}\) - \({ }^{\text {a }}\) & Ir.Id-Pv-eat & quihit \\
\hline spaii & \{ \(\left.\mathbf{s i - p} \mathbf{p}_{\text {Abl }} \mathbf{- a a i}\right\}\) & Ir.Id-PV-make & caai \\
\hline spazix & \(\left\{\mathbf{s i - p} \mathbf{p}_{\text {Abl }}\right.\)-azix \(\}\) & Ir.Id-Pv-saw & quizix \\
\hline speque & \{si-p \(\mathbf{p}_{\text {Abl }}\)-eque \} & Ir.Id-Pv-give.gift & quique \\
\hline spot & \{si-pot\} & Ir.Id-? & cpot \\
\hline squiijc & \{si-ca-iijc \(\}\) & Ir.Id-US-wet & quiije \\
\hline squiim & \{si-ca-iim \(\}\) & Ir.Id-1Em.S.In-sleep & quiim \\
\hline syaai & \{si-yaai\} & IR.ID-travel.to & cyaai \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|l|}{T} \\
\hline taa & \{t-aa\} & RL-be & haa \\
\hline taailx & \{t-aailx \(\}\) & RL-release.ImpF & quicatx \\
\hline taaitom & \{t-âaitom \(\}\) & RL-speak & caaitom \\
\hline taaixaj & \{t-âaixaj\} & RL-strong & caaixaj \\
\hline taanpx & \{t-\{aanipx \(\}\) \} & RL-go.home & caanpx \\
\hline taapl & \{t-aapl \(\}\) & RL-cold & caapl \\
\hline
\end{tabular}

\footnotetext{
\({ }^{35}\) The stem is historically derived from the negative prefix \(\mathbf{m}-\) and the root iih (be.FL). See Marlett (2002).
}
\begin{tabular}{|c|c|c|c|}
\hline tacat & \{t-ācat & RL-swim & cacat \\
\hline tacat & \{t-acat \(\}\) & RL-bitter/salty & cacat \\
\hline tacösxaj & \{t-acösxaj\} & RL-tal1/long & cacösxaj \\
\hline tacsx & \{t-acss \(\}\) & RL-wake.up & cacsx \\
\hline tactim & \{t-actim \(\}\) & RL-be.cut & cactim \\
\hline tafp & \{t-\{afap \}\} & RL-arrive & caafp \\
\hline tahaapl & \{t-ah-aapl\} & RL-AUG-cold & cahaapl \\
\hline tahaatxo & \{t-ah-atxo \(\}\) & RL-Times-many & cahaatxo \\
\hline tahahaatoj & \{t-ah-a-haatoj\} & RL-Pv-Aug-extended & cahaatoj \\
\hline tahahásaquim & \{t-ah-ah-asaquim \(\}\) & RL-Pv-AUG-comb.one's.hair & cahásaquim \\
\hline tahahitaj & \{t-ah-ah-itaj\} & RL-Pv-Aug-burn & cahitaj \\
\hline tahatalhaa & \{t-ah-italhaa\} & RL-Pv-buy/sell & quitalhaa \\
\hline tahca & \{t-ahca\} & RL-be.located & caahca \({ }^{36}\) \\
\hline tahcaaiscan & \{t-ah-ac-âaiscan\} & RL-Pv-Aug-hard & cacaaiscan \\
\hline tahcazni & \{t-ah-cazni\} & RL-Pv-bite & ccazni \\
\hline tahcoaazj & \{t-ah-acoaazj\} & RL-Pv-braid & cahcoaazj \\
\hline tahfaiilquim & \{t-ah-faiilquim \(\}\) & RL-Pv-tie.up.ImPF & cfain \\
\hline tahii & \{t-ah-Cii \(\}\) & RL-Pv-feel & cquii \\
\hline tahjiit & \{t-ahjiit \} & RL-fall & cahjiit \\
\hline tahmiiitim & \{t-ah-miiit-tim \(\}\) & RL-Pv-ask-ImpF & cmiiit \\
\hline tahníp & \{t-ah-nip \} & RL-Pv-hit & cnip \\
\hline tahoiitoj & \{t-ahoiitoj\} & RL-hunt.in.middle.of.day & cahoiitoj \\
\hline tahpaxoz & \{t-ah-a-paxoz\} & RL-Pv-AUG-lifted.up & capaxoz \\
\hline tahsaamij & \{t-ah-a-saamij\} & RL-Pv-Aug-rolled.up & casaamij \\
\hline tahsiimet & \{t-ah-a-siimet\} & RL-Pv-AUG-bread & casiimet \\
\hline tahtaamalca & \{t-ah-ataamalca\} & RL-Pv-AUG.HAVE.antler(s) & cataamalca \\
\hline tahtxima & \{t-ahtxima\} & RL-rich & cahtxima \\
\hline tahtximj & \{t-\{ahtxima\}-j\} & RL-rich-PL & cahtxima \\
\hline tahxáp & \{t-ah-xap & RL-Pv-dig.up & cxap \\
\hline tama & \{t-m-a \(\left.\mathbf{I}_{\text {Irreg }}\right\}\) & RL-N-be & haa \\
\hline tama & \{tm- \(\mathbf{a}_{\text {Irreg }}\) \} & Sb-be & haa \\
\hline tamoz & \{t-amoz\} & RL-think/try & camoz \\
\hline
\end{tabular}

\footnotetext{
\({ }^{36}\) This verb is irregularly in having a long vowel phonetically in this form. It is homophonous with the causative verb in this form.
}
\begin{tabular}{|c|c|c|c|}
\hline tanloj & \{t-anloj\} & RL-thunder.IMPF & canj \\
\hline tap & \{t-ap \(\}\) & RL-stand & caap \\
\hline tapca & \{t-apca \(\}\) & RL-rain & capca \\
\hline tapoti & \{t-apoti\} & RL-duck.a.blow & capoti \\
\hline tapxa & \{t-apxa \(\}\) & RL-three & capxa \\
\hline tapxölim & \{t-apxölim \(\}\) & RL-broken.Hz & capxölim \\
\hline tascax & \{t-ascax\} & RL-tear.PL & cazx \\
\hline tàsiom & \(\{\) t-asim-<? \(>\) \} & RL-laugh-? & casim \\
\hline tatax & \{t-atax\} & RL-go & catax \\
\hline tataxim & \{t-atax-tim \(\}\) & RL-go-ImPF & catax \\
\hline tatxo & \{t-atxo \(\}\) & RL-much/many & catxo \\
\hline tazcam & \{t-azcam \(\}\) & RL-arrive.PL & caafp \\
\hline taziim & \{t-a-ziim \(\}\) & RL-AUG-enjoy & caziim \\
\hline tazoj & \{t-azoj\} & RL-alone & cazoj \\
\hline tazojeecoj & \{t-azojeecoj\} & RL-unmarried.and.elderly & cazojeecoj \\
\hline tcomea & \{t-comca\} & RL-noisy & ccomea \\
\hline tcooo & \{t-cooos & RL-all & ccooo \\
\hline tcozim & \{t-cozim \(\}\) & RL-hot.(weather) & ccozim \\
\hline tee & \{t-ee\} & RL-say & quee \\
\hline teeme & \{mi- İrreg \} & Px-say & teeque \\
\hline teemyo & \(\left\{\right.\) mi-e \(\left._{\text {Irreg }}-\mathbf{y o}\right\}\) & Px-say-PL & teeque \\
\hline teenzil & \(\left\{\mathbf{t}-\varnothing_{\text {Abl }}-\right.\) inzil \(\}\) & RL-UO-yell.at.PL & queenj \\
\hline teepe & \{po-e Irreg \} & Ir.Dp-say & teeque \\
\hline teete & \{t-e Irreg \} & RL-say & teeque \\
\hline teme & \{t-eme\} & RL-depleted & queme \\
\hline tfit & \{t-fit \} & RL-stand & cfit \\
\hline thaa & \{t-haa\} & RL-EQ & chaa, haa \\
\hline thamoc & \{t-hamoc\} & RL-be.night & chamoc \\
\hline theemloj & \{t-heemloj\} & RL-stink.PL & cheemt \\
\hline theemt & \{t-heemt \({ }^{\text {d }}\) & RL-stink & cheemt \\
\hline tihiiha & \{t-ihiiha \} & RL-pure & quihiiha \\
\hline tihiij & \{t-ihiij\} & RL-remain.seated & quihiij \\
\hline tiic & \{t-iic\} & RL-be.killed & quiic \\
\hline tiifnij & \{t-i-VVfnij \(\}\) & RL-HAVE-nostril & quiifnij \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline tiih & \{t-iih \} & RL-be.Fl & quiih \\
\hline tiihtim & \{t-iih-tim \(\}\) & RL-be.Fl-ImPF & quiih \\
\hline tiij & \{t-iij\} & RL-sit & quiij \\
\hline tiim & \{t-\{iima\}\} & RL-sleep & quiim \\
\hline tiima & \{t-\{iima\}-Ø\} & RL-sleep-PL & quiim \\
\hline tiimotoj & \{t-iimot-toj\} & RL-gamble-PL & quiimot \\
\hline tiin & \{t-iin\} & RL-go & quiin \\
\hline tiix & \{t-iix\} & RL-inflated & quiix \\
\hline tinej & \{t-inej\} & RL-empty & quinej \\
\hline tinol & \{t-i-Vnol \(\}\) & RL-HAVE-finger/hand/arm & quinol \\
\hline tipjöc & \{t-ipjöc\} & RL-thick.PL & quipcö \\
\hline tisil & \{t-isil\} & RL-small & quisil \\
\hline tist & \{tis-t\} & harpoon.point-PL & tis \\
\hline titoj & \{t-i-Vto-j \(\}\) & RL-HAVE-eye-PL & (quito) \\
\hline titooij & \{t-itooij\} & RL-go.PL & quiin \\
\hline tix & \{t-ix \(\}\) & RL-juicy & quix \\
\hline tjizi & \{t-jizi\} & RL-painful & cjizi \\
\hline tmafp & \{t-m-\{afap \(\}\) \} & RL-N-arrive & caafp \\
\hline tmahca & \{tm-ahca \(\}\) & Sb-sit.PL & quiij \\
\hline tmahcaail & \{tm-ahcaail\} & RL-N-remain/lacking & cahcaail \\
\hline tmasol & \{t-masol\} & RL-yellow & cmasol \\
\hline tmaticpan & \{tm-aticpan\} & Sb-work & caticpan \\
\hline tmeet & \{t-meet\} & RL-? & cmeet \\
\hline tmiih & \{t-m-iih\} & RL-N-be.FL & quiih \\
\hline tmiih & \(\left\{\mathbf{t - m i i h}{ }^{37}\right.\) \} & RL-not.be.FL & cmiih \\
\hline tmooxi & \{t-m-ooxi\} & RL-N-die & cooxi \\
\hline tmoqueepe & \{t-moqueepe\} & RL-sick & cmoqueepe \\
\hline tmozime & \{t-mozime\} & RL-drunk & cmozime \\
\hline toii & \{t-0ii\} & RL-be.Fl.PL/stand.PL & quiih, caap \\
\hline tojocam & \{t-ojocam\} & RL-flee.PL & cojoz \\
\hline tojoz & \{t-ojoz \(\}\) & RL-flee & cojoz \\
\hline tomcácöatim & \{t-m-ca-\{āco\}-tim \(\}\) & RL-N-US-cover.oneself-ImPF & cacötim \\
\hline
\end{tabular}

\footnotetext{
\({ }^{37}\) The stem is historically derived from the negative prefix \(\mathbf{m}\) - and the root iih (be.FL). See Marlett (2002).
}
\begin{tabular}{|c|c|c|c|}
\hline tomemiiquet & \{t-m-cmiique-t \(\}\) & RL-N-person-? & -cmiiquet \\
\hline tomhaa & \{t-m-haa \(\}\) & RL-N-EQ & chaa \\
\hline tomhaa & \{tm-haa \} & Sb-EQ & chaa \\
\hline tommeque & \{t-m-meque \} & RL-N-warm & cmeque \\
\hline tommiih & \(\left\{\mathbf{t - m - m i i h}{ }^{38}\right\}\) & RL-N-not.be.FL & cmiih \\
\hline tompaho & \(\left\{\mathbf{t - m}-\mathbf{p}_{\text {Abl }}-\mathbf{a h o}\right\}\) & RL-N-PV-see & quiho \\
\hline tompaii & \(\left\{\mathbf{t} \mathbf{- m - \mathbf { p } _ { \text { Abl } } \mathbf { - a } \mathbf { a i } \}}\right.\) & RL-N-PV-make & caai \\
\hline toocj & \{t-oocj \} & RL-two & coocj \\
\hline toofin & \{t-oofin \} & RL-? & coofin \\
\hline tooha & \{t-ooha \(\}\) & RL-cry & cooha \\
\hline toohit & \(\left\{\mathbf{t - o}_{\text {Abl }}-\mathbf{a h i t}\right\}\) & RL-UO-eat & coohit \\
\hline tooil & \{t-00il \(\}\) & RL-blue/green & cooil \\
\hline tooit & \{t-ooit\} & RL-arrive & cooit \\
\hline tooit & \{t-ooit\} & RL-dance & cooit \\
\hline tooiti & \{t-ooiti\} & RL-lie.PL & coom \\
\hline tooizj & \(\left\{\mathbf{t - o}_{\text {Abl }}-\mathrm{Cizj}\right\}\) & RL-UO-grind & cooizj, cquizj \\
\hline toom & \(\{\mathbf{t - o o m} \mathrm{Irreg}\) \} & RL-lie & coom \\
\hline toop & \(\left\{\mathbf{t - 0}_{\text {Abl }}-\mathbf{a p}\right\}\) & RL-UO-sew.basket & coop \\
\hline toos & \(\{\mathbf{t - \{ o o s i \}}\}\) & RL-sing & \(\operatorname{coos}\) \\
\hline tooxi & \{t-ooxi\} & RL-die & cooxi \\
\hline tooxquim &  & RL-UO-put.Hz & cooxquim, quixquim \\
\hline tooza & \{t-ooza \(\}\) & RL-speak.PL & caaitom \\
\hline toqué & \{t-oqué\} & RL-hear.well & coqué \\
\hline toquee & \{t-oquee\} & RL-hear.well.PL & coquee \\
\hline tosípaxoj & \(\left\{\mathbf{t - \mathbf { o } _ { \text { Abl } } - \mathbf { s i p x o j } - < ? > \}}\right.\) & RL-UO-whistle-? & cosipx \\
\hline totofz & \{t-otofz\} & RL-squeeze.in & cotofz \\
\hline tpaaatim & \(\left\{\mathbf{t - p} \mathbf{p}_{\text {Abl }} \mathbf{- a a a}-\mathbf{t i m}\right\}\) & RL-PV-call-IMPF & caaa \\
\hline tpaailx & \{t-paailx & RL-arrive.PL & \\
\hline tpaainj & \{t-paainj \} & RL-tumble & cpaainj \\
\hline tpaaisx & \(\left\{\mathbf{t - p} \mathrm{Abl}^{\text {-aais }}\right.\) \} & RL-PV-clean & caaisx \\
\hline tpaao & \(\left\{\mathbf{t}-\mathbf{p}_{\text {Abl }} \mathbf{- a a o}\right\}\) & RL-PV-pass.by & caao \\
\hline tpaca & \(\left\{\mathbf{t}-\mathbf{p}_{\text {Abl }}\right.\)-aaca \(\}\) & RL-PV-entrust & caaca \\
\hline
\end{tabular}

\footnotetext{
\({ }^{38}\) The stem is historically derived from the negative prefix \(\mathbf{m}-\) and the root iih (be.FL). See Marlett (2002).
}
\begin{tabular}{|c|c|c|c|}
\hline tpacta & \(\left\{\mathbf{t - p}_{\text {Abl }} \mathbf{- o o c t a}\right\}\) & RL-Pv-look.at & coocta \\
\hline tpacta & \{t-pacta\} & RL-be.in.appearance & hapacta \\
\hline tpafc & \(\left\{\mathbf{t - p} \mathrm{p}_{\text {dbl }}\right.\)-aafc \} & RL-Pv-pound & caafe \\
\hline tpaho & \(\left\{\mathbf{t - p _ { \text { Abl } } - \mathbf { a h o }}\right.\) \} & RL-Pv-see & quiho \\
\hline tpai & \(\left\{\mathbf{t - p} \mathbf{p l a b}^{\text {aid }}\right.\) \} & RL-Pv-tell & quii \\
\hline tpaii & \(\left\{\mathbf{t - p} \mathbf{p l a b}_{\text {Aaia }}\right.\) \} & RL-Pv-make & caai \\
\hline tpaiitim & & & \\
\hline tpam & \(\left\{\mathbf{t - p _ { \text { Abl } } - \mathbf { a m } \}}\right.\) & RL-Pv-swallow & quim \\
\hline tpanl & \(\left\{\mathbf{t - p} \mathbf{p a b l}^{\text {-0onl }}\right.\) \} & RL-Pv-stir & coonl \\
\hline tpanzx & \{t-panzx \(\}\) & RL-run & cpanzx \\
\hline tpap & \{t-p \(\mathbf{p}_{\text {Abl }} \mathbf{- a p}\) \} & RL-Pv-sew.basket & quip \\
\hline tpat & \{t-p \(\mathbf{p l a b}_{\text {Abat }}\), & RL-PV-cook.under.coals & caat \\
\hline tpatj & \{t-p \(\mathbf{p}_{\text {Abl }} \mathbf{- a a t j}\) \} & RL-PV-pound.flat & caatj \\
\hline tpaxi & \{t-p \(\left.\mathbf{p l a b}_{\text {Abe }} \mathbf{a x i}\right\}\) & RL-Pv-finish & quixi \\
\hline tpaxquim & \(\left\{\mathbf{t - p}_{\text {Abl }}\right.\)-axquim \(\}\) & RL-Pv-put.Hz & quixquim \\
\hline tpazje & \(\{\mathbf{t - p a z j c}\}^{39}\) & RL-dispersed & cpazje \\
\hline tpazt &  & RL-PV-tattoo & quizt \\
\hline tpazyax & \(\left\{\mathbf{t - p _ { \text { Abl } } - \mathbf { a z y a x } \}}\right.\) & RL-Pv-saw.ImPF & quizix \\
\hline tpemen & \{t-p abl \(^{\text {- }}\) emen \(\}\) & RL-PV-shake.back.and.forth & quimen \\
\hline tpemosim & \{t-p abl \(^{\text {-iimosim }}\) \} & RL-Pv-beg.from & quiimosim \\
\hline tpesxö & \(\left\{\mathbf{t - p _ { \text { Abl } } - \mathbf { i s x } \boldsymbol { 0 } \}}\right.\) & RL-Pv-hide & quiisxÖ \\
\hline tpezi & \(\{\mathbf{t - p}\) Abli-izi \(\}\) & RL-Pv-defeat & quiizi \\
\hline tpoct & \{t-poct \(\}\) & RL-full & cpoct \\
\hline tquiij & \{t-ca-iij\} & RL-US-sit & quiij \\
\hline trooquij & \{trooqui-j\} & vehicle-PL & trooqui \\
\hline tsiijim & \{t-siijim \(\}\) & RL-move & csiijim \\
\hline tsiilim & \{t-siilim \} & RL-move.IMPF & csiijim \\
\hline ttamjö & \{t-Camjö\} & RL-shiny & ccamjö \\
\hline ttamla & \{t-Camla \(\}\) & RL-shiny.ImPF & ccamjö \\
\hline ttazojeecoj & \{t-Cazojeecoj\} & RL-unmarried.and.elderly & cazojeecoj \\
\hline tyaai & \{t-yaai\} & RL-cost & cyaai \\
\hline
\end{tabular}

\footnotetext{
\({ }^{39}\) This root is etymologically passive.
}
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|l|}{X} \\
\hline xaail & \{xo-aail\} & Em-spacious & caail \\
\hline xaapl & \{xo-aapl\} & Em-cold & caapl \\
\hline xacaatol & \{xo-acaatol\} & Em-dangerous & cacaatol \\
\hline xajoeene & \{xo-a-joeene\} & Em-Aug-dust & cajoeene \\
\hline xasii & \{x0-a-sii \(\}\) & Em-AUG-smell & casii \\
\hline xaticpan & \{xo-aticpan\} & Em-work & caticpan \\
\hline xaziim & \{xo-a-ziim\} & Em-Aug-appreciate & caziim \\
\hline xazlc & \{xazle \} & puma.PL & xazoj \\
\hline xiica & \{xiica \} & thing.PL & ziix \\
\hline xiih & \{xo-iih\} & Em-be.Fl & quiih \\
\hline xiij & \{xo-iij\} & Em-sit & quiij \\
\hline xiimj & \{xo-iimj \({ }^{\text {a }}\) & Em-clear & quiimj \\
\hline xiipe & \{xo-\{iipe\}\} & Em-good & quiipe \\
\hline xiipt & \{xo-\{iipe\}-t\} & Em-good-Pl & quiipe \\
\hline xina & \{xo-i-Vna\} & Em-have-fur & quina \\
\hline xiteejöc & \{xo-iteejöc \(\}\) & Em-thin & quiteejöc \\
\hline xöaait & \{x0-ooit\} & Em-arrive & cooit \\
\hline xöaatjö & \{xo-oaatjö\} & Em-sweet & coaatjö \\
\hline xöaatzil & \{xo-oaatzil\} & Em-sweet.Pl & coaatjö \\
\hline xöaxyat & \{xo-ooxyat \(\}\) & Em-die.Pl & cooxi \\
\hline xocaii & \{xo-caii\} & Em-mature & ccaii \\
\hline xocozim & \{xo-cozim \(\}\) & Em-hot.(weather) & ccozim \\
\hline xohoopatj & \{xo-hoopatj\} & Em-wave & choopatj \\
\hline xomiha & \{xo-m-iha\} & Em-N-fast & quiha \\
\hline xomiipla & \{xo-miipla\} & Em-bad & cmiipla \\
\hline xommipi & \{xo-m-mipi\} & Em-N-? & cmipi \\
\hline xomotet & \{xo-motet\} & Em-heavy & cmotet \\
\hline xoofp & \{xo-\{afap\}\} & Em-arrive & caafp \\
\hline xooixaj & \{xo-âaixaj\} & Em-strong & caaixaj \\
\hline xoome & \{xo-eme\} & Em-depleted & queme \\
\hline xoozcam & \{xo-azcam\} & Em-arrive.PL & caafp \\
\hline xopám & \{xo-p \(\mathbf{p a b l}^{\text {am }}\), & Em-Pv-swallow & quim \\
\hline xoque & \{x0-ca-e Irreg \} & Em-US-say & teeque \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline \begin{tabular}{l}
xoqueeej \\
xoroocöxam
\end{tabular} & \begin{tabular}{l}
\{xo-queeej\} \\
\{x0-roocö-xam \}
\end{tabular} & \begin{tabular}{l}
Em-mature.PL \\
Em-crazy-Pl
\end{tabular} & \begin{tabular}{l}
caii \\
roocö
\end{tabular} \\
\hline \multicolumn{4}{|l|}{Y} \\
\hline yaa & \{i-Ø-yaa\} & 3P-ON-own & yaa, cyaa \\
\hline yaacni & \{i-yaacni\} & 3P-bow & yaacni \\
\hline yaaco & \{i-yaaco \(\}\) & 3P-house & yaaco \\
\hline yaacö & \{yo-o abl \(\left._{\text {abacö }}\right\}\) & DT-UO-bark & coocö, quiicö \\
\hline yaacöt & \{i-\{yaaco \(\}\)-t \(\}\) & 3P-house-PL & yaaco, haaco \\
\hline yaafe & \{i-y-aafc\} & 3P-ON-pound & caafe \\
\hline yaafipolca & \{yo-oaafip-olca\} & DT-bounce.upwards-PL.IMPF & coaafp \\
\hline yaai & \{i-y-aai\} & 3P-ON-make & caai \\
\hline yaai & \{i-yaai\} & 3P-side & yaai \\
\hline yaail & \(\left\{\mathbf{i - \mathbf { y } _ { \text { Abl } } - \mathbf { o o i l } \}}\right.\) & 3P-PON-blue.green & cooil \\
\hline yaait & \{yo-ooit\} & DT-arrive & cooit \\
\hline yaalim & \{i-y \(\mathbf{y}_{\text {Abl }}\)-aalim \(\}\) & 3P-PON-play & caalim \\
\hline yaalim & \{yo-aalim \(\}\) & DT-play & caalim \\
\hline yaanapolca & \{yo-aanapolca\} & DT-stagger-IMPF & caanapoj \\
\hline yaanipxat & \{yo-\{aanipx\}-at\} & DT-go.home-PL & caanpx \\
\hline yaanpx & \{yo-\{aanipx\}\} & DT-go.home & caanpx \\
\hline yaao & \{i-y-aa0 \(\}\) & 3P-PON-UO.pass.by & caao \\
\hline yaapxa & \(\left\{\mathbf{y o}-\mathbf{a}_{\text {Abl }}\right.\)-apxa \(\}\) & Dt-Times-three & caapxa \\
\hline yaatjö & \{yo-oaatjö\} & DT-sweet & coaatjö \\
\hline yaazi & \{i-y-aazi\} & 3P-ON-carry & caazi, yaazi \\
\hline yaazj & \{i-yaazj\} & 3P-ankle.nerve & yaazj \\
\hline yaazxl & \{i-y-aazxl\} & 3P-PON-cough & caazx \\
\hline yacaalim & \{i-y-ac-aalim \(\}\) & 3P-ON-AUG-play & cacaalim \\
\hline yacoso & \{i-y-acoso\} & 3P-ON-carry.on.back & cacoso \\
\hline yacoxl & \{i-y-acoxl\} & 3P-ON-tend & cacoxl \\
\hline yahaaho & \{i-y-a-haaho \} & 3P-ON-AUG-road & cahaaho \\
\hline yahahizj & \{yo-ah-a-ihizj\} & Dt-Pv-Aug-tied.up & cahizj \\
\hline yahipxat & \{i-yahipxat & 3P-ink (from octopus) & yahiipxat \\
\hline yahjiit & \{yo-ahjiit\} & DT-fall & cahjiit \\
\hline yaii & \{i-y \(\left.\mathbf{y}_{\text {Abl }} \mathbf{0 i i}\right\}\) & 3P-PON-be.Fl.PL/stand.PL & quiih, caap \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline yaii & \{yo-oii\} & DT-be.Fl.Pl/stand.PL & quiih, caap \\
\hline yamác & \{i-yamác\} & 3P-blow & yamác \\
\hline yamtxö & \{i-y \(\mathbf{y b u l}^{\text {-0omtx }}\) \% \(\}\) & 3P-PON-straight & coomtxö \\
\hline yaniicjoj & \{i-yaniicjoj\} & 3P-place.in.front.of.PL & yaniicp \\
\hline yaniicp & \{i-yaniicp\} & 3P-place.in.front.of & yaniicp \\
\hline yanopj & \{i-yanopj\} & 3P-fist/hoof & yanopj \\
\hline yapol & \{i-y y \(_{\text {Ab }}\)-oopol \(\}\) & 3P-PON-black & coopol \\
\hline yapóticol & \(\left\{\mathbf{i - \mathbf { y } _ { \text { Abl } } - \mathbf { a p o t i } - \mathbf { c o l } \}}\right.\) & 3P-PON-duck.a.blow-IMPF & capoti \\
\hline yapxöt & \{i-y \(\mathbf{y}_{\text {Abl }}-\mathbf{0 o p x} \mathbf{0} \mathbf{t}\) \} & 3P-PON-bloom & coopxöt \\
\hline yas & \(\left\{\mathbf{i - \mathbf { y } _ { \text { Abl } } - \{ 0 0 s i \} \}}\right.\) & 3P-PON-sing & coos \\
\hline yas & \{yo-\{00si\}\} & DT-sing & coos \\
\hline yataam & \{i-yataam\} & 3P-mountain.pass & yataam \\
\hline yaticpan & \(\left\{\mathbf{i - \mathbf { y } _ { \text { Abl } } \text { -aticpan } \}}\right.\) & 3P-PON-work & caticpan \\
\hline yaticpan & \{yo-aticpan\} & DT-work & caticpan \\
\hline yatoiilcam & \{i-yo-atoiilcam\} & 3P-ON-distribute.PL & caailcam \\
\hline yatolec & \{yo-atolec\} & DT-ask.for.help & catolec \\
\hline yatomtim & \{yo-atóm-tim\} & DT-make.sound.in.water-IMPF & catóm \\
\hline yax & \{i-yax \(\}\) & 3P-belly & yax \\
\hline yaxi & \{yo-\{00xi\}\} & DT-die & cooxi \\
\hline yaxyat & \{yo-\{00xi\}-at \} & Dt-die-PL & cooxi \\
\hline yaza & \(\left\{\mathbf{i - \mathbf { y } _ { \text { Abl } } \mathbf { - o o z a } \}}\right.\) & 3P-PON-speak.PL & caaitom \\
\hline yaza & \{yo-ooza\} & DT-say.PL, DT-speak.PL & quee, caaitom \\
\hline yázalca & \{yo-oozalca\} & DT-speak.Pl.ImpF & caaitom \\
\hline yazám & \{yo-o abl \(^{\text {zam }}\) \} & Dт-UO-put.Vт & cozám, czam \\
\hline yaziim & \{yo-a-ziim \(\}\) & DT-AUG-appreciate & caziim \\
\hline yee & \{y-ee\} & DT-say & quee \\
\hline yeen & \{i-yeen\} & 3P-face & yeen \\
\hline yeenj &  & Dт-UO-yell & queenj \\
\hline yicopol & \{yo-icopol\} & DT-dark & quicopol \\
\hline yihiimet & \{yo-ihiimet\} & DT-married & quihiimet \\
\hline yiij & \{yo-iij\} & DT-sit & quiij \\
\hline yiijc & \{yo-iijc \(\}\) & DT-wet & quiije \\
\hline yiim & \{yo-\{iima\}\} & DT-sleep & quiim \\
\hline yiin & \{yo-iin\} & DT-go & quiin \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline yiipe & \{yo-iipe\} & DT-good & quiipe \\
\hline yiisax & \{yo-iisax\} & Dт-have.life & quiisax \\
\hline yimoz & \{yo-i-Vmoz\} & Dt-have-heart & quimoz \\
\hline yitooij & \{yo-itooij\} & DT-go.PL & quiin \\
\hline yohaa & \{yo-haa\} & Dt-EQ & chaa, haa \\
\hline yohanl & \{yo-hanl\} & DT-ten & chanl \\
\hline yojizi & \{yo-jizi\} & DT-sour/rotten/spicy/hurt & cjizi \\
\hline yoma & \{yo-m-a \(\mathbf{I I r r e g}\) \} & DT-N-be & haa \\
\hline yomafp & \{yo-m-\{afap\}\} & DT-N-arrive & caafp \\
\hline yomalx & \{yo-m-\{alax\}\} & Dt-N-go.PL & catax \\
\hline yomatax & \{yo-m-atax\} & DT-N-go & catax \\
\hline yomayaxi & \{yo-m-a-yaxi\} & DT-N-Aug-? & cayaxi \\
\hline yomcáp & \{yo-m-cap\} & DT-N-fly & ccap \\
\hline yomeet & \{yo-meet\} & DT-? & cmeet \\
\hline yomiih & \{yo-m-iih\} & Dt-N-be.Fl & quiih \\
\hline yomiih & \{yo-miih \({ }^{40}\) \} & DT-not.be.FL & cmiih \\
\hline yomoos & \{yo-m-\{oosi\}\} & DT-N-sing & coos \\
\hline yoneeej & \{yo-neeej\} & DT-curled.up & cneeej \\
\hline yontápolquim & \{yo-m-tapolquim \(\}\) & DT-N-broken & ctapolquim \\
\hline yoofp & \{yo-\{afap\}\} & DT-arrive & caafp \\
\hline yoohca & \{yo-ahca\} & DT-be.located & caahca \\
\hline yoolx & \{yo-\{alax\}\} & DT-go.PL & catax \\
\hline yoom & \{yo-00m \({ }_{\text {Irreg }}\) \} & Dt-lie & coom \\
\hline yoome & \{yo-eme\} & DT-depleted & queme \\
\hline yoomjöc & \{yo-amjöc\} & DT-think-PL & camoz \\
\hline yoomoz & \{yo-amoz\} & DT-think & camoz \\
\hline yoonloj & \{yo-anloj\} & DT-thunder.IMPF & canj \\
\hline yoopea & \{yo-apca\} & DT-rain & capea \\
\hline yootxo & \{yo-atxo \(\}\) & DT-much/many & catxo \\
\hline yoozcam & \{yo-azcam \(\}\) & DT-arrive.PL & caafp \\
\hline yoozquim & \{yo-azquim \(\}\) & DT-enter & cazquim \\
\hline yopaailx & \{yo-paailx\} & DT-arrive.PL & cooit \\
\hline
\end{tabular}

\footnotetext{
\({ }^{40}\) The stem is historically derived from the negative prefix \(\mathbf{m}\) - and the root iih (be.FL). See Marlett (2002).
}
\begin{tabular}{|c|c|c|c|}
\hline yopahit & \{yo-p-ahit\} & Dt-Pv-eat & quihit \\
\hline yopám & \{yo-p \(\mathbf{A b l}^{\text {-am }}\) \} & DT-Pv-swallow & quim \\
\hline yopanzx & \{yo-\{panozx\}\} & DT-run & cpanzx \\
\hline yopazjc & \{yo-pazjc \(\}\) & DT-dispersed & cpazje \\
\hline yopete & \{yo-pete\} & DT-swollen & cpete \\
\hline yoque & \{yo-ca-e Irreg \} & DT-US-say & teeque \\
\hline yoquiih & \{yo-ca-iih\} & Dt-US-be.FL & quiih \\
\hline yosoop & \{yo-soop\} & DT-low.timbre/thick & csoop \\
\hline yotápolquim & \{yo-tapolquim \(\}\) & DT-broken & ctapolquim \\
\hline \multicolumn{4}{|l|}{Z} \\
\hline zacaamalc & \{ \{zacaama\}-lc \(\}\) & young.woman-PL & zacaam \\
\hline ziicalc & \{ ziica\}-lc \(\}\) & bird-PL & ziic \\
\hline
\end{tabular}```


[^0]:    ${ }^{1}$ The ISO 639-3 code for this language is sei. For the best succinct overview of modern Seri culture, see Bowen \& M. Moser (1995), although as I point out below, the matter of linguistic affiliation is not decided yet.
    ${ }^{2}$ The non-Seri town of Desemboque is south of Puerto Peñasco and north of Puerto Libertad, at $30^{\circ} 34^{\prime} 6^{\prime \prime} \mathrm{N}$ $113^{\circ} 0^{\prime} 32^{\prime \prime} \mathrm{W}$. The Seri town of Desemboque is sometimes distinguished from the non-Seri town by the qualifiers "del Río San Ignacio" or "de los Seris".
    ${ }^{3}$ See Felger \& M. Moser (1985).

[^1]:    ${ }^{4}$ Brusca (2010).
    ${ }^{5}$ The announcement was made in November 2009, for site \#1891.
    ${ }^{6}$ It was started in the 1960s by a number of Seri families who wanted easier access to the area's non-Seri population (especially the residents of Bahía de Kino) for commercial reasons. Some individuals and families alternated their residence between the two Seri towns, as still happens today, for various reasons. Contrary to the assertion that Socaaix was founded by Seris who were disgruntled by religious activities in Haxöl Iihom (Bourillón Moreno 2002, repeated in Rentería Valencia 2009:74) Seris have only given economic reasons as the motivating factors for beginning this town (interviews with various Seri elders, 2008). See note 79.

[^2]:    ${ }^{7}$ Southernmost point: $28^{\circ} 45^{\prime} \mathrm{N}, 112^{\circ} 18^{\prime} \mathrm{W}$; northernmost point $29^{\circ} 13^{\prime} \mathrm{N} 112^{\circ} 18^{\prime} \mathrm{W}$; westernmost point: $28^{\circ} 52^{\prime}$ N $112^{\circ} 34^{\prime} \mathrm{W}$; easternmost point: $29^{\circ} 14^{\prime} \mathrm{N} 112^{\circ} 12^{\prime} \mathrm{W}$.
    ${ }^{8}$ This island was declared a "Zona de Reserva Natural y Refugio para la Fauna Silvestre" on 7 February 1963 by President Adolfo López Mateos (see Comisión de Desarrollo de la Tribu Seri 1976, not paginated; the declaration was published in the Diario Oficial de la Federación in Mexico City on 15 March 1963).
    ${ }^{9}$ Some outsiders have imposed a sense of "sacred" on this land; even some Seris may use that word in Spanish conversation. However, no one has recorded an expression similar in meaning to "sacred" in the Seri language. No rites or practices by the Seris would seem to really justify the use of the term in this context. Other items sometimes claimed by outsiders to be sacred to the Seris include the ironwood tree, the leatherback turtle, and the elephant tree. These and many other animals and plants have had special significance in the culture, but the designation "sacred" still seems inappropriate.
    It is also incorrect, as has sometimes been alleged in popular articles as well as Bowen \& M. Moser (1995:234) that the Seris were forced to leave Tiburon Island, or that they did so because of a lack of food on the island (Grupos étnicos de México, n.d., pages not numbered). By the middle of the twentieth century, most were living on the mainland for reasons of their own choosing, primarily having to do with easier access to commodities. There was never a forced eviction. Once the island was declared a wildlife preserve (to protect the fauna from

[^3]:    ${ }^{19}$ This is partially but richly documented in Malkin (1962), Felger \& M. Moser (1985) and C. Marlett (forthcoming).
    ${ }^{20}$ The place names in M. Moser \& Marlett (2001b) are included in M. Moser \& Marlett (2005).
    ${ }^{21}$ Hast mountain (stone), -aacoj big, cacösxaj tall (SN-tall/long). The part -aacoj is a combining adjectival morpheme (see $\S 13.5 .6$ ) and not an independent word. It is also the root for the predicate big. Latitude $29^{\circ} 12^{\prime} 42^{\prime \prime}$ N , longitude $112^{\circ} 7^{\prime \prime} 2^{\prime \prime} \mathrm{W}$.
    ${ }^{22}$ Transparent names sometimes result from older names becoming taboo. Therefore an easily analyzable name does not necessarily indicate lack of history. For more on names, see chapter 15.
    ${ }^{23}$ E. Moser (1963), Spicer (1962), Griffen (1961). Spellings of the names of the groups are updated to reflect the latest conventions for writing the language.

[^4]:    ${ }^{24}$ The word Hast, while literally stone, hill, mountain, is also an alternative name that refers specifically to this island.
    ${ }^{25}$ This is documented clearly in Herrera Casanova (2010).
    ${ }^{26}$ Bowen (1983:231) citing Bahre (1967:50-51). See also the names Tastioteños, Salineros, and Upanguaymas mentioned in Bowen (1983:248).
    ${ }^{27}$ The comment in Langdon (1974:20), "one language - Seri — several dialects; all still spoken" was erroneous if one understands the word 'dialect' as something more distinct than the very small variation that is found between the various families and family members living in the two towns.
    ${ }^{28}$ Bahre (1967); Sheridan (1979), Bowen (2000).

[^5]:    ${ }^{29}$ McGee (1898), Sheridan (1979), Spicer (1962).
    ${ }^{30}$ Domínguez (1933:148) states that the 1926 census registered 140 Seris, and that in 1933 before a measles epidemic claimed 30 lives, there were $170 ; 26$ men, 29 women, and 85 young people and children.
    ${ }^{31}$ E. Moser (1963).
    ${ }^{32}$ See, for example, the statements in Herbert Corey (1922) Adventuring down the west coast of Mexico, The National Geographic Magazine 42.5:449-503.
    ${ }^{33}$ This is shown well by their use of plants as documented in Felger \& M. Moser (1985).
    ${ }^{34}$ See Ryerson (1976).
    ${ }^{35}$ I mention in Marlett (2007c) that "even to this day there has been no serious anthropological study of any depth done by trained anthropologists. The published anthropological works have been sometimes large or broad, but they were done with embarrassingly small amount of research time in the field; the results have been superficial and/or seriously flawed." The summary presentations such as in Grupos étnicos de México (n.d.) are similarly flawed. See Marlett (2007c) for additional information and references.
    ${ }^{36}$ One myth has been especially defamatory, and that is that the Seris were cannibalistic (see Cannon 1966:31, for example). This has contributed, at least in the past, to outsiders' fears and been part of the psychological barrier between outsiders and the Seris.
    ${ }^{37}$ The official census figure for the year 2000 was 716 (http://cdi.gob.mx/index.php?id_seccion=660), but that figure is probably low. Seri government officials claim the number should be more than 900 (personal communication, 2005).
    ${ }^{38}$ Comisión de Desarrollo de la Tribu Seri (1976) includes a copy of the official 12 November 1970 decree by President Gustavo Díaz Ordaz published in the Diario Oficial de la Federación on 28 November 1970. A later decree (10 January 1975, published 11 February in the Diario Oficial), by President Luis Echeverría, gave the Seris exclusive fishing rights in their coastal waters. This is also reprinted in Comisión de Desarrollo de la Tribu Seri (1976). The Seris are given "reconocimiento y titulación de terrenos comunales" of Tiburón Island by President Echeverría on 10 February 1975 (published 11 February 1975 in the Diario Oficial).

[^6]:    ${ }^{39}$ However, a map produced in 2006, funded by a group of national and international organizations, has the title Hant Comeaac Yaat ${ }^{\circ}$ (land Seri-PL theirs) land that the Seris own, which appears to be an unnatural translation from Spanish.
    ${ }^{40}$ Cuéllar (1980).
    ${ }^{41}$ See also Burckhalter (2000).
    ${ }^{42}$ The spellings Konkaak, Kunkaak, Concaac, Comca'ac and Conca'ac are common erratic spellings, adaptations, or approximations of the plural noun; see Marlett (in preparation b). They are especially popular in commercial uses of the autoethnonym by outsiders and by people who want to use the real name but are accessing their information from uninformed or misinformed sources. Some outsiders have also mistakenly applied this plural noun for the people to the language. All of these problems are typical of situations where cultures try to pay appropriate respect to another culture and language that they do not understand. I capitalize the words Comcaac and Cmiique according to English conventions when I use them in isolation in the text. In sentence examples I follow the Seri and Spanish conventions of not capitalizing such names.

[^7]:    ${ }^{43}$ These limited contexts include certain idiomatic expressions and unspecified person in a passive clause (see $\S 17.3 .5$ ). The terms used for person and people in a generic sense are $\llcorner$ ziix quiisax」 (thing SN-have.life) and $\llcorner$ xiica quiistox $\lrcorner$ (thing. PL SN-have.life-PL).
    ${ }^{44}$ Outsiders have the tendency to think that every name must mean something (see the discussion in Bright 2003, 2004). And, of course, etymologies for ethnonyms are of special interest.
    ${ }^{45}$ Some initial results of a study of the nineteenth century word lists, as well as information about how they came about, are given in Marlett (in press, in preparation).
    ${ }^{46}$ Pérez de Ribas (1645/1999:149).
    ${ }^{47}$ This claim appears in various places in the literature, apparently beginning with Barjau and Iturbide (1981:10), although no source that I have seen gives any substantiation for the claim. The word for sand in modern Yaqui is see'e (something like [see?e]; see Estrada Fernández et al. 2004.) The official secondary school curriculum in Sonora further confuses the issue by claiming that the word Konkaak [sic] has the meaning usually attributed to "Seri", namely 'hombres de la arena' ('men of the sand') (at least in an examination for the first year of secondary school, November-December 2007, published on-line).
    ${ }^{48}$ McGee (1898:9) claimed that the name was from Opata "and may be translated 'spry'," but he gave neither evidence nor the source of his information. A similar claim was made in Hernández (1904) who, as we know, was essentially popularizing McGee's work for a Spanish-speaking audience.
    ${ }^{49}$ Di Peso and Matson (1965:41).

[^8]:    ${ }^{50}$ Spicer (1962:105). Spicer does not indicate the source of this information.
    ${ }^{51}$ Simply the word cmiique (Seri.person) typically occurs with the verb $\sqrt{ } \mathbf{i i}$ hear, as in ¡Cmiique hxii! I really know the Seri language! (literally, I hear Seri (person)!), which usually is taken to mean speak it as well as understand it. In the Gigante_comelón text (line 498), the phrase cmiique iitom is used with the verb $\sqrt{ }$ aCa know when it states that this giant understood the Seri language. The following clauses then have itii (3:3-RL-hear) he heard it and itaa (also written as itá) (3:3-RL-know) he knew it.
    ${ }^{52}$ The deer dance is not integral to Seri culture, however.
    ${ }^{53}$ Spicer (1953) saw some similarities between Seri and Pima (Uto-Aztecan) vocabulary, and suggested that Pima may have had a more dramatic effect on Seri than is attributable to the usual borrowing of a few lexical items. He seems to have been suggesting that Seri might be a mixed language as a result of that intense contact. The data do not appear to support this hypothesis, however.

[^9]:    ${ }^{54}$ See Lionnet (1986) for the Eudeve data. Pinart (1879:1) recorded this word as Koksol 'Mejicanos' [sic].
    ${ }^{55}$ For the Seri account, see Montaño Herrera (2007); and for the Maricopa and Tipai account, see Miller (1997); and the identification of the animals in the Maricopa and other Yuman groups in Kelley \& Milone (2005, 421, 494) citing Spier (1955) and (Hudson 1984).
    ${ }^{56}$ For the Seri information, see the 2005 dictionary; and for the Luiseño and Tipai account, see Miller (1997: 209).
    ${ }^{57}$ See also Maclaury (1997).
    ${ }^{58}$ There is no easy way to express the general word 'color' in the language, however. If one wants to know the color of something, the opening question is ¿Zó hapáctaya? (literally, How does it appear?, less literally, What is it like?), which is understood as referring to color in the common situation. The fact that one is asking about color and not shape can be made clear by prompting the response with suggestions about the expected answers, such as ¿Cooxpya? ¿Cheelya? (Is it white? Is it red?).
    ${ }^{59}$ This example and others are found in Saxton, Saxton \& Enos (1983). Thanks to David Shaul (p.c.) for first alerting me to this construction in O'odham.

[^10]:    ${ }^{60}$ Estrada Fernández et al. (2004) and Collard \& Collard (1974).
    ${ }^{61}$ But probably the Mayo term is closer to the original word. Many Seri words have lost the vowel of the syllable that follows the stressed syllable. If this were to happen to a word like moosen, the result would be moosn, which would itself be unpronounceable in Seri because of having a nasal after a fricative in word-final position. As this has happened to other words in Seri (see §28.3.3), we know that the "repair" strategy in these cases is to insert the vowel $\mathbf{i}$ after the final consonant. The application of such a strategy to moosn would yield moosni - precisely the form attested in modern Seri. Pinart (1879:9) transcribed this word (glossed as 'galápago') as mosbin, (with a breve above the $b$ and above the $i$, and both the $b$ and $i$ underlined) suggesting that indeed the original second syllable vowel was present that time, in line with the hypothesis presented here.
    ${ }^{62}$ Langdon (1974), Sapir (1925). Langdon (1990:64) points out that she has found that Yuman and Seri "share some morphological sets and specific idiosyncracies" but that "cognate lexical morphemes are hard to identify."

[^11]:    ${ }^{63}$ Kroeber (1915), Sapir (1917), Kroeber (1931), Bright (1956), Greenberg (1987). Greenberg and Swadesh (1953) actually took Seri as representative of Yuman. Haas (1964) cites Kroeber's (1915) paper approvingly. Swadesh's classification was especially favored for citation in earlier publications by the Mexican government (see Grupos étnicos de México, n.d., no page numbers, for example). Hale \& Harris (1979:173) remark, however, that "if Seri is indeed a Hokan language, it remains questionable whether its closest relative is the one suggested by geography - Yuman." They point out that their assessment of the data (at that time) suggests that, if indeed Seri is related to Yuman, the separation of the two would have been about ten millennia in the past.
    ${ }^{64}$ Campbell (1997) and Marlett (2008c), for example. Kaufman (2008) presents a different assessment, including Seri in the Hokan grouping that he believes exists. Notwithstanding the lack of convincing evidence of the relationship of Seri to any other language, the desire to link it to something and the lack of understanding of the tenuousness of the evidence presented in the past have led non-linguists to continue to assert the hypotheses.
    ${ }^{65}$ See Marlett (2008c) for a review of a history of the proposal and also an evaluation of the evidence.
    ${ }^{66}$ This is the conclusion I draw in Marlett (2007b). See also Campbell (1997). The alternate view was put forward, most recently in Greenberg (1987), without discussion or much evidence, which was repeated in Bright (1992). See the discussion in Marlett (2008c).
    ${ }^{67}$ See Marlett (2006) for a very brief introduction.

[^12]:    ${ }^{68}$ E. Moser (1963:17-18).

[^13]:    ${ }^{69}$ Examples with á...e changing to á...i are not found because á...e is a sequence that has already been subjected to a vowel harmony rule producing é...e (see §13.6.4), which is then resistant to raising to $\mathbf{i}$.

[^14]:    ${ }^{70}$ Marlett, Moreno Herrera and Herrera Astorga (2005).

[^15]:    ${ }^{74}$ See McGee (1898:95ff, 299ff) and Marlett (2010c) for information on the various lists from the nineteenth century.
    ${ }^{75}$ Ramírez (1861). It is not at all clear why publication of the list was delayed for more than ten years.
    ${ }^{76}$ This list is available from the Smithsonian Institution.
    ${ }^{77}$ Gatschet (1900). This list is available from the Smithsonian Institution.
    ${ }^{78}$ Kroeber (1931).
    ${ }^{79}$ For more details, see the historical overview in Marlett (2008b). I note here that the very brief account of the Mosers' lives and work, as well as of other events of that time period, presented in Bourillón Moreno (2002), as well as Rentería Valencia (2007:19-20, 2009:73-74), which are largely based on the former, contains major inaccuracies. These inaccuracies, as well as the sometimes tendentious portrayal of the times and people, are due to the uncritical use of unpublished field notes and manuscripts by William Neil Smith; these notes are available from the University of Arizona Library Special Collections; see the introduction to them at http://knet.asu.edu/archives/?getObject=ualib:117366\#id2348733. Smith was a young man, with an undergraduate degree in anthropology and an incomplete master's degree, who began to live with the Seris in the late 1940s and spent significant time there until 1967. (His long-term research was funded from various private sources and conducted outside of any formal program or oversight. He left behind two small academic publications about the Seri culture and a couple of non-academic ones.) Many of his unpublished observations are very acute and interesting, some show naïvety and bias, and yet others are erroneous according to other contemporary observers and to Seris with whom verification has been sought. His assertion (in Smith 1974:142) that "the last vestiges of native culture disappeared after protestant [sic] missionaries began living with the tribe in the early 1950 s" and that "thus ended more then 2,000 years of indigenous culture and freedom for the Kunkaak - the Seri people" is simple calumny that was obvious to others who were personally familiar with the situation.

[^16]:    ${ }^{92}$ The Spanish translations generally use the vocabulary of speakers of Mexico, and particularly northwestern Mexico. Second person plural forms are translated with ustedes rather than vosotros; the verb forms in the translation reflect this usage. Since Seri does not express respect through pronouns or verb forms, the second person singular forms of Seri are all translated with tú (and related pronominal forms) and its corresponding verb forms rather than with usted and its corresponding verb forms.

[^17]:    ${ }^{93}$ The story was rather clumsily edited (without attribution of the source although it is clearly just a representation of the version in Romero et al. (1975), translated, and published in the oddly titled book Relatos guarijíos (1995).

[^18]:    ${ }^{94}$ This chapter is an expansion and revision of Marlett (2005).

[^19]:    ${ }^{98}$ This claim is complicated by other factors that are discussed in chapter 22. Postposition-looking words (Pelements) and their semantic complements are commonly not contiguous; the complement may occur early in the sentence, but the P-element must occur in a pre-verbal position; see §22.3.1.

[^20]:    ${ }^{99}$ The facts therefore support the head-final typology if the Determiner is taken as a head, as in the DP hypothesis; see Abney (1987).
    ${ }^{100}$ Since third person is unmarked except when third person acts on third person, the inflectional characteristics of verbs may be overlooked when not looked at within the paradigm.

[^21]:    ${ }^{101}$ To be "tensed", the language in question must have a grammatical category of tense that is morphologically bound on verbs and also minimally involve a distinction between past and non-past time reference (Stassen 1997:350-351). A non-tensed language should also have "verby" adjectives, according to Stassen's Tensedness Universals of Adjective Encoding (1997:357). This is true of Seri.
    ${ }^{102}$ The inflectional morphology for objects is written in the practical orthography as a separate word; but the evidence is clear that these morphemes in question are true prefixes.

[^22]:    ${ }^{103}$ Thanks to Mary B. Moser for pointing out this feature and suggesting its inclusion in the grammar.

[^23]:    ${ }^{104}$ The original text had the definite article quih (the.FL) after the head noun. A Seri editor indicated that it was better without it.

[^24]:    ${ }^{105}$ See Nichols (1986) and Nichols \& Bickel (2008).
    ${ }^{106}$ Kaufman's (2008:507) writes that "most Hokan languages (e.g., Yan, Yum, Ser) have accusative casemarking." The inclusion of Ser (viz., Seri) in this list is puzzling since no one has ever claimed that Seri has case marking at all.
    ${ }^{107}$ The fact that postpositions and P-elements are inflected for person whether the complement is a noun phrase or a pronoun puts Seri within a very small group of languages by the typology of Bakker (2008).

[^25]:    ${ }^{108}$ Presumably Seri would be classified as a predominately prefixing language by the criteria laid out in Dryer (2008a), which is typologically unusual, especially for verb-final languages. The morphological marking of number and aspect in Seri seem to be quite old features of the language, however, and these are suffixes.

[^26]:    ${ }^{109}$ According to the typology presented in Bickel \& Nichols (2008), Seri ranks on the high end of the scale for synthesis.
    ${ }^{110}$ Third person subject on an intransitive verb is indicated by the lack of person morphology.
    ${ }^{111}$ Third person possessor is generally overtly marked but it is deleted phonologically before $\mathbf{y}$. The nominalizer $\mathbf{y}$ - causes a following vowel to change quality under certain conditions.

[^27]:    ${ }^{112}$ The nominalizer is a zero prefix in this form.
    ${ }^{113}$ The only example of a verb that has two roots in it is $\sqrt{ }$ apocjitac peel the outer part from the limberbush to prepare basket-making material, which has the causative prefix a-before the root $\sqrt{ }$ pocj carapace and the inflected word itac (3P-bone) its bone.

[^28]:    ${ }^{114}$ The basic stem and the causative stem are not identical in the way they conjugate, despite their similar presentation here.

[^29]:    ${ }^{115}$ Therefore it is especially odd to read McGee's (1898:11) claim that "kinship terms are strikingly scanty" in the language.

[^30]:    ${ }^{116}$ Langdon (1971).
    ${ }^{117}$ These are the categories used in the Seri dictionary (M. Moser \& Marlett 2005). This grammar makes some refinements and corrections to what is presented in the dictionary.

[^31]:    ${ }^{118}$ Maddieson (2008b).
    ${ }^{119}$ E. Moser \& M. Moser (1965) posited nasalized vowels, but the error in analysis was corrected about ten years later and documented in Marlett (1981b). Thus Seri should be removed from the sample cited in Ruhlen (1978).
    ${ }^{120}$ See Maddieson (2008a) for a typology.
    ${ }^{121}$ See Maddieson (2008c). In that survey, less than 60 languages have uvular continuants, and only 12 have
    uvular continuants without uvular plosives. No language of the Americas is included in that group in the survey.
    ${ }^{122}$ See Maddieson (2008d).

[^32]:    ${ }^{123}$ Having penultimate stress puts Seri within a large group of languages (Goedemans \& van der Hulst 2008). The fact that the domain is the root makes Seri quite unusual, however, at least based on current surveys.
    ${ }^{124}$ The 2005 dictionary followed a simple convention of writing stress whenever it did not fall on the first syllable of the word. In this grammar, like the second edition of the dictionary (2010), however, the convention is slightly different since it takes the phonological properties of the word into consideration. See page 29.

[^33]:    ${ }^{1}$ Until that time, an appropriate strategy is to work without such a structure. On the order of the various nominal phrases, see Culicover and Jackendoff (2005:130) where it is argued that it is possible to appeal simply to linear order, with arguments preferably occurring in a particular order, but with that preference being "defeasible" by other factors.

[^34]:    ${ }^{2}$ Content questions are discussed in $\S 6.2$. Word order is somewhat less flexible in questions (see chapter 6).
    ${ }^{3}$ See chapter 18 for a discussion of complications that arise when the semantic arguments do not match the syntactic arguments.

[^35]:    ${ }^{6}$ See Comrie (1989:127) for discussion of natural information flow and different kinds of nominals.

[^36]:    ${ }^{7}$ This is the preferred interpretation of this sentence although for some speakers, at least, it is ambiguous. For some speakers, if the article com is used with the expression for hammer (which other speakers disallow), the interpretation would be that the hammer is the object being pounded, since that article would imply (for them) that the hammer is lying on the table or somewhere and thus is not being used as the instrument.

[^37]:    ${ }^{8}$ This example cannot mean ...to you (pl.) because with this verb a plural goal must be represented with an inflected P-element: Mino hpmiifp. I have arrived to you (pl.). See §22.3.3.

[^38]:    ${ }^{9}$ Location with other verbs is not generally possible this way. See, for example, *Socaaix hac cöcaticpan iha ('Está trabajando en Punta Chueca' She is working in Punta Chueca). A P-element is required for this situation.
    ${ }^{10}$ This construction can be used only with an inanimate object. Although one can personify the fire and say I'm not going to sit near you, if the referent is a person, a locational noun (mihiin place near you, in this case) must be used. See §13.4.

[^39]:    ${ }^{11}$ The Seri rendering here does not seem to be the equivalent of the Spanish and English. Furthermore, this version is slightly revised from the published version due to input from consultants on the grammar. The adverb mos was moved from sentence-initial position to precede itacl.

[^40]:    ${ }^{12}$ The verb used here implies that a long instrument is used, so the sentence is not ambiguous. The word order preference is quite strong in this case, with the definite nominal preceding the indefinite.

[^41]:    ${ }^{21}$ These would have to be expressed using a P-element. See $\S 2.7 .2$.

[^42]:    ${ }^{1}$ This prefix is not very commonly used and so an example that is completely natural has been included here. The allomorph here includes an epenthetic $\mathbf{0}$.
    ${ }^{2}$ This must be used as a first person plural hortative (let's ...) form that also used the first person emphatic subject prefix (§17.3.2.1); see the discussion of irrealis forms below.

[^43]:    ${ }^{3}$ The use (without auxiliary and modal) as a first person plural imperative, illustrated in (1e), is unusual.
    ${ }^{4}$ The clause might also be a predicative nominal construction; see chapter 10.

[^44]:    ${ }^{5}$ One subordinator, xox although, combines with a clause headed by a dependent verb rather than an independent one; see §25.4.1.

[^45]:    ${ }^{6}$ Longacre (1972) introduces the term "clause chaining" and characterizes it based on languages of Papua New Guinea. Longacre (1985) demonstrates that this is a type of structure found in other parts of the world as well. See also Hale (1991) for a discussion of similar facts in Misumalpan languages of Central America.

[^46]:    ${ }^{7}$ This is a simplified version of the structure proposed in Hale (1991) for chained clauses in Misumalpan. Hale indexes the topmost $S$ with the final $S$, while the other $S$ 's are viewed as adjoined to the final $S$

[^47]:    ${ }^{8}$ This line has two verbs that occur in a particular construction discussed in §17.3.8.

[^48]:    ${ }^{10} \mathrm{My}$ attempts to elicit a sentence directly corresponding to $I$ will buy it to eat it were unsuccessful. I consistently could only get Ihpitalhaa, ihsiihit aha I will buy it (Dependent Irrealis), I will eat it.

[^49]:    ${ }^{11}$ The postposition ano may be used this way sometimes as well, though less frequently and under conditions that have not been studied. See Yaza ano, ... (3P-PON-speak.PL) While they were talking, ... (NTT, Lk 24:15).

[^50]:    ${ }^{12}$ The basic facts of the Seri switch-reference system were laid out in M. Moser (1978b). Further details were provided in Marlett (1981b), Marlett (1984c), and Farrell, Marlett \& Perlmutter (1991).

[^51]:    ${ }^{13}$ These examples all happen to have third person subjects; this is irrelevant, as the more complete treatment makes clear.

[^52]:    ${ }^{14}$ The first sentence of this example is identical to one given in Moser (1978:115), but the translation here is a bit different. This may be due to a bit more ability in Spanish by my consultants.

[^53]:    ${ }^{15}$ This DS marker is not related to the very next pair of interpolated clauses, but rather to clause $(\mathrm{e}+\mathrm{g})$.
    ${ }^{16}$ This is not a clause, of course, but only a nominal phrase; see $\S 3.11$.

[^54]:    ${ }^{17}$ This instance of DS ma is absent on the original recording, but erroneously so according to the consultants for this grammar.
    ${ }^{18}$ This word is actually missing in this sentence on the original recording, but after a pause a new sentence starts.
    See $\S 12.4 .3$ for the use of yoque as an evidential marker.

[^55]:    ${ }^{19}$ The unexpressed agent is the relevant subject in this example; see $\S 9.1 .1$.

[^56]:    ${ }^{20}$ Another example is found in（89）below，line（f）．

[^57]:    ${ }^{21}$ This morpheme was written as a suffix for many years despite obviously not being part of the morphology of any particular class of word. It was the suggestion of the Seri consultants, during the last stage of the revision of the Seri dictionary, that the morpheme be written as a separate word.

[^58]:    ${ }^{22}$ This is translated 'They arrived three days ago' in Moser (1978: 116). This translation was rejected by my consultants.

[^59]:    ${ }^{23}$ This phrase is very common and often reduces to ['o $\chi$ pakama], with stress on the first word rather than on the verb. Sometimes the phrase has a literal interpretation and sometimes not; it is not easy to distinguish them in all situations.

[^60]:    ${ }^{24}$ This expression may also be used just to mean in past times，without indicating a previous era．

[^61]:    ${ }^{26}$ Other examples from the NTT: Mt 9:28 (subject), Mt 18:2 (subject), Lk 11:1 (subject), Lk 14:1 (subject), Lk 5:2 (subject), Mk 9:36 (subject). The following example shows a dangling DP separated by two clauses from a clause in which it could appear.
    (v) Ox tpacta ma, ctam Anás hapáh quii - Jesús tintica cói tahfaiilquim oo ma, thus RL-be DS man SN-PV-say the.CM the.AW still RL-PV-tie.up-Impf DL DS
    toc contita ma, ctam Caifás ... quij cöimaaix.
    there 3IO-AW-RL-move DS man the.CM 3IO-3:3-PX-carry
    'Entonces Anás envió a Jesús, atado, a Caifás, el sumo sacerdote.'
    Then Annas sent Jesus, still tied up, to Caiaphas the High Priest. (NTT, Jn 18:24) RMH_07-11-07_52a

[^62]:    ${ }^{27}$ This means before a direct quotation in cases where one is presented.

[^63]:    ${ }^{28}$ The article quih in this position is barely pronounced, as a $[\mathrm{k}]$. See §21.2.4.

[^64]:    ${ }^{31}$ In fact, if the nominal were in the clause, the verb ntiya would have to be replaced by contiya, to cross-
    reference the oblique object.

[^65]:    ${ }^{32}$ The oblique/indirect object agreement on this verb is cross-referencing the complement of the P-element iti. That complement refers to the circumstances that led to Cöquimaxp's death.
    ${ }^{33}$ One consultant would have preferred to see pac some rather than the first instance of quih.

[^66]:    ${ }^{1}$ The interpretation with a plural direct object and this particular verb stem is unlikely because if the event is best described with an imperfective stem ( $\sqrt{\text { aafajquim, in this case), that would be used instead of the perfective stem; }}$ see $\S 17.3 .3$. It is also possible that the instrument could be construed as plural.

[^67]:    ${ }^{2}$ This must be understood as perfective since the perfective stem is used. If the action were done to the men one by one (as would be most normal), then the imperfective stem is required. See §17.3.8.
    ${ }^{3}$ This is the preferred interpretation of this sentence although for some speakers, at least, it is ambiguous. For some speakers, if the article com (the.Hz) is used with the expression for hammer (which other speakers disallow), the interpretation would be that the hammer is the object being pounded, since that article would imply (for them) that the hammer is lying on the table or somewhere and thus is not being used as the instrument.

[^68]:    ${ }^{4}$ The change from quij to quih is not absolutely indicative of any particular change in the grammatical structure, but it tips the balance in favor of one interpretation over another in this case at least.

[^69]:    ${ }^{5}$ One consultant suggested that it would look more reasonable if there were a comma after Juan quij

[^70]:    ${ }^{6}$ This presentation follows Huddleston and Pullum's (2002:410) proposal for English: "Fused-head NPs are those where the head is combined with a dependent function that in ordinary NPs is adjacent to the head, usually determiner or internal modifier ...."

[^71]:    ${ }^{7}$ The categories used in the 2005 dictionary were of this traditional type.

[^72]:    ${ }^{8}$ If the sandals found were of someone else who is not mentioned explicitly, one would use the absolutive form (see §13.1.2) of the noun: hataamt.

[^73]:    ${ }^{14} \mathrm{~A}$ variation on this sentence or the first that is completely acceptable as well, is the one that postposes the subject to the end of the sentence: Heme yoofp, hascám z iti tiij, Juan quih.
    ${ }^{15}$ René Montaño Herrera reports that this kind of sentence structure is heard from young people today. I have not confirmed this observation, however, and it is impossible to guess whether the crucial facts are the same.

[^74]:    ${ }^{1}$ The adverb anxö precedes miizj well in the idiom miizj $\sqrt{ }$ aai (well make) take care of. It follows the adverb mos also since mos is not in the VP.

[^75]:    ${ }^{2}$ This is grammatical on the reading He had healed people who were so sick....

[^76]:    ${ }^{3}$ The adverb hax, like some other adverbs, co-occurs with the postverbal adverb oo, which is not translatable (but glossed here and elsewhere as DL 'delimiter'; see §24.3.8).

[^77]:    ${ }^{4}$ Examples to illustrate this fact are too bizarre to even attempt to present.

[^78]:    ${ }^{5}$ The direct object prefixes are written as separate words the practical writing system (in a way analogous to the pronominal clitics of Spanish), but this practice must not be allowed to obscure the fact that in Seri they are simple prefixes in the verb word.

[^79]:    ${ }^{6}$ The prefix $\mathbf{i}$ - (3:3) is written in (24) for reasons other than the actual phonetics, since this $\mathbf{i}$ and the $\mathbf{i}$ of $\mathbf{p t i}$ merge phonetically. See §11.5.
    ${ }^{7}$ While some speakers might take example to be talking about boxing, Xavier Moreno informs me that slightly different (detransitivized) plural verb stems, Voncooptoj, Voncooptolca, are used for the sense of boxing, as recorded in the second edition of the dictionary (2010).
    ${ }^{8}$ Other nouns like these include heecot desert area (most commonly found in the idioms heecot $\sqrt{ }$ iih (desert.area be) go hunting and heecot $\sqrt{ }$ aamx (desert.area say +IO ) promise secretly). This noun also occurs without an article as an oblique object ( $\$ 2.4$ ) in other contexts. See also the word hanteeno (on the) ground. While this word may be an adverb (as listed in the 2005 dictionary), it might also be categorized as a location noun. Both heecot and hanteeno may be etymologically derived from sequences of noun plus postposition.

[^80]:    It is shown below that the P-element occurs inside the verb phrase.

[^81]:    ${ }^{10}$ Not all of the possibilities have been explored. This class of nouns could continue to grow as additional evi-
    dence accumulates.

[^82]:    ${ }^{11}$ The source of this phrase is not known，nor its meaning in isolation．There is a related phrase hant haazitoj that means bothersome．It looks like a possessed deverbal verb form and for that reason it is included in this section．

[^83]:    ${ }^{12}$ The sentence means pray many times if it has the imperfective verb stem (§17.3.8); the verb would be imatólejquim in that case.

[^84]:    ${ }^{13}$ There is some variability on this. The following is acceptable to at least some consultants: Ziix quih anxö imacoaat, $S$ /he taught them many things, in which ziix quih precedes anxö and there is no oblique object crossreferencing morphology. (For at least some speakers this example is not ambiguous; it only means many things and not many people.) The phrase ziix quih is grammatically the oblique object that is cross-referenced on the verb in (49). When no addressee is present, the clause is intransitive (as indicated by lack of 3:3 marking (§17.3.2.1) in the following example): Pedro quij ziix quih anxö cömacoaat, Pedro taught many things. Again, for some speakers the latter has a grammmatical variant, Pedro quij anxö ziix quih cömacoaat.
    ${ }^{14}$ The construction is transitive by the tests shown in Appendix C. Note that in (51) the allomorph $\mathbf{h}$ - and not hp(see $\S 17.3 .2 .1$ ) is used for first person singular subject.

[^85]:    ${ }^{15}$ The syntax of P-elements is discussed in more detail in chapter 22.
    ${ }^{16}$ The only exceptions to this are the postpositional phrases occurring at the beginning of a sentence and providing a general context (see $\S 3.9$ )
    ${ }^{17}$ See note 13 in this chapter where the phrase ziix quih (thing the.FL) has some special variability as well for some speakers.

[^86]:    ${ }^{18}$ In §5.8.4 one very special exception is noted.

[^87]:    ${ }^{19}$ The $\mathbf{i}$ that sometimes occurs before first and second person subject markers is simply epenthetic for phonological reasons; see §27.1.1.
    ${ }^{20}$ The P-element ano is obligatorily truncated to an when it precedes a vowel (see $\S 22.2 .1$ ). When it precedes a glottal stop followed by a vowel, this truncation is common but usually optional. In this particular example, however, the consultants preferred an.

[^88]:    ${ }^{21}$ The expression for put (long item) inside is ano $\sqrt{ }$ axquim, and for put (long item) down is hant $\sqrt{ }$ axquim. The combination of ano and hant is what gives the idea of doing it carefully, and it is not relevant whether the putting is onto a hard surface (like the land) or into water, as example (96) shows.

[^89]:    ${ }^{22}$ This example is crucially different from the grammatical one that has an indefinite article after hamác, which as a DP must occur before the VP:
    (i) ... hast ancoj zo hamác $z$ ano htitlim ma,... stone 3P-area-PL a/one fire a 3P-in 1SGS.Tr-RL-kindle DS
    ... prendí una lumbre en las rocas, ...' / ... I made a fire on the rocks, ... RRR

[^90]:    ${ }^{1}$ This modal is written as a suffix in the practical orthography, as decided by the editorial committee for the 2005 dictionary. See §20.5.

[^91]:    ${ }^{2}$ This section expands on the material presented in Marlett \& M. Moser (2000). Since Seri uses interrogative mood for finite verbs and a question modal for yes-no questions when there is no verb, it falls into a small group of languages in the typology presented in Dryer (2008b).

[^92]:    ${ }^{3}$ More accurately, the question modal follows the verb phrase (including whatever postverbal adverbs that may also be present) that is headed by the deverbal noun.

[^93]:    ${ }^{4}$ The word zó is also used in more complicated expressions to ask why? and how much?. See §6.2.2.4.
    ${ }^{5}$ In addition, the word háahcö is an archaic word for who?

[^94]:    ${ }^{6}$ Thanks to René Montaño Herrera for pointing this out.

[^95]:    ${ }^{7}$ The most common way to question an ergative subject is with a deverbal noun construction (see §6.2.2.2).

[^96]:    ${ }^{8}$ Perhaps the following is a more natural rendering in the language:
    (i) ¿Zó ${ }^{\circ}$ ziix ccam ${ }^{\circ}$-ya toc cötiih, Luis quih itácö? what? animal QM there 3IO-RL-be.FL the.FL 3:3-RL-kill
    'Qué animal mató a Luis?’ (* ‘Qué animal mató Luis?')
    What animal killed Luis? (*What animal did Luis kill?) RRR

[^97]:    ${ }^{9}$ Note that it also occurs with an article in this context. This construction is appropriate when the event is farther in the past. It may also be noted that the sequence quih haa here is pronounced very quickly, essentially as if it were chaa [k?aa], but it is not the subject nominalized form chaa of the equative root $\sqrt{ }$ haa. That word is used in a question such as íÁz chaa -ya ntasi? What was it made of that you drank? RRR
    ${ }^{10}$ The following rhetorical question which has háqui hac cross-referenced on the verb, was provided:
    (ii) ¿¿Cmaax Juan quih háqui hac cötiih, ziix zo thaa?! now the.FL which? the.LC 3IO-RL-be.FL thing a RL-EQ
    ';Juan no será oficial otra vez! / Juan will never be an official again! RRR

[^98]:    ${ }^{11}$ Another grammatical sentence with this same translation is the following using a deverbal noun in the main clause, which therefore requires a third person form in the dependent clause (see $\S 10.4 .2$ ): RRR
    (iii) ¿Me zó hant ano mota hant hizac iti caafp -ya? 2PRO which land 3P-in/from TwD-RL-move land PX-LC 3P-on SN-arrive QM
    ${ }^{12}$ A P-element may be used for other reasons - such as to indicate the location more specifically - in which case the article hac is used as well. See example (106).
    ${ }^{13}$ The sense of (101a) can be expressed if the question word is part of a dependent clause with a verb allowing for an oblique locative.

    | (iv) ¿Me | háqui | hac | contipa | soos | quee | -ya? |
    | :---: | :---: | :--- | :--- | :--- | :--- | :--- |
    | 2PRO | where? | the.LC | 3IO-AW-Ir.DP-move | IR.ID-sing | AUX.SN QM |  |
    | ¿Dónde cantarás? / Where will you sing? RRR |  |  |  |  |  |  |

[^99]:    ${ }^{14}$ If one were asking this question as if with contemplation or doubt, the question would have the finite verb (which requires a different auxiliary).
    (v) ¿Háqui com isaazi haa -ya?
    which.one? the.Hz 3:3-IR.ID-carry Aux QM
    ‘¿Cuál (p.ej., de los rifles) va a llevar?' / Which one (e.g. of the rifles) is s/he going to take? RRR

[^100]:    ${ }^{15}$ A grammatical example that could be confused with this is: (viii) ¿Hant zo matqueept?
    place a 2PLS-RL-like-PL RMH_10-15-0__20b
    '¿Prefieren ustedes algún lugar en particular?’ / Do you (pl.) prefer any particular place?

[^101]:    ${ }^{16}$ To the best of my knowledge, this variant was not recorded before 2007 , and it is unclear why not.

[^102]:    ${ }^{17}$ The general question must use a finite verb: ¿Quíih - ya toos? Who is singing?

[^103]:    ${ }^{18}$ This is grammatical if the me is analyzed as the oblique/indirect object prefix (§17.3.2.4) rather than the independent pronoun. It would mean What is s/he doing to you?

[^104]:    ${ }^{19}$ The causative form cayaxi is used with the expressions for age, among others. On this construction, see §19.9.

[^105]:    ${ }^{20}$ To make it absolutely specific about requesting exact information, the word isoj (3P-self) can be inserted after cyaxi.

[^106]:    ${ }^{21}$ If the me is taken as the $2 I O$ prefix, in this example, the meaning is When will s/he/it arrive to you?

[^107]:    ${ }^{22}$ Note that the infix -a- does not occur in this context; see $\S 26.10$.

[^108]:    ${ }^{1}$ The word hamatj rarely occurs outside of this idiom and another; its gloss is only speculative here. The 2005 dictionary suggests something relating to aridness.

[^109]:    ${ }^{2}$ The word hant carries the primary stress in this idiom.
    ${ }^{3}$ Since the word iiha does not change at all, it is not clearly identified with either of the homophonous possessed nouns that are iiha (his/her/its possession and his/her/its body member/extremity). The plural form of (11) is iiha

[^110]:    matapitaj are you (pl.) fat?; note the invariance of iiha. The position of the word in the clause does not make it identifiable with the postverbal adverb iiha only (see §24.5.5).
    ${ }^{4}$ This is the irregular verb that retracts stress, not the equative verb $\sqrt{ }$ haa.

[^111]:    ${ }^{5}$ This is the irregular verb that retracts stress, not the equative verb $\sqrt{ }$ haa.

[^112]:    ${ }^{6}$ Although this is homophonous with a short form of the word for now (typically cmaax), it does not occupy an adjunct position in the clause, unlike the common time adverb (see §24.4.3). In the idiom, cmaa is invariant in its immediate preverbal position.
    ${ }^{7}$ Part of the meaning of apparently is expressed by the word xah in the complement.
    ${ }^{8}$ This expression seems to be falling into disuse.
    ${ }^{9}$ The $\mathbf{m}$, etymologically negative, is lexicalized as part of the stem. The most obvious evidence for this is the fact that the subject-oriented deverbal form uses the $\mathbf{c}$ - allomorph rather than the i- allomorph. See §14.1.

[^113]:    ${ }^{10}$ The root $\sqrt{ }$ azje means piled up; it seems obvious that that verb stem in this idiom is derived from a lexicalized passive form of that verb. The $\mathbf{p}$, etymologically the passive prefix, is lexicalized as part of the stem. The most obvious evidence for this is the fact that the subject-oriented deverbal form uses the $\mathbf{c}$ - allomorph rather than the ha- allomorph. See $\S 14.1$. The stem $\sqrt{ }$ pazje is used in a few idiomatic expressions.

[^114]:    ${ }^{11}$ See also the use of co- in morphologically dative statives (§18.2.6) in which it is also pleonastic.

[^115]:    ${ }^{1}$ Following Abney (1987) and much later work. See Bernstein (2001).
    ${ }^{2}$ The difference between $\mathbf{z o}$ and $\mathbf{z}$ as the singular indefinite article is trivially conditioned by the absence or presence of a vowel immediately following it in the utterance; see §21.1.

[^116]:    ${ }^{3}$ The interrogative determiner zó which? precedes its complement, however. See §6.2.1.5.

[^117]:    ${ }^{4}$ Tosni ina (pelican 3P-feather) is pronounced tosni ina in hypercorrect speech, but [to s'nina] in normal speech. Similarly, moosni ilít (sea.turtle 3P-head) is pronounced [mo'sni'łit] in normal speech. This must be a case of elision of the $\mathbf{i}$. Note the $\mathbf{i}$ in the expression tosni áa (pelican true); the form is not *tosnáa.
    ${ }^{5}$ The essay author's original version of the sentence did not have the determiner (quih) after the noun iiselca. Another person indicated that, while understandable, the phrase was very much improved by including quih.

[^118]:    ${ }^{6}$ The most common, and generally preferred, situation is for the word $\mathbf{z}$ to $\underline{n o t}$ be included in this sentence.
    However, it is viewed as possible here for rhetorical effect. It is also possible in a sentence such as the following:
    (i) ${ }^{\circ}$ Ziix hapx coom ${ }^{\circ}$ z ilít $\quad$ zo tazoj, caacoj a -ya, ... whale a 3P-head a SN-alone SN-big RHET QM
    'No solamente la cabeza de una ballena es grande, ...'
    Not only the head of a whale is big, ... RRR (offered)

[^119]:    ${ }^{7}$ The adverb heeno relating to the desert precedes the noun in the phrase heeno comcaac central Tiburón Island Seris.
    ${ }^{8}$ The noun for Baja California is typically Hant Ihiin. It is not known why this noun — and no others, apparently - has a slightly different form in this construction.
    ${ }^{9}$ A PP is usually associated with a verb; see the examples of relative clauses with PPs in §8.4.

[^120]:    ${ }^{10}$ The same pattern is found in a several lexicalized items. See §13.5.3.

[^121]:    ${ }^{11}$ If this is referring to fish, then they are at the surface. If it is referring to insects or birds, then they could be just above the surface.

[^122]:    ${ }^{12}$ This analysis follows, in part, that proposed in Williamson (1987) for Lakhota, and Basilico (1996).
    ${ }^{13}$ Example (115) is a good, but uncommon, example with a nonrestrictive relative clause that modifies a nominal (which happens to contain a restrictive relative clause).
    ${ }^{14}$ This means that the distribution of DPs with adjective-equivalents do not have the same distribution in Seri as they have in English. Note that in English we easily say "John looked up into the bright blue sky" without implying that the sky was any other color at any time.

[^123]:    ${ }^{15}$ These facts are important to note since Williamson (1987) made the claim that those language that have internally headed relative clauses will universally follow a restriction that the head must be indefinite. This sweeping claim is contradicted by the facts of Seri as well as (at least) Haida (Enrico 2003:577-8).
    ${ }^{16}$ This generalization is slightly complicated by what happens with the irrealis forms.

[^124]:    ${ }^{17}$ The morphology may be slightly skewed in some situations, where overt plural morphology is not used. It is very common, however, for the plural morphology to be overtly expressed in multiple locations as in this example.
    ${ }^{18}$ The article following caaytaj in this example is explained in §8.4.5

[^125]:    ${ }^{19}$ The second relative clause here has an intransitive predicate, obviously, and it is unusual in that it is nonrestrictive.

[^126]:    ${ }^{20}$ The word quih (the.FL) appears internal to the clause in this and other examples. This is discussed in $\S 8.4 .5$.

[^127]:    ${ }^{21}$ This is despite the claim in the 2005 dictionary that it is also an adjective.
    ${ }^{22}$ This kind of predication is not made in simple clauses, however; isoj cannot be the predicate nominal in a simple sentence.

[^128]:    ${ }^{23}$ One person claimed that this could be paraphrased as quictamo fierce. Another consultant disagreed and said it would mean the person is someone who can do well whatever $\mathrm{s} / \mathrm{he}$ does.
    ${ }^{24}$ This distinction applies only to a very few verbs. See §18.6.

[^129]:    ${ }^{25}$ This example is ungrammatical because of the location of the postposition. See chapter 22.

[^130]:    ${ }^{26}$ Example (128) obviously has no overt possessor before the possessed noun aal; it is included here as a textual example that apparently illustrates the same structure that is more explicitly attested by example (173).

[^131]:    ${ }^{27}$ Siimet bread is the direct object of quihit and not the head of a relative clause. It takes the article quih normally because of the type of item it is; see $\S 13.3$.

[^132]:    ${ }^{28}$ Following Huddleston and Pullum (2002), these are analyzed as having fused heads, where the deverbal noun is the head.
    ${ }^{29}$ The verb $V$ fit means stand up from a seated position. This sentence could be translated as the one who stood up ...but it may also be used for a person who has never been seated.

[^133]:    ${ }^{30}$ This was called an adverb in the 2005 dictionary.

[^134]:    ${ }^{31}$ An alternative analysis would posit a null head that is accompanied by the indefinite determiner.

[^135]:    ${ }^{32}$ The two different stress patterns here reportedly indicate slight differences in meaning. With less stress on ano, the meaning is that one goes to Hermosillo for a short while. With greater stress on ano, the meaning is that you go infrequently.
    ${ }^{33}$ Sometimes the determiner of the embedded DP is singular although the head noun of that phrase is plural; see chapter 21 for more discussion of the determiners with relationship to plurality.

[^136]:    ${ }^{34}$ The equivalent of You two should go is the biclausal Mapacj, masiilx aha (2PlS-Ir.DP-two, 2PLS-Ir.ID-go.PL AUX-DCL). Likewise, the equivalent of We two went is the biclausal (He) hatoocj, hayoolx (1Pro 1PS-RL-two, 1PS-DT-go.PL). RMH_08-14-07_67a MH_08-14-07_-67b

[^137]:    ${ }^{35}$ The same expression also means one by one, and this is presumably the origin of the other.
    (ii) Me iij càap tazo cah masiitax aha. 2Pro apart SN-stand one the.FL-FOC 2PlS-Ir.ID-go AUX-DCL ' Ustedes deben irse uno por uno.'
    You (pl.) should go one by one. RMH_09-28-07_154e

    | (iii) | Me iij còoyolca | coocj | cah | masiilx |
    | :--- | :--- | :--- | :--- | :--- | :--- |
    | 2PRO apart | SN-stand.PL.IMPF | SN-two | the.FL-FOC | 2PLS-IR.ID-go.PL AUX-DCL |
    | ' Ustedes deben irse en grupos de dos.' |  |  |  |  |
    | You (pl.) should go two by two. RMH_09-28-07_154f |  |  |  |  |

    ${ }^{36}$ The stress is so much weaker on each of these forms (in natural speech) that the orthography previously has written the vowels as short. However, the fact that càap [k a a p ] occurs even for speakers who use the cop variant of the definite article (see §21.2) makes it clear that the words in these expressions are not the articles, but rather reduced forms of the deverbal nouns from which the articles have derived historically.

[^138]:    ${ }^{1}$ Some of these facts have been discussed in detail in Marlett (1981b), Marlett (1984b), Farrell, Marlett \& Perlmutter (1991).

[^139]:    ${ }^{2}$ The subject of the second clause may also be in sentence-initial position (see §3.11):

[^140]:    ${ }^{3}$ Disjoint reference is not marked on sentences such as the following, however, which has a meteorological predicate followed by a descriptive verb.
    (ii) Poopea $x$, siixaj caha. Ir.DP-rain UT Ir.ID-strong AUX-DCL
    'Si llueve, va a ser fuerte.' / If it rains, it will rain hard. XMH_08-15-07_62a

[^141]:    ${ }^{4}$ Some speakers allow the article quih (the.FL) here.

[^142]:    ${ }^{5}$ It may be that unless the context is absolutely clear that the unexpressed agent of the passive clause is unambiguously coreferential with the expressed subject of the other clause，switch－reference marking is used．

[^143]:    ${ }^{6}$ This example provides a good illustration of pause "markers". After the two instances of the enclitic $\mathbf{x}$ there is a vowel $\mathbf{i}$ in the recording that is nothing more than a hesitation word.

[^144]:    ${ }^{7}$ See the various ways in which the Unaccusative Hypothesis (Perlmutter 1978) has been adopted by various theories.
    ${ }^{8}$ Various examples and some of the discussion in this section were presented in chapter 11 of Marlett (1981b) and in Marlett (1984b).
    ${ }^{9}$ René Montaño Herrera prefers this example to have the verb maacj (PX-TIMES-two).

[^145]:    ${ }^{10}$ "Number" verbs have up to five distinct uses and at least two of them are always different. These five uses and forms are contrasted explicitly in $\S 19.11$.

[^146]:    ${ }^{35}$ This is somewhat reminiscent of the colloquial Spanish pues; it is remotely possible that this use of mos has been influenced by Spanish.

[^147]:    ${ }^{36}$ This gloss does not adequately describe the range of meanings that this expression has nor the restrictions on its usage.

[^148]:    ${ }^{1}$ The P-element iiqui toward, with might be translated as and in a free translation, as in (i) but the noun phrases in this example are not actually coordinated:
    (i) Haaco zo canoaa $z$ iiqui hnyaa. ABS.house a boat a 3P-with 1SGS.Tr-PX-own
    'Tengo una casa y una panga.' / I have a house and a boat.
    ${ }^{2}$ The coordinator xah never joins clauses or verb phrases.
    (ii) * Yoofp xah yas. DT-arrive CRD DT-sing ('Llegó y cantó.) (S/he arrived and sang.)
    (iii) * Hiiqui miipca xah he emaax hataap coha ha. 1P-toward PX-rain CRD 1PRO now ABS-mucus 3IO-SN-be DCL
    ('Llovió en mí y ahora estoy resfriado.') (It rained on me and now I have a cold.)

[^149]:    ${ }^{3}$ It is sometimes observed that the coordinator is not used after the last conjoined element. The consultants for this grammar invariably corrected such examples to include the final coordinator, however, when the meaning was and. See §25.1.2 for existential cases where it cannot be present.

[^150]:    ${ }^{4}$ Consultants indicate that it is unusual or surprising that the form cmiique is used here. They would have used the plural comcaac instead.

[^151]:    ${ }^{5}$ In fact, one might argue here that examples (13)-(14) are actually interpreted as conjunctions in a partitive expression: 'which one of the conjoined set you and $I$ ?' and 'one of the conjoined set you and $I$.'
    ${ }^{6}$ For the question of the alternate order, see below.

[^152]:    ${ }^{7}$ This construction implies that the man and woman were together when they fell into the sea.

[^153]:    ${ }^{8}$ On the position of the coordinator here, see $\S 25.1 .1$ below.
    ${ }^{9}$ The P-element iiqui toward, with also occurs in this example, unlike in the preceding ones. See also note 1 of this chapter.

[^154]:    ${ }^{10}$ This is another example that combines the use of $\mathbf{x a h}$ and also the iiqui plus verb construction (see above).

[^155]:    ${ }^{11}$ Compare coordination outside of the possessor phrase:
    (iv) Tosni ina $\underline{x} \quad \underline{x a h}$, honc ina quih ${ }^{\circ}$ ano cötahníp ${ }^{\circ} \quad$ ma $x, \ldots$ pelican 3P-feather CRD gull 3P-feather CRD the.FL 3P.in 3IO-RL-PV-hit DS UT 'La pluma de un alcatraz o la pluma de una gaviota se le fue insertado, ...'
    A pelican feather or a gull feather was put into it, ... RRR

[^156]:    ${ }^{12}$ In the common phrase ox $\mathbf{0 o}$ mpacta xo (thus DL PX-be.in.appearance but), which might be easily rendered nevertheless in many cases, the $\mathbf{x o}$ is clearly part of the same intonational phrase as $\mathbf{0 x} \mathbf{0 0}$ mpacta.

[^157]:    ${ }^{13}$ It is important to not confuse this coordinator with the homophonous but distributionally distinct word $\mathbf{x}$ that very commonly occurs at the end of dependent clauses; see §3.6.3.

[^158]:    ${ }^{14}$ The form $\mathbf{t x}$ is found in the speech of Roberto Herrera M., for example, as recorded by E. Moser and found in the NTT (for which Herrera was the primary consultant).

[^159]:    ${ }^{15}$ Future situations require a clause with a deverbal noun and isax (§25.4.2.1).

[^160]:    ${ }^{16}$ They are classified as "aux" (auxiliary) or "v aux" (verbo auxiliar) in the 2005 dictionary. See other words of this category in chapter 20. The exact classification is debatable.

[^161]:    ${ }^{1}$ The word yoo may be a loanword, but this is not entirely clear.

[^162]:    ${ }^{2}$ Both may etymologically be part of paradigms of verbs meaning be. The same is true of the other interjections in this section. The word yohaa was recorded by Bartlett in 1852 (see item 17.550 in Marlett 2010c).

[^163]:    ${ }^{3}$ The $\mathbf{t}$ in this word does not lengthen (see $\S 28.5 .1$ ), which is puzzling. The variant saat was not recorded in the 2005 dictionary. The negative interjection elicited by Bartlett in 1852 was hohom (see item 17.560 in Marlett 2010c). This word was independently verified but listed as archaic in the 2005 dictionary.
    ${ }^{4}$ This may be somehow related to the irregular verb coha 3IO-SN-be be with, happen.

[^164]:    ${ }^{5}$ The spelling in the practical orthography is uncertain since the pronunciation is unusual.
    ${ }^{6}$ It was also said in unison to the shaman, cacaaso.
    ${ }^{7}$ These words were recorded in early vocabularies; see Marlett (2010c). They are also listed in E. Moser \& M. Moser (1961:ix). See also Marlett \& M. Moser (1994b, 1997).

[^165]:    ${ }^{8}$ Mary B. Moser (p.c.).
    ${ }^{9}$ René Montaño Herrera (p.c.), May 2007.

[^166]:    ${ }^{10}$ This is a helpful way to unpack some consonant clusters and see clearly that the labialized consonants are exactly as shown - that Tahejöc is $/ \operatorname{taRex}^{\mathrm{w}} \mathrm{k} /$, for example, and not $* / \operatorname{taRexk}^{\mathrm{w}} /$ or $* / \operatorname{ta}^{2} \varepsilon \mathrm{x}^{\mathrm{w}} \mathrm{k}^{\mathrm{w}} /$ or */ta?exwk/. It is relevant for distinguishing between a lengthened /t/ and a sequence /tt/ that results from morphological concatenation (see §24.4.1.3 for similar situation). Becky Moser pointed out years ago (p.c.) that Seri speakers would treat the word cucaracha from Spanish as having a cluster / $\mathrm{t} \int /$ rather than the affricate in this situation: /kukarat-a- $\int \mathrm{a} /$, demonstrating that their subconscious analysis of that complex sound is different than that of a native Spanish speaker.
    ${ }^{11}$ This word uses the plural stem $\sqrt{ }$ masl, which is formed by deleting the post-tonic vowel of the underlying (and singular) stem $\sqrt{ }$ masol.

[^167]:    ${ }^{12}$ This example is also interesting because of the probability that the final $\mathbf{i}$ is epenthetic historically. The infixation of -a- does not affect the presence of this $\mathbf{i}$.
    ${ }^{13}$ This is apparently (in part) the result of a difference between (a) true three-mora diphthongs and (b) three-mora diphthongs that result from the diphthong effect described in $\S 28.3 .4$. The two types of diphthongs were generally transcribed differently by Edward Moser before 1976 (clearly because he heard them that way) than the consultants for the 2005 dictionary expected them to be written. This is an area that could be studied in much more depth and with a greater number of speakers.
    ${ }^{14}$ This word is etymologically related to the root Vaaisx clean (tr.), but the latter is more infrequently used now. See the discussion in Marlett (2002).

[^168]:    ${ }^{1}$ While one might argue that the vowel /i/ is the default vowel in Seri, the idea of default features being supplied automatically has been shown to be unworkable (Steriade 1995).

[^169]:    ${ }^{2}$ Thus an transitive verb preceded by the P-element iti, for example, sounds the same as an intransitive verb precede by that word: iti $\mathbf{m} . .$. sounds the same as iti im....
    ${ }^{3}$ Extremely slow speech would put each word in its own phonological phrase, of course, causing the epenthetic vowel to appear.

[^170]:    ${ }^{7}$ The i-Deletion rule (5) applies first, feeding the rule of $\mathbf{0}$-Epenthesis in this form as well as the next.
    ${ }^{8}$ Care must be taken to not confuse Imperative $\mathbf{c}$ - followed by epenthetic $\mathbf{o}$ with the full allomorph co- of the third person indirect object agreement prefix (§17.3.2.4).
    ${ }^{9}$ Underlying $\{\mathbf{h p}-\mathrm{mi}-\mathbf{p a n z x}\}$ (1SGS.IN-PX-run) I run loses the $\mathbf{i}$ of the prefix, giving the sequence $\mathbf{p m p}$, which seems to precisely be the context for $\mathbf{0}$-Epenthesis. Nevertheless, $\mathbf{0}$-Epenthesis does not apply. Instead, i-Epenthesis applies; the surface form is ihpimpanzx.
    ${ }^{10}$ De Lacy (2006: 301) discusses these facts briefly and suggests that "it is possible that epenthetic $[\mathrm{o}]$ is not epenthetic at all, but part of the input," because of the problem that the facts present for his theoretical proposal, based on extensive cross-linguistic study, that epenthetic vowels are always [-round]. The facts presented in this chapter should make it clear that the epenthesis solution is not in doubt. For more discussion, see Marlett (2010d).

[^171]:    ${ }^{11}$ De Lacy (2006: 137) also discusses these facts briefly and states that "Seri [k] does not act like an epenthetic element; its distribution may reasonably called idiosyncratic, much like a morpheme's." His extensive crosslinguistic study leads him to propose that epenthetic velar consonants do not exist. For more discussion, see Marlett (2010d).

[^172]:    ${ }^{12}$ Transitive roots beginning with $\mathbf{0 0}$ are very uncommon. Most verbs that begin with $\mathbf{o}$ or $\mathbf{o o}$ are intransitive. Many derived verb stems also begin with $\boldsymbol{o}$ because of the unspecified object prefix (§19.1).
    ${ }^{13}$ Structure Preservation (Kiparsky 1982) also arguably prevents this rule from applying to morpheme-internal sequences.

[^173]:    ${ }^{14}$ This is one of the verbs with a diphthong that is presented here with a long ee although it was presented with a short $\mathbf{e}$ in Marlett (1981b). On some of the problems relating to diphthongs, see §28.3.4.

[^174]:    ${ }^{15}$ Marlett (1981b) and Stemberger \& Marlett (1983) posited a rule of Short Low Vowel Deletion with lengthening of the prefix vowel as a concomitant effect.

[^175]:    ${ }^{16}$ The "problem" with these verbs was discovered shortly at the very end of the time of preparation of the 2005 dictionary. The data in that work were primarily from the lexical files of Edward Moser, who transcribed them without the additional length that the younger consultants insisted was there. Since Moser's transcriptions were usually extremely accurate, this consistent difference was enigmatic at first.
    ${ }^{17}$ These verbs are discussed in Marlett (1981a) and Marlett (1981b, chapter 6). The most formal analysis appeared in Stemberger \& Marlett (1983). An additional verb of this small class was discovered in early 2010 in an essay composed at that time by Xavier Moreno. Used only with a plural subject, the root $\sqrt{ }$ Colcö means crowd in around (someone).
    ${ }^{18}$ See Stemberger \& Marlett (1983) for a complete presentation of the evidence.
    ${ }^{19}$ Xavier Moreno feels strongly that the stressed vowel in itaa is short, and the 2005/2010 dictionary followed his suggestion in writing it as itá. In this grammar I have written it long.
    ${ }^{20}$ The long vowel in this word is not directly explained.

[^176]:    ${ }^{21}$ See pages 912 ff of the 2005 dictionary, although these pages include irregular verbs of more types than the ones presented in this section.
    ${ }^{22}$ Marlett (1981b, chapter 5) called them stress-retracting verbs.

[^177]:    * The use of $\mathbf{c}$ and $\mathbf{q u}$ parallels the distribution in Spanish: qu before front vowels and $\mathbf{c}$ before back vowels and consonants. See the discussion of the alphabet in Marlett (2006b).
    ${ }^{\dagger}$ Very rare.
    ${ }^{\dagger \dagger}$ Only in loanwords.

[^178]:    ${ }^{1}$ See Marlett, Moreno Herrera, \& Herrera Astorga (2005). This analysis is different in important ways from the one presented in E. Moser \& M. Moser (1965). The inventory given in this grammar refers to "taxonomic" phonemes - those that are adequate to write the surface contrasts adequately. The "systematic" phonemes (Chomsky \& Halle 1968) would include, perhaps, the so-called empty or abstract consonant in Seri (Stemberger \& Marlett 1983); see §27.3.2. The systematic phonemes might also not include the labialized consonants; this position was taken in Marlett (1981b), but it no longer seems to be the appropriate step to take.

[^179]:    ${ }^{2}$ These words both have lengthened consonants and vowels (see $\S 28.5 .1$ ) although those details are not shown here.
    ${ }^{3}$ Chomsky and Halle (1968:302) included glottal stop in the class of sonorants since it is "produced with a vocal tract cavity configuration in which spontaneous voicing is possible."

[^180]:    ${ }^{4}$ Two examples: hantéezj mud, from hant haaizj (land SN-PV-grind) soil that has been ground up; hateeictim rag, from hatáai iictim (SN-PV-wear.kilt 3P-PON-cut) piece of cloth.
    ${ }^{5}$ This word is [' $\mathrm{In}: \mathrm{a}:$ ] in a narrow phonetic transcription. See $\S 28.5 .1$. This phonetic length is not represented in the phonetic transcriptions in this chapter generally.
    ${ }^{6}$ Since Seri does not have a $\mathbf{u}$, it is common to hear Seris interchange the vowels $\mathbf{u}$ and $\mathbf{o}$ when speaking Spanish, and to pronounce the two very similarly.
    ${ }^{7}$ The underlying long vowels are transcribed here phonetically with a sequence of identical vowel symbols rather than with a sequence of a vowel symbol followed by a length diacritic, as in the IPA tradition. This convention is not meant to imply any particular theoretical or descriptive claim other than that the nuclei in question are longer than the ones without length indicated.

[^181]:    ${ }^{8}$ As is clarified in $\S 28.5 .1$ below, a more narrow phonetic transcription of this word would be ['k o ? : a: ], and of the next word [' ko ? $\mathrm{P}: \mathrm{a}:]$. Even so, the diacritics for length do not adequately portray the phonetic facts.
    ${ }^{9}$ This was the analysis proposed in E. Moser \& M. Moser (1965).
    ${ }^{10}$ This is predicted by the Obligatory Contour Principle (Leben 1973 and much later work).

[^182]:    ${ }^{11}$ The unstressed vowel in one root is noticeably and unaccountably long: aquéect ctam (3P-parent.in.law male) his/her father-in-law and aaquéect cmaam (3P-parent.in.law female) his/her mother-in-law. There are also some cases of superficial length distinctions in unstressed syllables that are the result of a morphological condition on a phonetic rule; see $\S 28.5 .1$.
    ${ }^{12}$ These details are laid out in E. Moser \& M. Moser (1965).

[^183]:    ${ }^{13}$ See $\S 26.10$ for evidence that the cluster may be split by a vowel under certain conditions.
    ${ }^{14}$ Marlett, Moreno Herrera, \& Herrera Astorga (2005).
    ${ }^{15}$ E. Moser \& M. Moser (1965:54). It was analyzed and transcribed as [W], using an Americanist tradition, a voiceless labial-velar approximant, in many earlier publications.
    ${ }^{16}$ E. Moser \& M. Moser (1965:54).

[^184]:    ${ }^{17}$ One might think that this word begins with j $\mathbf{j}$. However, the timing of the $\mathbf{o}$ is more like that of a short vowel than of simple labialization. This interpretation is also the one that has been confirmed with Seri consultants.
    ${ }^{18}$ The labialized uvular fricative only occurs in initial position under very specific conditions in the conjugation of intransitive verbs; see §27.2.2.

[^185]:    ${ }^{19}$ As pointed out in $\S 17.1 .2 .3$, the final nasal of the first person singular direct object prefix him exceptionally fuses with the second person subject prefix $\mathbf{m}$ - to form a single nasal.

[^186]:    ${ }^{20}$ This word did not make it into the 2005 dictionary. Checkers is not a game played among the Seris in recent decades, but it was played at least in the first part of the $20^{\text {th }}$ century. See C. Marlett (forthcoming).

[^187]:    ${ }^{21}$ The lengthening effects described in $\S 28.5 .1$ are not included in these two phonetic representations.
    ${ }^{22}$ This section reprises Marlett (2006, 2008e).

[^188]:    ${ }^{23}$ These are not common; this list may be exhaustive.

[^189]:    ${ }^{24}$ See $\S 13.2 .3$ for discussion of this conjugation pattern.
    ${ }^{25}$ See $\S 13.2 .3$ for discussion of this conjugation pattern.

[^190]:    ${ }^{26}$ The morpheme mazi in these examples is a prefix although it is written with a space in the practical orthography. See §17.1.2.3.

[^191]:    ${ }^{27}$ This expression is often reduced phonetically to something like zihapxcóom.
    ${ }^{28}$ This discussion reprises Marlett (1988) with some revisions. Some key ideas, such as the idea of a nucleus with three vowels, are found in E. Moser \& M. Moser (1965). The root $\sqrt{\text { oaaij }}$ hang free arguably has four vowels in the nucleus, but this example is set aside here.

[^192]:    ${ }^{29}$ The idea, expressed in E. Moser \& M. Moser (1965), that there is a balance somehow between the size of the nucleus and the size of the coda, is probably epiphenomenal.
    ${ }^{30}$ The root $V_{\mathbf{o a a i j}}$ hang free is one of the few examples with perhaps four vowels in the nucleus. The

[^193]:    ${ }^{31}$ See Morelli $(1997,1999)$ for discussion of the two-consonant onsets in this and other languages.
    ${ }^{32}$ Labialized consonants are omitted here because of their limited or special distribution.
    ${ }^{33}$ One might expect this sequence when the prefix hp- (first person singular subject, intransitive) precedes the dependent irrealis prefix po-. However, this sequence of geminates (unlike most others) is simplified to a single bilabial stop.

[^194]:    ${ }^{34}$ See also i-lxaai 3P-lower.part.of.back.of.head.
    ${ }^{35}$ The lateral approximant is very rare and is not included in this discussion. The tap occurs only in a few loanwords and is also omitted from this discussion.
    ${ }^{36}$ This vowel is most commonly $\mathbf{i}$, but it is $\boldsymbol{0}$ in one situation. See §27.1.1 and §27.1.3.

[^195]:    ${ }^{37}$ This onset may be attested in xojmás a land snail. Some words like this, however, are clearly compounds. The syllabification of the clusters in these cases may be uncertain and for that reason have not been included in the examples listed.
    ${ }^{38}$ The Sonority Sequencing Principle and the notion of a sonority hierarchy have a long history in phonology. See Selkirk (1984), for example.

[^196]:    ${ }^{39}$ A geminate cluster in a coda arises when the enclitic $\mathbf{x}$ (UT, §3.6.3) follows an $\mathbf{x}$-final root.

[^197]:    ${ }^{40}$ The word tacasióla pipit made it into the 2005 dictionary. Today it would be taken as tacasyola, analogous to pyeest fiesta.

[^198]:    ${ }^{41}$ This claim runs afoul of theoretical proposals limiting the Nucleus of a syllable to only one position (Goldsmith 1990:109ff), or maximally two (a position that is more commonly assumed and illustrated, if not explicitly claimed). Blevins' (1996:239, note 35) framework explicitly allows for three units in the Nucleus.
    ${ }^{42}$ This is only attested by the archaic verb $\sqrt{ }$ eeolim look for organpipe cactus fruit diligently, at the end of the season, and bring the ripe fruit with the thorns removed; since the conjugation pattern cannot be verified, the example is not presented with the other data.
    ${ }^{43}$ The loanword iionam (3P-hat, see Appendix A) is common but the length on the first vowel of the root ( $\sqrt{ }$ VVonam $)$ may be due to the diphthong effect.
    ${ }^{44}$ Many examples of $\mathbf{0 o i}$ are found but they may all be due to the dipthong effect. The root $\sqrt{\text { Voil }}$ blue/green, for example, was written earlier as $\sqrt{ }$ oil.
    ${ }^{45}$ This is found in the compound hateiictim rag; see §13.5.2.
    ${ }^{46}$ This diphthong usually has perceivably greater stress on the vowel aa; in words such as canoaa boat and itóaa (3P-foot), with open syllables, the stress is perceived on the $\mathbf{0}$.

[^199]:    ${ }^{47}$ In recent years and with certain speakers I have heard a slight glide and very short epenthetic vowel pronounced even in cases like caai ha, however.
    ${ }^{48}$ This has been the case generally during the years of investigation. However, occasionally a consultant has given an initial response that suggests $\mathbf{y C}$. There may be speaker variation on this point of analysis.

[^200]:    ${ }^{49}$ See $\S 28.2 .2$ where it is shown that the final consonant of a coda does not contribute to syllable weight for the purpose of stress assignment.

[^201]:    ${ }^{50}$ What is or is not included in the practical orthography has changed over the years. See Marlett (2006b) for a historical overview and discussion.
    ${ }^{51}$ Lengthened consonants are often 150-230 msecs. long in normal speech, which is one and a half to two and a half times longer than unlengthened consonants. Lengthened vowels are 250-350 msecs. in length, which is two to four times longer than short stressed vowels and much longer than stressed long vowels.
    ${ }^{52}$ Therefore a word such as caacoj would be $\left[{ }^{\prime} \mathrm{ka}^{\prime} \mathrm{k}^{\prime} \mathrm{O}^{\prime} \mathrm{X}\right]$ in a narrower phonetic transcription.

[^202]:    ${ }^{53}$ Native speakers have described these consonants in quite similar ways and sometimes have written double consonants in these positions, indicating their feeling that these are unlike Spanish.
    ${ }^{54}$ The lengthening that occurs in certain noun plurals provides additional evidence that the vowels in the plurals are part of the root: zacaam, zacaama-lc young woman, siip, siipi-lc young man, hax, háxa-jam water, xtiip, xtiipo-lc giant Panamic cockle, poosj, poosi-lca cord, cool, coolo-loj twine jug holder.
    ${ }^{55}$ It may be thought that the enclitics are obviously outside of the domain of the process, but these morphemes were analyzed as suffixes in previous descriptions. The facts here underscore the brilliance of the suggestion by René Montaño Herrera, during the preparation of the 2005 dictionary, to write the enclitics as separate words.

[^203]:    ${ }^{56}$ Examples such as these led to the analysis of phonemic length in unstressed syllables that was an important part of the phonological description in E. Moser \& M. Moser (1965).

[^204]:    ${ }^{57}$ As in other languages that have a vowel length distinction, loanwords are most commonly taken into the language with length on the vowel that is stressed.
    ${ }^{58}$ This process apparently came into the language sometime in the twentieth century, if not slightly earlier, since transcriptions of the word comcaac were made in 1850 and 1862, by different people from different backgrounds and without doing phonological analysis, as kumkak (Bartlett 1852: XX, McGee 1898:310).

[^205]:    ${ }^{59}$ E. Moser \& M. Moser (1965) did not notice the relevance of the position of stress and for that reason concluded that the language had a velar nasal that contrasted with $/ \mathrm{m} /$ and $/ \mathrm{n} /$, despite the tenuousness of the evidence. They therefore wrote the name of the ethnic group as congcáac.
    ${ }^{60}$ Examples with uvular nasals before uvular consonants have not been found; this is presumed to be an accidental gap. Examples with the coronal nasal (in unstressed syllables) before back consonants have also not been found in monomorphemic examples other than the loanword sancaac brown sugar (see Appendix A).
    ${ }^{61}$ Most words in the language do not show as much variation as this one.

[^206]:    ${ }^{62}$ This might be based on an archaic plural of cmaam woman.
    ${ }^{63}$ This might be based on an archaic plural of haan smooth Pacific venus clam.

[^207]:    ${ }^{64}$ Examples such as this are relevant for the claim that a word such as saaom is monosyllabic. If it were bisyllabic, on the other hand, somehow stress must be assigned to the vowel $\mathbf{0}$ as well in order to block Nasal Assimilation
    ${ }^{65}$ The minority happens to include a key consultant for this grammar, René Montaño Herrera. I was surprised to hear these pronunciations and was skeptical of them at first as they struck me as "reading" pronunciations. But during the time that I worked on the grammar, I was convinced that they were real. I am unable to say if many other people have these pronunciations.
    ${ }^{66}$ Word-final nasals are written in their unassimilated form. They are also written (by decision of the dictionary committee) in their unassmilated form when the preceding the enclitic ya (QM). The latter is the only enclitic that the dictionary committee decided to write as a suffix.

[^208]:    ${ }^{67}$ At one time I was told about a verb that has a velar nasal— actually a labialized velar nasal - in all occurrences, despite being in a stressed syllable: $\sqrt{ } \mathbf{a h i ́}\left[\mathrm{y}^{\mathrm{w}}\right]$ and was told that it meant to pronounce " $m$ " with a bilabial nasal rather than with a nasalized labialized velar (such as pronouncing emaam woman as [k ma a m ] rather than [kw a a m ], see §28.5.4). This meaning seems backward. I was unable to confirm the existence of this word in 2007.
    ${ }^{68}$ When these words are tested with the infix -a- (§26.10), two results have been recorded. For at least some speakers, the use of the infix results in a velar nasal occurring intervocalically:
    (i) iiCtam hi[y]-a-cop a?!
    man DT-RHET-VT AUX
    'Ese hombre, ija!'
    That man, my eye! RRR

[^209]:    One consultant could not produce and would not accept this form (which his wife did accept and produce); he used the un-infixed form hi[ y$]$ cap a.
    ${ }^{69}$ This is erroneously cited as neutralization of place of articulation in De Lacy (2006:39) since there is no neutralization in Seri. The distinction between $/ \mathrm{m} /$ and $/ \mathrm{n} /$ is maintained. De Lacy also proposes that the consonant described here as velar phonetically is actually a nasal glottal stop (2006: 142-144).
    ${ }^{70}$ Word lists from the nineteenth century do not give evidence of this rule. E. Moser \& M. Moser (1965) observed the lenition rule as it was spreading through the lexicon and the speech community in the mid twentieth century, and they contrasted forms to which the rules had applied with forms to which the rules had not yet applied. Therefore they considered nasalization phonemic, although considerable alternation was noted (1965:55). Since then, the rule has generalized to the entire lexicon for all speakers so far as I am aware.

[^210]:    ${ }^{71}$ The labialization and anticipatory labialization (§28.5.8) are phonetically such that the Mosers had written these words earlier as haquéoje and Tahéoje, respectively.
    ${ }^{72}$ Labialization should be written after the cluster in the interjections cajcöi seven and pxajcöi eight (§26.8) for etymological reasons (the second syllable of these interjections derives from cöquiih 3IO-SN-be.FL), although they were written cajöqui and pxajöqui, respectively, in the 2005 dictionary. It has not been investigated whether there is synchronic evidence for treating these archaic words differently.
    ${ }^{73}$ Earlier materials written by the Mosers had words such as cöpaticpan written as cöcatícpan.

[^211]:    ${ }^{74}$ Some materials written by the Mosers had words such as icös (3P-spine) written as iocs. Later investigation clarified that these are indeed words with labialized consonants and no full vowel o. Romero (1994) also includes similar transcriptions, and other naïve writers sometimes write the epenthetic $\mathbf{0}$. The committee for the 2005 dictionary confirmed, however, that the $\boldsymbol{0}$ does not have the status of a full vowel.
    ${ }^{75}$ It is possible that these facts should be subsumed under the spread of labialization discussed in $\S 28.5 .6$ above.

[^212]:    ${ }^{76}$ Earlier materials written by the Mosers had words such as szatx written as zzatx. It was later decided to write these words with the s- (since si- is the underlying form of the Independent Irrealis prefix) as, in fact, some speakers actually pronounce it.

[^213]:    ${ }^{1}$ This presentation is adapted from Marlett (2007a). Sources for the Uto-Aztecan data are: Eudeve (Lionnet 1986, Pennington 1981), Huarijío (Stolzfus, in preparation), Mayo (Collard \& Collard 1974), O’odham (Papago) (Mathiot 1973, Saxton, Saxton \& Enos 1983), Pima Bajo (Escalante \& Estrada Fernández 1993 and Pennington 1979), Southeastern Tepehuan (Willett 1991), Yaqui (Estrada Fernández et al. 2004, Johnson 1962, Molina \& Shaul 1993). A few other words that describe non-native items but which do not have correspondences in known neighboring languages include hapxöl corn (maize), haasman woven mat, mooj cotton, and sahmees (less common dialectal variant zahmees) orange (fruit). These words do not have unusual characteristics for Seri words. A plausible etymology for sahmees is zaah cmis ('what is like the sun'). Other words of uncertain origin: catápora robber fly and Icor spirit of plant life. These words have the tap consonant that is not native to the Seri language.

[^214]:    ${ }^{1}$ See note 1 in Appendix A.

[^215]:    ${ }^{2}$ Santamaría (1983:642): "Jola. f. En el norte y noroeste del pais, moneda sencilla o fraccionaria; feria."

[^216]:    ${ }^{1}$ This verb has a short vowel although a long vowel in such situations would be expected.

