

Ineseño Chumash Grammar

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## Abstract

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Ineseño Chumash was the language spoken in the vicinity of the Mission Santa Ynez, along the middle reaches of the Santa Ynez River. The language is now extinct, though some older people in the area are able to remember a few words. This description is based almost entirely on extensive field notes made by J. P. Harrington between 1911 and 1919; these notes are the property of the Smithsonian Institution National Anthropological Archives.

Ineseño, like all of the Chumashan languages, is characterized by a good deal of phonological complexity. Some of the more striking aspects of the phonology are 1) the extensive occurrence of glottalization, 2) vowel epenthesis in many environments, 3) vowel harmony, which affects stems and those affixes in position classes near the stem, and 4) sibilant harmony, in which all sibilants in the word are either dental /s c/ or palatal /š č/, as determined by the last sibilant in the word.

A prominent feature of Ineseño morphology is the frequency of reduplication, in several distinct patterns, both as an inherent part of many stems and as a highly productive inflectional process. The morphology of the verb is complex, relying far more heavily on prefixation than on suffixation. There are over a hundred and fifty verbal affixes, ranging from highly productive and freely

combining forms to opaque forms of quite limited distribution. These verbal affixes include not only subject and object markers, but also temporal, spatial, adverbial, instrumental and other concepts, as well as grammatical notions such as 'causative' or 'desiderative.' One set of prefixes classifies the activity denoted by the stem, such as 'of cutting' or 'of tying.' Combinations of prefix plus stem often show highly idiosyncratic semantic specialization.

Syntactically, Ineseno is characterized by a pre-vaillingly verb - object - subject word order, although topicalization may shift any noun into preverbal position. Nouns are not marked for case, and the syntactic relation of the verb to accompanying noun phrases is only loosely indicated. Nominal predications are quite common, both in noun-noun predications and nominalized verb phrases: these are especially frequent as agentive forms and as heads of cleft-sentence constructions.

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## 100 Introduction

## 101 Geography and Linguistic Affiliations

Chumash territory extended along the southern California coast from Malibu to some point north of San Luis Obispo, with the densest population along the coast south of Point Conception. This area included the Santa Barbara channel islands, and stretched inland to present-day Castaic (Chumash *kaštiq*) and the Grapevine Pass at the southern extreme of the central valley. Many Chumash place names still survive, such as Ojai (*ʔawhay*), Zaca (*ʔasaka*), Lompoc (*lompoʔ*), and Cuyama (*kuyam*).

Five missions were founded in Chumash territory, at Ventura, Santa Barbara, La Purisima, Santa Ynez, and San Luis Obispo. The inhabitants of many outlying areas were gathered into these centers. The distribution of Chumash speech was no doubt characterized by a more or less continuous graduation of one dialect into another, but the five missions were linguistic focal points: the idioms spoken in their vicinity are regarded as distinct languages. Less is known of island speech and of the remoter interior. The Chumashan languages are thought to be related to the Hokan stock, represented primarily in northern California, but this relationship is not an easy one to establish.

As noted by M. S. Beeler ('Sibilant Harmony in Chumash,' 1970), the languages spoken around the missions at Ventura, Santa Barbara, Santa Ynez, and La Purisima comprise the most cohesive dialect subgrouping of the Chumash area,

with Ventureño somewhat less closely related to the other three. Ineseño Chumash (usage fluctuates between the spellings 'Ynezeño' and 'Ineseño;' I have chosen the latter), upon which this description focusses, was spoken along the middle reaches of the Santa Ynez river. Further downstream, Ineseño shaded into Purisimeño, while further upstream and across the Santa Ynez range to the southwest, Ineseño shaded into Barbareño. There is a reference to this dialect graduation in a comment on a character in a myth: /ma-s-aqlíw hi šiša-ʔalap-ka-swaʔ/ 'his language is half Barbareño' (ka-swaʔ is the name of a village in the Santa Barbara area). The Ineseño name for their own group was shamala.

#### 102 Sources

Although some older people in the area still remember a few words, Ineseño is now extinct. Accordingly, this description is based entirely on the work of earlier recorders of the language, including Arroyo de la Cuesta, Alphonse Pinart, Henry W. Henshaw, A. S. Gatschet, Alfred L. Kroeber, C. Hart Merriam, and especially John P. Harrington. Most of the pre-Harrington work consists of word lists and a little syntactic material, although Kroeber published a twelve-page sketch of the language in 1904. Harrington's contribution stands out as unquestionably the most careful, reliable, and comprehensive, full of meticulous phonetic detail and rich in syntactic and semantic information.

Most of Harrington's work with Ineseño seems to have been done in 1911 and 1919. His extensive Ineseño manuscript materials are the property of the Smithsonian Institution National Anthropological Archives. A large part of this is at present on loan from the Smithsonian Institution, at the Department of Linguistics of the University of California at Berkeley, where I worked with it between 1969 and 1972.

This material does not constitute Harrington's original field notes, but is almost entirely typed and mounted on legal sized sheets, filling several good-sized boxes. It consists of word lists, paradigmatic material, sets of phrases and sentences, paragraph length texts (which Harrington called textlets), and a dictionary of verbal elements (stems, affixes, and compounds). The glosses are either in Spanish, the informants' second language, or in English. In addition to the manuscript at Berkeley, I worked with several longer texts, presently in the Smithsonian Institution, which Thomas Blackburn showed me in xeroxed form.

### 103 Scope of the Description

This material has been organized and condensed into a grammar and dictionary of Ineseño. The grammatical section is based almost entirely on Harrington's manuscript, although the dictionary is supplemented with lexical items gleaned from the word lists of earlier recorders of the language. Given the richness of



Harrington's work, it has been possible to describe the language in considerable detail, and I have included as much of this as possible without making the grammar too unwieldy.

Needless to say, in the absence of a native speaker, there are countless indeterminacies in every level of this description. This is due to the sheer accident of what is and what is not attested; even in so large a corpus it is not possible for all of the phonological, syntactic, and semantic structures of the language to be exemplified. The more abstract levels of analysis suffer most from this indeterminacy. The description of transformational processes is sketchy and necessarily speculative, and the treatment of Ineseño semantics is limited to elementary notions such as 'animate' and 'inalienable' which have some overt syntactic realization.

I have tried to structure this grammar to be of use to people with varying interests, and, except in the phonological sections, linguistic formalism has not been emphasized.

#### 104 Changes in Harrington's Transcription

I have made several notational changes in Harrington's transcription, to bring it more into conformity with contemporary usage.

- 1) One to one changes in symbols include the change of  $\text{ə} \rightarrow \text{ɛ}$ ,  $\text{j} \rightarrow \text{y}$ ,  $\text{q} \rightarrow \text{x}$ ,  $\text{K} \rightarrow \text{q}$ , and  $\int \rightarrow \text{š}$ .
- 2) Unit symbols  $\text{c}$  and  $\text{č}$  are used for Harrington's  $\text{ts}$

and tʃ within morpheme boundaries.

- 3) Aspiration is written with a raised h rather than with Harrington's ʰ (e.g. tʃ<sup>h</sup>o for tʃʰo 'to be good').
- 4) Harrington used a single symbol ʔ to stand for both glottal stop and the glottalization of consonants. While this practice has certain advantages, I use ʔ for glottal stop and write glottalization of consonants as a superscript diacritic (e.g. /k-ʔap/ → k<sup>ʔ</sup>ap 'my house' for Harrington's /k-ʰap/ → k<sup>h</sup>ap).
- 5) Certain subphonemic details which Harrington consistently transcribed have been omitted (see 230 on subphonemic detail), such as voiceless echo vowels and the devoicing of syllable-final sonorants.
- 6) Finally, I have been more liberal in the use of word boundaries than was Harrington, who tended to write much of the phrase fused as a single unit.

#### 105 Notes on Format

The second chapter is phonological; the third deals with non-native forms; the fourth, fifth, and sixth are predominantly morphological. The seventh chapter presents particles, spanning morphology and syntax, since syntactic information is included in the discussion of individual particles. The eighth chapter presents syntax; the ninth exhaustively analyzes a sample of text.

For ease of reference, at the bottom of each page is indicated the section number of the first new heading on the page, or else the number of a full-page heading carried

over from the preceding page.

Throughout this description, except when single morphemes are being cited, Chumash examples are shown in their underlying morphophonemic form, enclosed in slashes (e.g. /mi-koy/ 'outside (of)'). An initial dash marks inalienably possessed nouns (q.v., 572) and bound or uniquely occurring verb stems (q.v., 615 and 616); inalienably possessed nouns (e.g. -koko? 'father,' /-is-?eneq/ -iseneq 'sister') are always preceded by a possessive marker, while bound and uniquely occurring stems (e.g. -kumu? 'to measure,' -walač in /max-walač/ 'to be thin, gauzy') are always preceded by some verbal prefix in addition to person-number markers. In the sections on stem morphology, formatives may be tentatively segmented (e.g. aq- in /aq-lamlam/ 'to chew') which in other sections are indicated simply as part of the stem (i.e. aqlamlam 'to chew').

Morpheme boundaries are indicated only with a dash, except in section 280 on phonological rules, where two distinct morpheme boundaries (symbolized + and =) are posited. If the surface form differs from the underlying form in any detail, it is quoted after the underlying form. Thus, in

/k-iš-alpat-waš/ 'we (dual) ran'

the surface form is identical with the underlying form, while there is a change in

/ma-iy-al-nañ-pi/ mayananpi 'where they go'

The only exception to this practice of indicating all changes is in the citation of phrases; given a phrase in

which the only change is the low-level deletion of initial /h/ in words non-initial in the phrase, as in

/k-aqšiyik heki/ kaqšiyik eki 'I like that one'

only the underlying form is cited. Surface forms are usually indicated in square brackets only when they occur in the English text or are otherwise set off from the underlying form.

In examples involving Chumash phrases, individual words are not identified in the gloss if their order does not differ from English word order, as in

/s-kuti ha-?eneq/ 'he sees the woman'

or if parenthesized material can help convey the force of the original and still preserve Chumash word order,

/?ini kič hi no?/ '[he is] not like me'

or if an example is given in a context where the meaning of one form is understood: in the discussion of /mi-šup/ 'down, (on) the ground,' the word order is obvious in

/s-ilakš hi mi-šup/ šilakš imišup 'the ground is soft'

When a free English gloss does not capture the force of the original, a literal translation follows, with the glosses of individual Chumash words set off with slashes.

/haku ?ini no? k-qil-hik/ haku?nino? q<sup>h</sup>ilik 'if I had not cared for him: if / not / I / I care for'

In the eighth chapter, on syntax, deep structure strings are occasionally posited, enclosed in [] brackets,

[aqšiyik heki no?]

and followed by a terminal string of morphemes.

/k-aqšiyik heki/ 'I like that one'

## 200 Phonology

This section deals with all aspects of the phonology of Ineseño. Included are the phoneme inventory, comments on articulatory phonetics and subphonemic details, a presentation of the distinctive feature framework within which this description operates, morpheme structure conditions, alternations not governed by rule, phonological rules, and a final note on the process termed morphemization, whereby once-segmentable forms are fused into single morphemes.

## 210 Phonemes

The phonemic inventory of Ineseño, virtually identical with those of the other Chumashan languages, is as follows.

	labial	dental	palatal	velar	uvular	glottal
<b>Stops/Affricates</b>						
plain	p	t	c	č	k	q
glottalized	p̣	ṭ	c̣	č̣	ḳ	q̣
aspirated	p <sup>h</sup>	t <sup>h</sup>	c <sup>h</sup>	č <sup>h</sup>	k <sup>h</sup>	q <sup>h</sup>
<b>Spirants</b>						
plain			s	š	x	h
glottalized			ṣ	ṣ̌	x̣	
aspirated			s <sup>h</sup>	š <sup>h</sup>	-	
<b>Sonorants</b>						
plain	m	w	n	l	y	
glottalized	ṃ	ẉ	ṇ	ḷ	ỵ	

Vowels	front	central	back
high	i	ɨ	u
low	e	a	o

This phonemic inventory is not at all abstract; all of these segments are present both in underlying forms at the systematic phonemic level and at the systematic phonetic level.

#### 220 Comments on Phonemes and Articulatory Phonetics

No precise articulatory descriptions of these segments can be given. Some inferences can be made, however, from Harrington's marginal comments on phonetics, from the subphonemic details which he included in his transcription and from the pattern revealed in the morphophonemics of the language.

#### 221 Glottalization

Glottal coarticulation is possible with every consonantal segment. As pointed out by Beeler in Barbareño ('Topics in Barbareño Chumash Grammar,' 1970, p. 8), 'it proves... impossible to distinguish between pre-glottalized, glottalized, or post-glottalized consonants, and this feature is marked as if glottal closure were simultaneous with the articulation of the consonant, or cluster.' Harrington, however, transcribed glottalization sequentially rather than as a coarticulation, with no distinction between glottal closure and release. He marked glottal closure before sonorants and

and word-final spirants, and glottal release elsewhere: after non-continuants (stops and affricates) and non-final spirants. Apparently Harrington wrote whichever phase of the glottal coarticulation was more prominent.

The glottalization of sonorants is probably more lenis than that of obstruents, since the transcription of glottalized sonorants is less consistent than that of stops and spirants. Glottalization occasionally shifts; this can be seen in alternate transcriptions such as *taká* ~ *takáʔ* 'where,' in an optional rule of glottal shift (286.26):

/s-lox<sup>h</sup>-it/ šloxit<sup>h</sup> 'he surpasses me'

and, diachronically, in many cognate pairs:

Barbareño Ineseño

-top<sup>h</sup>o      -topoʔ      'navel'

-kuy<sup>h</sup>uw      -kuyuw<sup>h</sup>      'right hand, right side'

t<sup>h</sup>amay      tamay<sup>h</sup>      'to forget'

There is a contrast of morpheme-initial vowel versus glottal stop plus vowel, as seen in a minimal pair:

/s-elew/ selew 'he comes down; it descends'

/s-ʔelew/ ʔelew 'his tongue'

Verbs and prefixes are generally characterized by an initial vowel, while nouns, except for some inalienably possessed forms (e.g. s-atik 'his soul') have the initial glottal stop. When a morpheme-initial vowel stands in word-initial position in imperative and derivative forms, it is prefaced with glottal stop by rule (286.17).

/expen-š-ʔ/ ʔexpeš<sup>h</sup> 'sing!'

/aqš<sup>h</sup>u-tapin-muʔ/ ʔaqš<sup>h</sup>utapinimuʔ 'lunch, midday meal'

## 222 Aspiration

Aspiration is far less common than glottalization. It tends to occur more frequently at morpheme boundaries, by the operation of certain phonological rules (286.30 and 286.31), than within morphemes. Not only do aspirates occur in more restricted environments than do glottalized segments, but fewer segments may be aspirated than may be glottalized. Sonorants are never aspirated; the aspirated spirants /sh/ and /šh/, especially /ǰh/, are particularly rare within morpheme boundaries, and \*/xh/ does not occur at all.

## 223 /x/ and /q/ as Uvulars

The spirant /x/ patterns with the uvular stop /q/ rather than with velar /k/. According to a marginal comment of Harrington's, /x/ is quite backed, matching /q/ in point of articulation. The two are frequently in morphophonemic alternation (cf. 272), particularly in verbal prefixes.

The opposition of /x ~ h/ and /k ~ q/ is evidently difficult to hear consistently, judging by a number of forms written alternatively with one or the other (e.g. -ictuhun ~ -ictuxun 'nose,' tokos ~ toqos 'seed, pit').

## 224 Sibilants

The affricates /c č/ belong with the stops as unitary segments. They are reduplicated intact in reduplicated environments, and in the subphonemic details of glottalization they pattern with the stops. The



affricates /c č/ pattern with the spirants /s š/ only in sibilant harmony, which requires that both within the morpheme and across morpheme boundaries, sibilants are all either dental /s c/ or palatal /š č/. But judging from Harrington's numerous alternative transcriptions (e.g. ʔoq<sup>h</sup>oś ~ ʔoq<sup>h</sup>oś 'sea otter'), the distinction between the two sets /s c/ and š č/ is not always an easy one to make.

#### 225 Semivowels /w/ and /y/

The semivowels /w/ and /y/ clearly pattern with the consonants rather than with the vowels. First, /w/ and /y/ may be glottalized, just as any consonant may be (e.g. wawač 'to be difficult,' pey 'to bloom'). Second, there are no cooccurrence restrictions at all between /w/ and /y/ and the six vowels, so that forms such as ʔuw 'to eat' and wıy 'to be notched' should be regarded as CVC sequences rather than as diphthongs. The only connection between the vowels and semivowels is that an epenthetic y-glide develops between /i/ and a following vowel in certain environments.

226 There is little evidence on vowel quality, except for a few marginal comments and one vowel chart tucked away without explanation in the manuscript:

i		u
	ɨ	
ɛ		ɔ
	a	

The use of the symbols  $\epsilon$  and  $\circ$  for the mid vowels, elsewhere written as  $e$  and  $o$ , suggests that the vowels are probably lax. The corresponding situation in Barbareño seems to be that vowels are generally lax, though somewhat tenser in open syllables. On the other hand, there is a marginal comment that unstressed / $\circ$ / sounds much like / $u$ /, clearly more [U] than [ $\circ$ ].

As for the high vowels, Beeler says of Barbareño ('Topics in Barbareño Chumash Grammar,' p. 9) that 'the high vowels / $i$ / and / $u$ / have a range between [i] and [e] and [u] and [ $\circ$ ], respectively; the low allophones extend into the area covered by allophones of English and Spanish / $e$ / and / $o$ /' This certainly must have been the case in Ineseño, too, since most of the recorders of the language often tended to confuse / $i$ / with / $e$ / and / $u$ / with / $o$ /. Even Harrington occasionally fell prey to this confusion (e.g. writing [saqosmon] as well as [saqusmon] for / $s$ - $aqu$ - $smon$ / 'he gathers it'), but Harrington's transcription is usually quite consistent on this point.

## 227 Stress

The information on stress is very fragmentary, and is not in complete agreement with what is known of stress in Barbareño. Here, Beeler reports (p. 7) that 'a small number of words bear a marked stress on the final syllable. The remainder... ordinarily exhibit a distinct stress on the penultimate syllable, but not infrequently the words of this remainder do not appear to give much prominence

to any syllable through stress.' Harrington transcribed stress only rarely, and very seldom in more than one occurrence of a given form, so that it is uncertain how consistent the few examples of marked stresses are.

Examples of final stress include

/ʔihíy-ʔ/ ʔihíy' 'man, male'

/k-oqloyloy/ koqloylóy 'I am chewing'

/s-axta-k<sup>h</sup>ít/ saxtak<sup>h</sup>ít 'the wind is blowing'

It may be, given the non-penultimate stress marked in

/k-qtí-k<sup>h</sup>ít-us-wun/ q<sup>h</sup>utík<sup>h</sup>ítuswun 'I pay attention

to them'

that the bound stem -k<sup>h</sup>ít 'to come near' is one which bears a marked stress in any context.

Stress is usually on the penultimate syllable.

/k-yal-weʔ/ kyáweʔ 'I go [there] to sleep'

/ma-k-ʔap/ mákap 'my house'

/ʔoyon-it-ʔ/ ʔoyónít 'help me!'

/s-max-telen + R<sub>2</sub>/ smextelextélen '[a rope] is dragging on the ground'

Many forms analyzed here as preverbal particles were written by Harrington as fused with the verb. Perhaps stress dictated this practice of Harrington's; thus, in

/tíni s-wíl/ 'it still exists'

does a stress pattern [tíníswíl] lead Harrington to write it as a single word? Due to lack of evidence, this point is indeterminate.

While there are many cases of penultimate stress, there are also examples of antepenultimate stress as well,

occasionally in the same form.

/s-aqunimák/ saqunímák ~ saqúnimák 'he hides'

Other cases of antepenultimate stress include

/s-axtipal-nowon/ saxtipónowon 'dust rises'

/s-watí-lípín/ swatílípín 'it caves in'

/pamani-k-kitwon/ pamaník<sup>h</sup>itwon 'I barely got out'

The apparently erratic placement of stress in these examples would seem to corroborate Beeler's observation that often no syllable is prominently stressed: hence the erratic results of trying to mark stress on only one syllable.

When stress is marked for the phrase rather than for the word (usually through elision in external sandhi, by rule 286.46), it is often unpredictable,

/hawala hi kay/ háwalikay 'only he'

/suku ha-p-al-kuti + R/ sukápakutkuti 'what are you looking at?'

but usually it seems to fall on the penultimate syllable of the phrase as a whole.

/k-čamín hi no?/ kčamínino? 'I know'

/ha kša hi pí?/ hakšípi? 'and as for you'

Examples such as [hakšípi?] seem to indicate that stress is assigned by a very low-level rule, after the operation of external sandhi rules.

## 228 Intonation

Evidence on intonation is very scanty. The only observations to be made are that vocative forms seem to

have a distinct final contour marked with an acute accent,  
 /to'no?/ to'no? 'scorekeeper!'

/k-koko?/ k<sup>h</sup>oko? '(my) father!'

and a couple of forms are marked with a circumflex accent, specifically the yes-or-no question suffix -ê and the emphatic particle mê.

/ašî'n-? mê/ ?ašî'n mê 'eat!'

/nox-ê/ noxê 'is it big?'

/?ini-s-su-nuw-in-ê/ ?inîs<sup>h</sup>unuwinê 'does it hurt you?'

### 230 Phonetics - Subphonemic Detail Rules

Harrington's transcription includes certain predictable subphonemic details. Some of these redundant phonetic specifications are made quite regularly, such as the devoicing of sonorants (especially /l/) in syllable-final position, while others are included only sporadically, such as the non-distinctive aspiration of stops in certain consonant clusters. The rules adding predictable subphonemic details apply both to individual morphemes and to full words and phrases to which the entire body of phonological rules has applied. Strictly speaking, these rules adding subphonemic detail belong after the phonological rules, including the external sandhi rules, but it is more convenient to discuss phonetic detail here at the outset. For a discussion of the distinctive feature notation used in this section, see 240 on the feature framework. Surface phonetic forms are quoted, in square brackets, only in this one section (230).

## 231 Syllable-Final Sonorants

Sonorants are voiceless when final in the syllable. This environment can also be stated as everywhere except before a following vowel.

/ʔalçhum/ → [ʔalçhum̥] 'shell money'

/ʔal-apay/ → [ʔalapay̥] 'up, above; (in) the sky'

Even when preceding another sonorant, which is voiced, sonorants are devoiced.

/s-am-moč/ → [šammoč̥] 'they paint it'

/s-wiy + R/ → [swiywiy̥] 'it is notched, grooved'

The domain of the sonorant devoicing rule is the phrase rather than the word, since a final sonorant remains voiced before a following vowel.

/##s-wil#ha-k-tomol/ → [swil aktomol̥] 'I have a boat'

This rule depends on the phrase boundary marked ##.

$$[+son] \rightarrow [-voice] / \text{---} \begin{cases} [+cons] \\ ## \end{cases}$$

## 232 Final Vowels

Final vowels are voiceless, although this detail is not always transcribed.

/ʔipšt̩/ → [ʔipšt̩̥] 'body louse'

/wašiko/ → [wašiko̥] 'chapparal sp.'

/s-kuti/ → [skuti̥] 'he sees'

Within the phrase, only phrase-final vowels are devoiced, rather than all word-final vowels.

/sukiku heki/ → [sukiku heki̥] 'what [is] that?'

This rule too depends on the phrase boundary marked ##.

$$[+voc] \rightarrow [-voice] / \text{---} ##$$

## 233 Echo Vowels

Phrase-final glottal stop is followed by a voiceless echo vowel, especially in citation forms.

/ʔalmiyiʔ/ → [ʔalmiyiʔi] 'condor'

/s-is-tiʔ/ → [šištɪʔi] 'he finds it'

Within a phrase, this echo vowel does not develop,

/##noʔ#ka#wot##/ → [noʔ kawot] 'I [am] a chief'

/##s-is-tiʔ#ha-ʔoʔ##/ → [šištɪʔ aʔoʔo] 'he finds water'

except occasionally before consonant clusters.

/##kuneʔ#s-nan##/ → [kuneʔe šnaŋ] 'who goes?'

/##haʔ#s-kitwon##/ → [haʔa skitwon] 'so that it emerges'

In a few sections of the manuscript, Harrington wrote echo vowels after all final glottalized consonants

/ʔatucʔ/ → [ʔatucʔu] 'tight-mesh bag'

and even after many plain consonants.

/s-ixut/ → [sixutu] 'it burns'

This was not his general practice; it may have been based on an informant's unusually careful pronunciation, or more likely, on Harrington's eagerness to capture every phonetic nuance.

Only those echo vowels which are written consistently are accounted for here: after phrase-final glottal stop and optionally before consonant clusters.

$$\emptyset \rightarrow V_1 / V_1 \text{ } \left\{ \begin{array}{l} \text{##} \\ \text{\# CC optional} \end{array} \right.$$

$$\emptyset \rightarrow \left[ \begin{array}{c} +\text{voc} \\ -\text{voice} \\ \Psi \end{array} \right] / \left[ \begin{array}{c} +\text{voc} \\ \Psi \end{array} \right] \left[ \begin{array}{c} -\text{cont} \\ -\text{ant} \\ -\text{cor} \\ -\text{back} \end{array} \right] \left\{ \begin{array}{l} \text{##} \\ \text{\# [+con][+con]} \end{array} \right.$$

## 234 Glottal Closure and Release

Glottalization has been phonemicized here as a simultaneous coarticulation, but in Harrington's transcription, which was phonetic, glottalization is marked sequentially: it either precedes or follows the segment in question, with no distinction between glottal closure and release. Forms shown in square brackets here are essentially Harrington's transcription, with glottalization marked just as he marked it.

Glottal release is marked with stops and affricates.

/s-kimín/ → [sk'ímín] 'it is dry'

/s-popoč'/ → [špopoč'] 'his paternal grandfather'

Glottal closure is marked with final spirants,

/pís/ → [pí's] 'basketry bowl'

/štexex'/ → [štexe'x] 'river'

but elsewhere with spirants, glottal release is marked.

/xox/ → [x'ox] 'heron sp.'

/s-uše?/ → [šuš'e?ə] 'he digs'

Glottal closure precedes sonorants, which are voiceless syllable-finally.

/xuxaw'/ → [xuxa'w̥] 'coyote'

/s-sinay/ → [shí'nay] 'he puts it away'

These two points of pre-sonorant glottal closure and syllable-final devoicing of sonorants are among the criteria of what constitutes a single glottalized segment. There can be a contrast of glottalized sonorant

/k-ulíš/ → [ku'liš] 'I grasp it'

and sonorant plus glottal stop in reduplicated sequences.



/ʔal-aqšan + R/ -> [ʔalʔalaqša'ŋ] 'the dead'

Harrington was not always consistent in his marking of glottalization. For example, /i'caqliwiy/ 'to wear a cape' is transcribed showing either glottal closure in [i'caqliwiy] or glottal release in [ic'aqliwiy]. A few other forms are regularly marked for glottal closure rather than release: [waha'č] 'many,' [su'ku] 'what,' and [ta'ku] 'how.' These I have phonemicized without a qualm as /wahač/, /suku/, and /taku/.

Given that Harrington's transcription does not clearly distinguish between glottal closure and release, it does not seem fitting for a phonetic rule to follow his practice too closely on this point by breaking up glottalized segments into sequences of glottal stop and consonant. Instead, glottalization is treated as an essentially simultaneous coarticulation, although the glottal and oral articulations may be slightly out of phase with one another.

### 235 Non-distinctive Aspiration

Stops (but not the affricates /c č/) may have a degree of non-distinctive aspiration non-finally in certain types of consonant clusters: before nasals,

/soxtonokmuʔ/ -> [soxtonok<sup>h</sup>muʔu] 'village name'

/p-niwon/ -> [p<sup>h</sup>niwon] 'you let go of it'

before glottalized stops and affricates,

/s-aqkam/ -> [saq<sup>h</sup>kam] 'he gets stuck in an opening'

/k-čamɪŋ/ -> [k<sup>h</sup>čamɪŋ] 'I know'

and before any stop when no vowel precedes.

/p-kuy/ → [p<sup>h</sup>kuy] 'you take it'

/k-tepet/ → [k<sup>h</sup>tepet] 'I roll it'

The rule for non-distinctive aspiration is:

$$\begin{array}{l}
 c^{\text{stop}} \rightarrow c^{\text{h}} \quad / \quad \begin{array}{l} \text{--- } \{m \ n\} \\ \text{--- } c^{\text{'-cont}} \\ \# \text{--- } c^{\text{-cont}} \end{array} \\
 \\
 \begin{array}{l} [-\text{cont}] \\ [-\text{strid}] \end{array} \rightarrow [+asp] \quad / \quad \begin{array}{l} \text{--- } [+nasal] \\ \text{--- } \begin{array}{l} [-\text{cont}] \\ [+glott] \end{array} \\ \# \text{--- } [-\text{cont}] \end{array}
 \end{array}$$

#### 240 Phonological Formalism

The following section on phonological formalism presents the distinctive feature framework within which this description operates, fully and minimally specified feature matrices, feature redundancy rules relating the minimally and fully specified matrices, and abbreviatory devices used in the statement of morpheme structure conditions and phonological rules in later sections.

#### 241 Distinctive Feature Framework

The set of distinctive features used here is based primarily on that presented by Chomsky and Halle in The Sound Pattern of English (1968), although the order in which features are presented is slightly altered. Not all of the Chomsky-Halle features are utilized here. Specifications of such features as 'low,' 'distributed,' or 'delayed release' are all predictable in Ineseño in

terms of features higher in the feature hierarchy. For example, [+delayed release] is a redundant specification of the affricates /c č/, which are already uniquely specified as [-continuant, +strident].

The features used in describing Ineseño are 'vocalic,' 'consonantal,' 'sonorant,' 'continuant,' 'anterior,' 'coronal,' 'high,' 'back,' 'round,' 'strident,' 'nasal,' 'lateral,' 'glottal,' and 'aspirated.' All are assumed to have binary values. The definitions of most of these are widely accepted, but a few call for special comment. For the feature 'anterior,' Chomsky and Halle say that 'anterior sounds are produced with an obstruction that is located in front of the palato-alveolar region' (p. 304), i.e. labial and dental segments in Chumash. As for 'coronal,' 'coronal sounds are produced with the blade of the tongue raised from its neutral position' (p. 304), i.e. dental and palatal segments.

In the specification of consonants as well as vowels, 'high sounds are produced by raising the body of the tongue above the level that it occupies in the neutral position' (p. 304), i.e. palatal and velar segments. Thus, velar /k/ and uvular /q/ are distinguished by the feature 'high,' where /k/ is [+high] and /q/ is [-high]. In consonants and vowels, 'back sounds are produced by retracting the body of the tongue from the neutral position' (p. 305), i.e. velar and uvular segments. The feature 'back' distinguishes the spirants /x/ and /h/ (although they differ in stridency as well: /x/ is

[+strident]): /x/ is [+back] and /h/ is [-back].

The glottal segments /ʔ/ and /h/ are distinguished from other non-sonorants as [-anterior, -coronal, -back]. The feature 'glottal' refers to glottal closure, applying to both glottal stop and glottalized consonants. The feature 'aspirated' used here is essentially a more familiar term for Chomsky and Halle's 'heightened sub-glottal pressure' (p. 326), and applies both to /h/ and to aspirated obstruents.

Among the vowels, the feature 'low' is unnecessary, since the vowels fall into a symmetrical pattern of [+high] /i ± u/ and [-high] /e a o/. But it is necessary to distinguish three vowel regions: front, central, and back. The features 'back' and 'round' are used for this purpose: the non-front vowels, marked [+back], are divided into [-round] central vowels /± a/ and [+round] back vowels /u o/. This characterization of central vowels is not very precise in articulatory terms, but there is some justification for treating central and back vowels together as [+back]: there is a rule of back vowel harmony governing an alternation of /u/ and /±/ in prefixes (286.11).

The features 'back' and 'round' also apply to the semivowels /w/ and /y/, although with the simple binary contrast of /w/ and /y/, 'round' is redundant in terms of 'back.' 'Back' applies to consonants as well as vowels, but 'round' has no consonantal correlate. Accordingly, consonants are simply not marked for the feature 'round.'

## 242 Fully Specified Feature Matrix

	p	p <sup>h</sup>	t	t <sup>h</sup>	c	c <sup>h</sup>	ç	ç <sup>h</sup>	k	k <sup>h</sup>	q	q <sup>h</sup>	s	s <sup>h</sup>
voc	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cons	+	+	+	+	+	+	+	+	+	+	+	+	+	+
son	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cont	-	-	-	-	-	-	-	-	-	-	-	-	+	+
ant	+	+	+	+	+	+	-	-	-	-	-	-	+	+
cor	-	-	+	+	+	+	+	+	-	-	-	-	+	+
high	-	-	-	-	-	-	+	+	+	+	+	-	-	-
back	-	-	-	-	-	-	-	-	+	+	+	+	-	-
round														
strid	-	-	-	-	+	+	+	+	-	-	-	-	+	+
nasal	-	-	-	-	-	-	-	-	-	-	-	-	-	-
lat	-	-	-	-	-	-	-	-	-	-	-	-	-	-
glott	-	+	-	-	+	-	-	+	-	-	+	-	-	+
asp	-	-	+	-	-	+	-	-	+	-	-	+	-	-

## Abbreviations:

voc = vocalic

cor = coronal

cons = consonantal

strid = strident

son = sonorant

lat = lateral

cont = continuant

glott = glottal closure

ant = anterior

asp = aspirated

	š	ṣ̌	gh	x	x̣	ʔ	h	m	ṃ	n	ṇ	l	ḷ	w	ẉ	y	ỵ	i	ɪ	u	e	a	o
voc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+	+	+	+
cons	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-	-	-	-	-
son	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
cont	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
ant	-	-	-	-	-	-	-	+	+	+	+	+	+	-	-	-	-	-	-	-	-	-	-
cor	+	+	+	-	-	-	-	-	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-
high	+	+	+	-	-	-	-	-	-	-	-	-	-	+	+	+	+	+	+	-	-	-	-
back	-	-	-	+	+	-	-	-	-	-	-	-	-	+	+	-	-	-	+	+	-	+	+
round																		-	-	+	-	-	+
strid	+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
nasal	-	-	-	-	-	-	-	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-
lat	-	-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-
glott	-	+	-	-	+	+	-	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+
asp	-	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## 243 Feature Redundancy Conditions

The following set of feature redundancy conditions fills in blank specifications in the minimally redundant matrix presented below (244). The application of these conditions to the minimally redundant matrix results in the fully specified matrix presented above (242). These conditions are unordered with respect to one another, but they are presented in roughly the order of the feature hierarchy used in the matrices.

243.01	[+voc]	->	<div style="border: 1px solid black; padding: 5px; display: inline-block;">           -cons            +son            +cont            -ant            -cor            -strid            -nasal            -lat            -glott            -asp         </div>
243.02	[+cons]	->	[-voc]
243.03	[+son]	->	<div style="border: 1px solid black; padding: 5px; display: inline-block;">           +cont            -strid            -asp         </div>
243.04	[-son]	->	<div style="border: 1px solid black; padding: 5px; display: inline-block;">           -voc            +cons            -round            -nasal            -lat         </div>
243.05	[-cont]	->	[-son]
243.06	[+ant]	->	<div style="border: 1px solid black; padding: 5px; display: inline-block;">           -high            -back         </div>
243.07	<div style="border: 1px solid black; padding: 5px; display: inline-block;">           -cont            -cor         </div>	->	[-strid]
243.08	[+cor]	->	[-back]
243.09	[+high]	->	[-ant]

- 243.10 [ +son  
+high ] → [ -ant  
-cor  
-nasal  
-lat ]
- 243.11 [ +son  
-high ] → [ -round ]
- 243.12 [ +back ] → [ -ant  
-cor ]
- 243.13 [ +voc  
-back ] → [ -round ]
- 243.14 [ +son  
+high  
αback ] → [ αround ]
- 243.15 [ -son  
αcont  
-ant  
-cor  
-back ] → [ -high  
-strid  
-αglott  
αasp ]
- 243.16 [ +strid ] → [ -son ]
- 243.17 [ +nasal ] → [ +son  
+ant  
-lat ]
- 243.18 [ +lat ] → [ +son  
+ant  
+cor  
-nasal ]
- 243.19 [ +glott ] → [ -asp ]
- 243.20 [ +asp ] → [ -glott ]
- 243.21 [ +strid  
+back ] → [ +cont  
-high  
-asp ]



## 244 Minimally Specified Feature Matrix

	p	p <sup>h</sup>	t	t <sup>h</sup>	c	c <sup>h</sup>	č	č <sup>h</sup>	k	k <sup>h</sup>	q	q <sup>h</sup>	s	s <sup>h</sup>	
voc															
cons															
son															
cont	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+
ant	+	+	+	+	+	+							+	+	+
cor	-	-	-	+	+	+	+	+	+				+	+	+
high								+	+	+	-	-	-		
back									+	+	+	+	+	+	
round															
strid			-	-	-	+	+	+	+	+					+
nasal															
lat															
glott	-	+	-	+	-	+	-	+	-	+	-	+	-	+	
asp	-	+	-	+	-	+	-	+	-	+	-	+	-	+	

	š	ṣ̌	š <sup>h</sup>	x	x̣	ʔ	h	m	ṃ	n	ṇ	l	ḷ	w	ẉ	y	ỵ	i	ị	u	e	a	o	
voc																		+	+	+	+	+	+	
cons														+	+	+	+							
son														+	+	+	+							
cont	+	+	+				-	+																
ant							-	-																
cor	+	+	+				-	-	-	-	+	+												
high	+	+	+											+	+	+	+	+	+	-	-	-		
back				+	+		-	-						+	+	-	-	-	+	+	-	+	+	
round																				-	+		-	+
strid	+	+	+	+	+																			
nasal									+	+	+	+												
lat																							+	+
glott	-	+		-	+				-	+	-	+	-	+	-	+	-	+	-	+				
asp	-		+																					

## 245 Abbreviatory Devices

A few formal abbreviatory devices used some of the following phonological statements deserve attention.

The sign of logical negation,  $\sim$ , precedes non-occurring sequences. For example, morpheme structure condition 253.2 states that no morpheme ends in /h/ or an aspirated consonant:  $\sim [+asp] +$ .

The mirror image convention shows with an asterisk that two elements in a statement may occur in either order. For example, morpheme structure condition 253.1, which blocks the non-contrastive sequences  $*?C$  and  $*C?$  in favor of unitary glottalized segments  $\overset{!}{C}$ , is stated as  $\sim ?C *$ .

Identically specified segments are marked with  $\psi$ , where  $\psi$  is a variable over all of the specifications of a pair of identical matrices. This device is a maximally compact form of the Greek letter variable convention; it is useful in the formal statement of such identities as  $C_1 C_1$  or  $V_1 V_1$ , as in morpheme structure condition 256.1 barring geminate consonants:  $\sim \begin{bmatrix} +cons \\ \psi \end{bmatrix} \begin{bmatrix} +cons \\ \psi \end{bmatrix}$ .

## 250 Morpheme Structure Conditions

The following unordered set of morpheme structure conditions is grouped by reference to vowels, discontinuous sequences, coarticulations of aspiration and glottalization, consonant clusters, and affixes. Depending on which facilitates the statement, these conditions are expressed both as rewrite rules of the form

$$[+son] \rightarrow [+cor] / \text{---} [+cons]$$

(e.g. (256.4), any preconsonantal sonorant is [+coronal] /l/ or /n/) and as statements of non-occurring sequences, preceded by the sign of logical negation

$$\sim \begin{bmatrix} -cont \\ +back \end{bmatrix} \begin{bmatrix} +cont \\ +back \end{bmatrix}$$

(e.g. (256.3), the clusters \*/kx/ and \*/qx/ do not occur).

Some conditions are without exception, while others may admit a few exceptions. How many exceptions can be tolerated without invalidating the condition is an indeterminate point. But a rule of thumb here is that a condition is valid, even if it has a few exceptions, if it has some parallel among the morphophonemic rules (280). Even conditions of possibly marginal validity will be discussed; these may still embody worthwhile general observations. It is noted in the text which conditions have exceptions and which have parallels among the morphophonemic rules.

Many CVC reduplicated stems (q.v., 261) violate consonant cluster conditions; for example, lewlew 'mythological creature' has a non-dental sonorant in preconso-

nantal position (in violation of 256.4). The unattested simplex form (e.g. *lew-* above) must be taken as the sequence to which the conditions apply. Another class of possible exceptions is proper names, of both persons and places, which are not necessarily Ineseño. Some such proper names are specifically identified by Harrington's informants as being non-Ineseno (e.g. *lompo?* 'Lompoc,' with a non-dental preconsonantal sonorant, is Purisimeño), but many are not thus identified.

In conjunction with the feature redundancy conditions presented above (243), these morpheme structure conditions permit a drastic simplification in the specification of morphemes. A few examples include:

the prefix *aqtipal-* 'in the air,'

$$+ \begin{bmatrix} +\text{voc} \\ -\text{high} \end{bmatrix} \begin{bmatrix} -\text{cont} \\ -\text{high} \\ +\text{back} \end{bmatrix} \begin{bmatrix} -\text{cont} \\ -\text{glott} \end{bmatrix} \begin{bmatrix} +\text{voc} \\ +\text{high} \\ -\text{back} \end{bmatrix} \begin{bmatrix} -\text{cont} \\ +\text{ant} \\ -\text{cor} \\ -\text{glott} \end{bmatrix} \begin{bmatrix} +\text{voc} \\ -\text{high} \end{bmatrix} [+son] -$$

the suffix *-mu?* 'locative nominalizer,'

$$- \begin{bmatrix} +\text{nasal} \\ -\text{cor} \end{bmatrix} \begin{bmatrix} +\text{voc} \\ +\text{high} \\ +\text{back} \end{bmatrix} \begin{bmatrix} -\text{cont} \\ +\text{glott} \end{bmatrix} +$$

the stem *yuxnuč* 'hummingbird,'

$$+ \begin{bmatrix} +\text{son} \\ +\text{high} \\ -\text{back} \end{bmatrix} \begin{bmatrix} +\text{voc} \\ +\text{high} \\ +\text{back} \\ -\text{round} \end{bmatrix} \begin{bmatrix} +\text{back} \\ +\text{strid} \end{bmatrix} \begin{bmatrix} +\text{nasal} \\ +\text{cor} \end{bmatrix} \begin{bmatrix} +\text{voc} \\ +\text{high} \\ +\text{back} \end{bmatrix} \begin{bmatrix} -\text{cont} \\ +\text{ant} \\ +\text{cor} \\ +\text{strid} \\ +\text{glott} \end{bmatrix} +$$

and the stem *teqepš* 'village name.'

$$+ \begin{bmatrix} -\text{cont} \\ +\text{ant} \\ +\text{cor} \\ -\text{strid} \\ -\text{glott} \\ -\text{asp} \end{bmatrix} \begin{bmatrix} +\text{voc} \\ -\text{high} \\ -\text{back} \end{bmatrix} \begin{bmatrix} -\text{cont} \\ -\text{high} \\ +\text{back} \\ -\text{glott} \\ -\text{asp} \end{bmatrix} \begin{bmatrix} +\text{voc} \\ -\text{high} \end{bmatrix} \begin{bmatrix} -\text{cont} \\ +\text{ant} \\ -\text{cor} \end{bmatrix} [+ant] +$$

## 251 Vowel Conditions

The permitted sequences of vowels within morphemes are shown in the following table.

1st	i	ɨ	u	e	a	o
i	i-i	i-ɨ	i-u	i-e	i-a	i-o
ɨ	ɨ-i	ɨ-ɨ	-	-	-	-
u	u-i	-	u-u	u-e	u-a	u-o
e	e-i	-	e-u	e-e	-	-
a	a-i	a-ɨ	a-u	-	a-a	-
o	o-i	-	o-u	-	-	o-o

As a matter of formalism, the possible permutations of intervening consonants are ignored in the first three conditions as irrelevant to permitted vowel sequences. The first two conditions apply across any number of syllables within the morpheme (e.g. wočkonoy 'caccoon,' ilik'in 'to sit, dwell,' hawala 'only, alone, except').

251.1 Low vowels within the morpheme are all identical; a morphophonemic parallel is the low vowel harmony rule (286.10). A few exceptions are moqe 'already,' peťa? 'sixteen,' and heča? 'this,' plus many Spanish loans (e.g. čaketon 'coat: Sp. chaqueton').

$$\begin{bmatrix} +\text{voc} \\ -\text{high} \end{bmatrix} \rightarrow \begin{bmatrix} \alpha \text{ back} \\ \beta \text{ round} \end{bmatrix} / \begin{bmatrix} -\text{high} \\ \alpha \text{ back} \\ \beta \text{ round} \end{bmatrix} \text{ ---}$$

251.2 A high back vowel agrees in rounding with a preceding high back vowel, giving the sequences /i-ɨ/ and /u-u/. A trio of exceptions is uxniwin 'to hurry,' uqčik 'to spit,' and untiq 'to weave pierced mats.'

A morphophonemic parallel (rule 286.11) is the centralization of /u/ in prefixes before /ɨ/ in stems.

$$\begin{bmatrix} +\text{voc} \\ +\text{high} \\ +\text{back} \end{bmatrix} \rightarrow [\alpha\text{round}] / \begin{bmatrix} +\text{voc} \\ +\text{high} \\ +\text{back} \\ \alpha\text{round} \end{bmatrix} \text{ —}$$

251.3 If the second vowel is specified as /ɨ/, an unspecified first vowel is either /i/ or /a/. In the case of /ɨ-ɨ/, it is the first vowel that is specified.

$$[+\text{voc}] \rightarrow \begin{bmatrix} \alpha\text{high} \\ -\alpha\text{back} \\ -\text{round} \end{bmatrix} / \text{ — } \begin{bmatrix} +\text{voc} \\ +\text{high} \\ +\text{back} \\ -\text{round} \end{bmatrix}$$

251.4 There are no vowel clusters within morphemes. Across morpheme boundaries, the first block of phonological rules (286.1 - 286.9) operates to prevent vowel clusters.

$$\sim [+\text{voc}] [+\text{voc}]$$

251.5 A vowel following medial /h/ is identical to the preceding vowel.

$$[+\text{voc}] \rightarrow \begin{bmatrix} +\text{voc} \\ \Psi \end{bmatrix} / \begin{bmatrix} +\text{voc} \\ \Psi \end{bmatrix} \begin{bmatrix} -\text{son} \\ -\text{ant} \\ -\text{cor} \\ -\text{back} \end{bmatrix} \text{ —}$$

## 252 Conditions Governing Discontinuous Sequences

The following conditions are statements of discontinuous dependencies which do not fit neatly into other sets of conditions (cf. 251.5 above and 253.8 below blocking aspirates in adjacent syllables).

252.1 The strident spirants and affricates within a morpheme are all from either the dental set /s c/ or

the palatal set /š č/, without exception. There is a corresponding sibilant harmony rule (286.28).

$$\begin{bmatrix} +\text{cor} \\ +\text{strid} \end{bmatrix} \rightarrow [\alpha\text{ant}] / \begin{bmatrix} \alpha\text{ant} \\ +\text{cor} \\ +\text{strid} \end{bmatrix} [\text{seg}]_1^n \text{ —}$$

252.2 The velar and uvular segments /k q x/ do not occur in the same CVC sequence (an exception is *maxakiš* 'cloth'). But there are many examples of these three cooccurring in what must be considered a single morpheme synchronically, as in *aqkam* 'to get stuck,' *axkikin* 'to gnaw,' *xalkay* 'to gather seeds,' or *qiliwik* 'to mix in.' It is tempting to regard these forms, especially those with the ubiquitous formatives *aq-/ax-* (q.v., 612.2), as having at one time been morphologically complex.

$$\begin{bmatrix} -\text{son} \\ +\text{back} \end{bmatrix} \rightarrow \begin{bmatrix} \alpha\text{high} \\ \beta\text{strid} \end{bmatrix} / \begin{bmatrix} -\text{son} \\ +\text{back} \\ \alpha\text{high} \\ \beta\text{strid} \end{bmatrix} [+v\text{oc}] \text{ —}$$

252.3 CVC sequences in which /q/ or /x/ cooccur with /h/ are blocked, although /k/ and /h/ cooccur freely. Exceptions are *huxminaš* 'plant sp.,' *haxwi-* 'to dress,' and *-hoqš* 'gall.'

$$\sim \begin{bmatrix} -\text{son} \\ -\text{high} \\ +\text{back} \end{bmatrix} [+v\text{oc}] \begin{bmatrix} -\text{ant} \\ -\text{cor} \\ -\text{back} \\ +\text{asp} \end{bmatrix}$$

### 253 Glottalization and Aspiration Conditions

These conditions govern the occurrence of aspirated and glottalized segments within the morpheme.



253.1 There is no contrast of unitary glottalized or aspirated segments versus a sequence of /ʔ/ or /h/ plus consonant (except in reduplicated forms, e.g. hočhoč 'warbler,' /ʔemet + R/ ʔemʔemet 'squirrels'); glottalization and aspiration are treated here as inherent features of the segment.

$$\sim \begin{bmatrix} -\text{son} \\ -\text{ant} \\ -\text{cor} \\ -\text{back} \end{bmatrix} \quad [+cons] *$$

253.2 No morpheme ends with either /h/ or with an aspirated segment. However, across boundaries, there is sporadic aspiration (286.32) of final /p k/ in certain environments (e.g. /ʔap-Vn/ ʔap<sup>h</sup>an 'to build a house'), and /h/ appears preconsonantly in the reduplicated forms of CV(ʔ) stems (e.g. /ku + R/ kuhkuʔ 'people').

$$\sim [+asp] +$$

253.3 Of the glottal segments /ʔ/ and /h/, only /h/ occurs intervocally. The few exceptions, woʔoʔ 'to lie,' tiʔiʔ 'fish sp.,' and waʔan 'plant sp.,' all show /ʔ/ only between identical vowels, just as with intervocalic /h/ in condition 251.5.

$$\begin{bmatrix} -\text{son} \\ -\text{ant} \\ -\text{cor} \\ -\text{back} \end{bmatrix} \rightarrow [+cont] / [+voc] \text{ --- } [+voc]$$

253.4 A morpheme-initial sonorant is not glottalized, at least in non-bound stems. Three bound stems appear to have an initial glottalized sonorant: -<sup>1</sup>may 'to cover,

overwhelm,' -l'eqen 'to extend, protrude,' and -n'ixš 'to do with the nose.' Sporadic glottalization of initial sonorants in particular compounds of free stems is possible by rule 286.24 (e.g. /kal-w'iy/ kaw'iy 'to cut a notch in').

+ [+son] → [-glott]                      in free stems

253.5 No sonorant is glottalized following another consonant. A corresponding morphophonemic rule (286.42) deglottalizes postconsonantal sonorants.

[+son] → [-glott] / [+cons] —

253.6 The non-final members of consonant clusters are neither glottalized nor aspirated. There are corresponding rules of preconsonantal neutralization (286.39 and 286.40).

[+cons] →  $\begin{bmatrix} -glott \\ -asp \end{bmatrix}$  / — [+cons]

253.7 The glottalization of a final consonant cluster is not permitted, either as glottalization of the entire sequence or of the final consonant. A corresponding morphophonemic rule (286.43) deglottalizes final clusters.

[+cons] → [-glott] / [+cons] — +

253.8 There are no sequences of successive aspirates, either /h/ or aspirated obstruents, in adjacent syllables, except in reduplicated stems (e.g. q<sup>h</sup>apq<sup>h</sup>ap 'to be thin').

~ [+asp] [+seg]<sub>1</sub><sup>2</sup> [+asp]

## 254 Consonant Cluster Conditions: Introduction

There are patterns of greater and lesser generality among the permitted consonant clusters, some of which hold true for both initial and medial clusters (these conditions, specifically 255.8 and 255.9, are listed as the last of the set of initial conditions). Those clusters which are relatively common (attested in at least five morphemes) are underlined in the following tables. An asterisk in the table denotes a systematic gap in the pattern, accounted for by one of the conditions governing clusters, while a dash may reflect an unsystematic gap perhaps only accidentally unattested.

Many of the less common clusters are attested only once, such as initial clusters /kt/ and /cq/, or medial clusters /sq, px, pn, lč, cm, km/ etc. These rarer clusters often violate what is otherwise an apparently systematic gap in the pattern. For example, it is tempting to postulate a condition barring clusters of stop plus /x/, except for one medial occurrence of /px/ and one of /čx/. But with these rarer clusters taken into account, only the weaker versions of consonant cluster conditions are given below. The second member of non-final clusters may be glottalized or aspirated; these coarticulations are accordingly left unspecified in the conditions. On the tables, a cluster such as /qp/ is to be understood as implying /qp, q<sup>h</sup>p, qp<sup>h</sup>/.

## 254.1 Initial Consonant Clusters

lst	p	t	c	č	k	q	s	š	x	m	n	l	w	y
p	*	*	*	*	*	*	ps	pš	*	*	*	<u>pl</u>	-	*
t	*	*	*	*	*	*	*	*	*	*	*	*	-	*
c	cp	*	*	*	-	cq	*	*	*	*	*	*	cw	cy
č	-	*	*	*	čk	čq	*	*	*	*	čn	*	čw	*
k	*	kt	-	-	*	*	ks	-	*	*	kn	<u>kl</u>	<u>kw</u>	*
q	*	*	*	*	*	*	qs	qš	*	*	*	<u>ql</u>	<u>qw</u>	*
s	<u>sp</u>	<u>st</u>	*	*	<u>sk</u>	<u>sq</u>	*	*	<u>sx</u>	<u>sm</u>	<u>sn</u>	<u>sl</u>	<u>sw</u>	sy
š	-	št	*	*	<u>šk</u>	-	*	*	-	šm	šn	šl	-	*
x	*	*	*	*	*	*	-	xš	*	xm	*	xl	xw	*

## 254.2 Medial Consonant Clusters

lst	p	t	c	č	k	q	s	š	x	m	n	l	w	y
p	*	<u>pt</u>	pc	*	*	*	ps	<u>pš</u>	px	-	pn	<u>pl</u>	pw	py
t	*	*	*	*	*	*	*	*	-	tm	-	tl	tw	-
c	cp	ct	*	*	<u>ck</u>	cq	*	*	-	cm	cn	-	cw	cy
č	čp	čt	*	*	čk	čq	*	*	čx	-	čn	čl	čw	čy
k	-	<u>kt</u>	-	-	*	*	ks	<u>kš</u>	*	km	kn	<u>kl</u>	kw	-
q	<u>qp</u>	<u>qt</u>	<u>qc</u>	<u>qč</u>	<u>qk</u>	*	<u>qs</u>	<u>qš</u>	*	<u>qm</u>	<u>qn</u>	<u>ql</u>	<u>qw</u>	<u>qy</u>
s	<u>sp</u>	<u>st</u>	*	*	<u>sk</u>	sq	*	*	sx	<u>sm</u>	<u>sn</u>	-	<u>sw</u>	sy
š	šp	št	*	*	<u>šk</u>	-	*	*	šx	šm	šn	šl	šw	-
x	<u>xp</u>	<u>xt</u>	<u>xc</u>	<u>xč</u>	<u>xk</u>	<u>xq</u>	<u>xs</u>	<u>xš</u>	*	<u>xm</u>	<u>xn</u>	<u>xl</u>	<u>xw</u>	<u>xy</u>
l	<u>lp</u>	lt	lc	lč	<u>lk</u>	lq	ls	lš	lx	lm	*	*	<u>lw</u>	ly
n	*	nt	nc	nč	*	*	ns	-	*	*	*	*	*	*

## 254.3 Final Clusters

ks qs  
pš kš qš xš

## 255 Initial Cluster Conditions

The following conditions govern initial consonant clusters. The last two (255.8 and 255.9) apply also to medial clusters.

255.1 No initial cluster begins with a sonorant.

$$[+cons] \rightarrow [-son] / + \text{---} [+cons]$$

255.2 Spirants in initial clusters with stops are /s/ and /š/, but not /x/.

$$\begin{bmatrix} -son \\ +cont \end{bmatrix} \rightarrow [+cor] / + [-cont] \text{---} *$$

255.3 Initial stop clusters are dissimilated by the feature 'coronal;' one member of the cluster belongs to the [+coronal] set /t c č/, the other to [-coronal] /p k q/.

$$[-cont] \rightarrow [\alpha cor] / + \begin{bmatrix} -cont \\ -\alpha cor \end{bmatrix} \text{---}$$

255.4 The peripheral stops /p/ and /q/ do not occur initially in initial clusters.

$$\sim + \begin{bmatrix} -cont \\ -cor \\ -high \end{bmatrix} [-cont]$$

255.5 Only strident dentals /s/ and /c/ precede /y/ in initial clusters.

$$[+cons] \rightarrow \begin{bmatrix} +ant \\ +cor \\ +strid \end{bmatrix} / + \text{---} \begin{bmatrix} +son \\ +high \\ -back \end{bmatrix}$$

255.6 Initial stop plus nasal is /č/ or /k/ plus /n/.

$$+ [-cont] [+nasal] \rightarrow \begin{bmatrix} -cont \\ +high \end{bmatrix} \begin{bmatrix} +nasal \\ +cor \end{bmatrix}$$

255.7 The coronal stops /t c č/ do not precede /l/ in initial clusters.

$$\sim + \begin{bmatrix} -\text{cont} \\ +\text{cor} \end{bmatrix} +\text{lat}$$

The following two conditions apply to medial as well as to initial consonant clusters.

255.8 There are no stop clusters with /t/ as first member.

$$\sim \begin{bmatrix} -\text{cont} \\ +\text{ant} \\ +\text{cor} \\ -\text{strid} \end{bmatrix} [-\text{cont}]$$

255.9 This condition blocks strident clusters (e.g. \*/sc, šč, cs, čš/) and the contrast of unitary segments /c č/ versus clusters \*/ts tš/. Harrington's transcription does not show this contrast even across morpheme boundaries; a cluster /ts/ or /tš/ arising across a boundary (e.g. /s-utičič + R/ šutšutišič 'it is very tough') was transcribed the same as the underlying segments treated here as /c/ and /č/.

$$\sim \begin{bmatrix} -\text{son} \\ +\text{cor} \end{bmatrix} \begin{bmatrix} +\text{cor} \\ +\text{strid} \end{bmatrix}$$

## 256 Medial Cluster Conditions

The following conditions apply to medial consonant clusters, as do 255.8 and 255.9 above. Medial clusters are far more diversified than are initial and final clusters. Clusters with /q/ or /x/ as first member are all common, reflecting the ubiquitous initial formative aq-/ax- (q.v., 612.2) with which many lexical items

begin, but which is very seldom synchronically segmentable. The underlying bimorphemic origin of such clusters is readily apparent in the table (254.2), where comparable clusters with first members other than /q/ or /x/ are either rare or do not occur at all. This is especially striking with the clusters /qc, qč, xc, xč/, where /c/ and /č/ as second members of clusters are quite rare. The initial cluster condition (255.3) that stop clusters are dissimilated by the feature 'coronal' is violated medially only by /qp/ and /qk/, this latter being of very occurrence.

256.1 There are no geminate clusters. A parallel morphophonemic rule (286.30) converts a geminate obstruent into the corresponding aspirate.

$$\sim \begin{bmatrix} +\text{cons} \\ \psi \end{bmatrix} \begin{bmatrix} +\text{cons} \\ \psi \end{bmatrix}$$

256.2 Non-strident anterior stops /p/ and /t/ do not precede the non-anterior stops /č k q/.

$$\begin{bmatrix} -\text{cont} \\ +\text{ant} \end{bmatrix} \rightarrow [+strid] / \text{---} \begin{bmatrix} -\text{cont} \\ -\text{ant} \end{bmatrix}$$

256.3 The clusters \*/kx/ and \*/qx/ do not occur.

$$\sim \begin{bmatrix} -\text{cont} \\ +\text{back} \end{bmatrix} \begin{bmatrix} +\text{cont} \\ +\text{back} \end{bmatrix}$$

256.4 Only the dental sonorants /l/ and /n/ occur in preconsonantal position. An exception is 'onomyo' 'gull.'

$$[+\text{son}] \rightarrow [+cor] / \text{---} [+cons]$$

256.5 Only the coronal obstruents /t c s č š/ are preceded by /n/.

$$[+cons] \rightarrow \begin{bmatrix} -son \\ +cor \end{bmatrix} / \begin{bmatrix} +cor \\ +nasal \end{bmatrix} \text{ —}$$

256.7 Only the non-dental sonorants /m w y/ are preceded by /l/, with the cluster /ly/ occurring only once.

$$[+son] \rightarrow [-cor] / [+lat] \text{ —}$$

### 257 Final Cluster Conditions

The following conditions govern final clusters, which are quite limited.

257.1 Final clusters end only in /s/ and /š/. The only final clusters across morpheme boundaries end in /š/ too.

$$[+cons] \rightarrow \begin{bmatrix} +cont \\ +cor \end{bmatrix} / [+cons] \text{ — +}$$

257.2 In final clusters, /p/ and /x/ precede only /š/. An exception is čomš 'cradle,' but even this final cluster closely approximates the regular clusters /pš/ and /xš/: a non-coronal segment followed by /š/.

$$[+cons] \rightarrow \begin{bmatrix} -son \\ \alpha cont \\ -cor \\ \alpha back \end{bmatrix} / \text{ — } \begin{bmatrix} +cons \\ -ant \end{bmatrix} +$$

257.3 Only /k/ and /q/ precede both /s/ and /š/ in final clusters.

$$[+cons] \rightarrow \begin{bmatrix} -cont \\ +back \end{bmatrix} / \text{ — } [+cons] +$$

257.4 There are no final triple clusters.

$$\sim [+cons] [+cons] [+cons] +$$



## 258 Triple Cluster Conditions

The following conditions govern triple consonant clusters, which are attested almost exclusively in medial position. Specific details of triple clusters are often handled by the medial cluster conditions given above (256): triple clusters, with their three consonants taken two at a time, contain only those pairs of consonants permitted by the medial cluster conditions.

Practically all of the triple consonant clusters attested involve one of the unanalyzable sibilant formatives ps-, c-/č-, ks- (q.v., 612.3) or else aqs-/axs- (q.v., 612.2), in all of which the sibilant may be either /s/ or /š/. These formatives are occasionally segmentable, but usually they must be regarded as fused with the stem with which they occur. Three triple clusters occur initially: /psn, psk, pšt/.

258.1 A non-coronal consonant initial in a triple cluster is a non-sonorant, i.e. /p k q x/.

[-cor] → [-son] / — [+cons] [+cons]

258.2 A medial consonant following a non-coronal consonant in a triple cluster is either /s/ or /š/.

[+cons] →  $\left[ \begin{array}{l} +\text{cont} \\ +\text{cor} \\ +\text{strid} \end{array} \right]$  / [-cor] — [+cons]

Triple clusters accounted for by the preceding conditions:

pst		qsp qst qsk qsm	qsw qsy
pšt pšk pšn pšl	kšn	xsp qšt	xsm qšl
		qšp xšt	qšm xšl

258.3 A non-sonorant coronal segment initial in a triple cluster is /č/.

$$\begin{bmatrix} -\text{son} \\ +\text{cor} \end{bmatrix} \rightarrow \begin{bmatrix} -\text{cont} \\ -\text{ant} \end{bmatrix} / \text{---} \begin{bmatrix} +\text{cons} \\ +\text{cons} \end{bmatrix}$$

258.4 The two consonants following /č/ in a triple cluster are a back stop /k/ or /q/ plus /w/.

$$\begin{bmatrix} +\text{cons} \\ +\text{cons} \end{bmatrix} \rightarrow \begin{bmatrix} -\text{cont} \\ +\text{back} \end{bmatrix} \begin{bmatrix} +\text{son} \\ +\text{high} \\ +\text{back} \end{bmatrix} / \begin{bmatrix} -\text{son} \\ +\text{cor} \end{bmatrix} \text{---} \text{---}$$

The preceding two conditions account for /čkw/ and /čqw/.

258.5 A sonorant initial in a triple cluster is /l/.

$$\begin{bmatrix} +\text{son} \end{bmatrix} \rightarrow \begin{bmatrix} +\text{lat} \end{bmatrix} / \text{---} \begin{bmatrix} +\text{cons} \\ +\text{cons} \end{bmatrix}$$

258.6 The two consonants following /l/ in a triple cluster are a non-coronal stop plus some continuant.

$$\begin{bmatrix} +\text{cons} \\ +\text{cons} \end{bmatrix} \rightarrow \begin{bmatrix} -\text{cont} \\ -\text{cor} \end{bmatrix} \begin{bmatrix} +\text{cont} \end{bmatrix} / \begin{bmatrix} +\text{son} \end{bmatrix} \text{---} \text{---}$$

The preceding two conditions account for /lkl, lpl, lkš, lps/.

## 259 Affix Structure Conditions

The large set of affixes not only follows the general conditions outlined above, but is also subject to some conditions unique to affixes. Three of the conditions are specific to prefixes, two to suffixes.

259.01 High vowels in affixes are the cardinal vowels /i/ and /u/; central /ɛ/ does not occur in underlying forms.

$$\begin{bmatrix} +\text{voc} \\ +\text{high} \end{bmatrix} \rightarrow \begin{bmatrix} \alpha \text{back} \\ \alpha \text{round} \end{bmatrix}$$

259.02 Low vowels in the underlying forms of affixes are the central vowel /a/. A few exceptions are no- 'future,' -ê 'yes-or-no question,' and -es 'again.' These forms might be analyzed as particles in origin, though now fused with the verb.

$$\begin{bmatrix} +\text{voc} \\ -\text{high} \end{bmatrix} \rightarrow \begin{bmatrix} +\text{back} \\ -\text{round} \end{bmatrix}$$

259.03 No consonant cluster in an affix begins with a sonorant.

$$[+\text{cons}] \rightarrow [-\text{son}] / \text{---} [+\text{cons}]$$

259.04 Any obstruent as second member of a consonant cluster in an affix is either /t/ or /s š/. The single affix with a triple cluster, uqšti- 'of throwing,' obeys this condition. One exception is aq̄pala- 'of grinding, pressure,' but this prefix may be subject to analysis as aq̄-pala- (cf. pana- 'of impact' and the occasional alternation of /l/ and /n/ (q.v., 275)).

$$[-\text{son}] \rightarrow \begin{bmatrix} \alpha\text{cont} \\ +\text{cor} \\ \alpha\text{strid} \end{bmatrix} / [+\text{cons}] \text{---}$$

259.05 No affix begins with a consonant cluster, with the exception of the nominalizing suffix -štaš. This condition as formulated does not prohibit the formatives ps-/pš-, ks-/kš-, and -kš.

$$\sim + [+\text{cons}] [+\text{cons}] [+\text{voc}]$$

259.06 The only aspirated segment in affixes is /h/; there are no aspirated obstruents.

$$[+asp] \rightarrow \begin{bmatrix} -ant \\ -cor \\ -back \end{bmatrix}$$

The following two conditions refer only to suffixes.

259.07 The only glottal segment initial in a suffix is glottal stop, never a glottalized consonant.

$$+ [+glott] \rightarrow \begin{bmatrix} -ant \\ -cor \\ -back \end{bmatrix}$$

259.08 The only glottal segments in final position in suffixes are glottal stop and glottalized sonorants, not glottalized obstruents.

$$[+glott] + \rightarrow \begin{bmatrix} +son \\ -ant \\ -cor \\ -back \end{bmatrix}$$

The following three conditions refer only to prefixes.

259.09 Prefixes do not end with either glottal stop or with a final glottalized consonant.

$$[+cons] + \rightarrow [-glott]$$

259.10 Prefixes do not contain glottalized sonorants.

$$[+son] \rightarrow [-glott]$$

259.11 A final sonorant in a prefix is /l/, although two exceptions are am- 'indefinite subject' and iy- 'plural.'

$$[+son] + \rightarrow [+lat]$$

## 260 Reduplicated Stems

Reduplicated stems abound in Chumash, following several patterns of reduplication. Such reduplicated stems might be called lexically reduplicated, since reduplication is inherent in the stem and no simplex form is attested. Syntactic reduplication of simplex stems is a common inflectional process, most productive with CVC reduplication (q.v., 562 and 682.4).

Reduplicated stems occur in lexical items of all sorts, but are more common in certain semantic domains, including some kinship terms and a great many plant and animal names, especially the latter. Other reduplicated stems have an onomatopœic force, particularly those denoting sounds (e.g. *asxílilín* 'to resound') and textures (e.g. *šokšok* 'to be wrinkled').

There are six modes of lexical reduplication: CVC, initial CV-, final -VC, medial, wuluwul, and bisyllabic reduplication. With all of these, the reduplicated sequence may be prefixed with one of several unanalyzable formatives, such as *aq-/ax-* with verbs (q.v., 612), or *ʔaya-* with nouns (q.v., 512). These formatives are not readily segmentable, since the stem itself is very seldom attested alone in such cases.

## 261 CVC Reduplication

CVC Reduplication is by far the most common pattern of reduplication, both as the simple reduplication of a CVC sequence

lewlew 'mythological creature'

yokyok 'bird sp.'

mixmux 'to crumble'

yityit 'to deceive'

and with prefixed formatives.

ʔaya-mušmuš 'caterpillar'

aq-lamlam 'to chew'

Occasionally, probably with uniquely occurring formatives, such forms look very much like final reduplications.

ʔaqwipwip 'black willow'

čaniyuxyux 'small skunk sp.'

-toponpon 'kidney'

As noted above in the discussion of morpheme structure conditions (250), consonant clusters may occur in CVC reduplicated sequences which are not permitted in simplex stems, such as a nasal before a non-dental in -toponpon, or the sonorant clusters in lewlew and aqlamlam.

## 262 Initial CV- Reduplication

Initial CV- reduplication is based on the pattern  $C_1V-C_1VC_2$ , in which the final consonant is often glottal stop

-teteʔ 'mother'

nonoʔ 'very, very much'

ʔani-k<sup>h</sup>ok<sup>h</sup>oʔ 'to hop on one leg'

as well as a full consonant.

-popoč 'paternal grandfather'

momoy 'Jimson weed, toloache'  
 ax-<sup>1</sup>ca<sup>2</sup>ax '[weather] to be cold'

The final consonant is missing in a few forms.

qloqlo 'tadpole'  
 ʔaya-mama 'ant sp.' (cf. ʔaya-mušmuš 'caterpillar')  
 naq-susu 'to squat' (cf. naq- 'with the legs, body')

### 263 Final -VC Reduplication

Final -VC reduplication is based on the pattern

$C_1VC_2-VC_2$ ,

-ʔosos 'heel'  
 štexex 'river'  
 makak 'to stutter'

sometimes with prefixed formatives.

-ʔax-pilil 'nerve, sinew; root; bowstring'  
 aqs-muyuy 'to make a kissing sound'

### 264 Medial Reduplication

This pattern shows the reduplication of a medial consonant, nearly always a sonorant,

walalaq 'lichen'  
 hamama 'so much! so many! (interjection)'  
 p<sup>h</sup>ototon 'to fall apart'

sometimes with prefixed formatives.

ʔaya-pililil 'cowrie shell'  
 as-xilililn 'to resound'  
 /aqs-pololon/ oqspololon 'to slap-yell'

265 wuluwul Reduplication

This pattern, named after a typical noun, is based on an underlying CVC sequence. As with medial reduplication, one of the consonants present is likely to be a sonorant.

wuluwul 'lobster'  
 yowoyow 'mythological creature'  
 tiqitiq 'blackberry'  
 qweleqweɫ 'cottonwood tree'  
 mayamay 'to be multicolored'

An example with a prefixed formative is

ʔaya-tulutul 'butterfly' (cf. ʔaya-mušmuš, ʔaya-mama)

## 266 Bisyllabic Reduplication

Bisyllabic reduplication is a pattern limited to verbs, based on an underlying CVCVC simplex in which the final consonant is dropped in the initial sequence.

yepeyepen '[earth] to shake'  
 wuluwulun 'to shake, wiggle' (cf. wuluwul 'lobster')  
 yuluyuluk 'to be angry'  
 k<sup>h</sup>awak<sup>h</sup>awak 'to be light (in weight)'

## 267 Phonology of Reduplicated Stems

The treatment of consonant clusters and of final versus initial consonants in reduplicated sequences deserves some comment. The few examples of consonant clusters in reduplicated sequences all show the clusters reduplicated intact.

qloqlo 'tadpole'



qweleqweł 'cottonwood tree'

snıyısniy 'goosebarnacle'

Initial consonants in reduplicated sequences are reduplicated with glottalization and aspiration intact.

-kúkuy 'cap of acorn'

ax-cácax '[weather] to be cold'

ʔani-k<sup>h</sup>ok<sup>h</sup>oʔ 'to hop on one leg'

k<sup>h</sup>awak<sup>h</sup>awak 'to be light (in weight)'

Final consonants are usually glottalized only in the final sequence.

štexex 'river'

mayamay 'to be multicolored'

It is quite rare for both occurrences of a final consonant to be glottalized.

makak 'to stutter'

tiqitiq 'blackberry'

In CVC reduplications, such double glottalization (e.g. \*yok<sup>h</sup>yok<sup>h</sup> for yokyok 'bird sp.') is impossible because preconsonantal glottalization is blocked. There are no examples of a glottalized medially reduplicated consonant.

## 270 Alternations not Governed by Rule

There are a number of common morphophonemic alternations which are not rule governed. Shared by all of the Chumashan languages, these alternations are deeply embedded aspects of Chumash morphology. In Ineseño, they are largely confined to verbal prefixes, but occur in other morphological environments as well. The choice of

one alternant form over another seems to be determined idiosyncratically for each lexical item. This is particularly apparent when examining cognate sets, although the various languages often agree on the exact details of alternating forms for a given lexical item. In Ventureño, the alternations of /q ~ x/, /l ~ n/, /s ~ š/, as well as others, are used expressively in diminutive sound symbolism (as noted by Harrington in 'Sibilants in Ventureño [Chumash],' 1916), but there is no evidence of such a process in Ineseño.

These alternations are best discussed before the main body of phonological rules (286). Whichever alternant form occurs serves as input to the phonological rules, and is subject to their subsequent operation.

#### 271 pil- ~ pili- Alternation

Prefixes with a high vowel and /l/ have alternant forms in which the same high vowel is repeated after the /l/, such as pil- ~ pili- 'in the air,' kil- ~ kili- 'of rapid action,' or aqul- ~ aqulu- 'of, with a long thin object.' These prefixes are all in position classes close to the stem; two remoter prefixes sili- 'desiderative' and qili- 'habitual' do not show this alternation. Exceptions among the closer prefixes are yul 'of heat, fire,' and il- ~ ulu- 'of water' (cf. 273 on ablaut), of which the expected forms \*ili- and \*ul- do not occur.

There seems to be no phonological conditioning of one alternant versus the other, such as by length of the

stem or the type of initial consonant. The most conclusive evidence against any purely phonological conditioning is the occasional occurrence of both alternant forms with the same stem, nearly always with some semantic differentiation. Some examples with the highly productive prefix pil- ~ pili- 'in the air' are based on qot'in 'to come down,'

/pil-qot'in/ 'to fall'

/pili-qot'in/ 'to drip down'

wayan 'to hang,'

/pil-wayan/ piwayan 'to hop, jump; to move'

/pili-wayan/ 'to drip down'

and tap 'to enter.'

/pil-tap/ pitap 'to fall in, jump in'

/pili-tap/ '[rain] to come in through smokehole'

By the operation of the phonological rules, /l/ in shorter forms (i.e. pil-) may be deleted before a following consonant by rule 286.22,

/s-pil-tap/ spitap 'he falls in, jumps in'

/s-aqul-nowon/ saqunowon 'it is piled up'

or the longer form with the final vowel (i.e. pili-) may show l-epenthesis before a following vowel by rule 286.09,

/k-ulu-elew/ kululelew 'I wade'

/s-xili-al-pul-pul/ sxililalpulpul 'he looks around  
inside'

although more commonly the shorter forms occur before initial vowels.

/s-kil-elew/ 'he falls down'

/s-xil-apit/ 'he looks upward'

## 272 Alternation of /q/ and /x/

The uvular segments /q/ and /x/ are frequently in alternation, most commonly in verbal prefixes, but in stems as well.

The /q ~ x/ alternation in stems is purely a sporadic feature of certain lexical items, usually between stem and derivative forms.

lox 'N: a hole; V: to be perforated, have a hole'

/palu-lox/ 'to bore a hole through'

iqmay 'to cover up'

/ixmay-ʔ/ -ʔixmay' 'eyelid'

-tiq 'eye, face'

/uxma-tiq-š/ 'to wash the face'

ʔaqulapšan 'to be green'

ʔaxulapšan 'herb, vegetable; medicine'

itaq 'to hear'

itax- 'of hearing, report (as verbal prefix)'

These alternations, although apparently sporadic in terms of which lexical items are affected, are quite consistently recorded. The forms with /q/ usually seem to have some priority over those with /x/, as in itaq ~ itax-. Cognate forms in the various Chumashan languages often show an alternation of /q/ and /x/.

Ineseño	Barbareño	Purisimeño	
-ʔax	-ʔax	-ʔaq	'bow'
-teleq	-teleq	-telex	'tail'
-siq	-six		'to do tightly'

The /q ~ x/ alternation in prefixes is of great generality; of the numerous prefixes in which these segments occur, over two dozen show alternant forms with both /q/ and /x/, while only a few fail to show an alternation:

qili- 'habitual'

itax- 'of hearing, report' (cf. itaq 'to hear')

uxma- 'of washing, rinsing'

xal- 'through the air'

qupal- 'unanalyzable'

The prefix qili- 'habitual' has two partial homonyms qili- ~ xili- in which the alternation occurs: 1) 'of water,' 2) 'of vision, seeing.' Similarly, xal- 'in the air' contrasts with qal- ~ xal- 'of typing, binding.'

In the alternating prefixes, both alternant forms of a prefix may occur before the same stem, with semantic differentiation (just as seen in /pil-qot'in/ ~ /pili-qot'in/ above (271)). A productive example is maq- ~ max- 'of a line, rope, clothlike object' with nan' 'to go,'

/maq-nan'/ '[line, pattern] to extend, go along'

/max-nan'/ 'to stretch [intran.]'

and with -apay 'to be up, above.'

/maq-su-ni-apay/ maqsunapay 'to string a bow'

/max-su-ni-apay/ maxsunapay 'to pull up a line, rope'

In a few forms, /q/ and /x/ are used interchangeably.

/aqi-kuy/ ~ /axi-kuy/ 'to grab casually, in passing'

/maq-su-al-al-apay/ maqsalalapay ~ maxsalalapay 'to pull up a line, rope'

The only apparent phonological conditioning in the occurrence of /q/ versus /x/ is before the segments /k q x h/ in stems, although these segments need not be immediately adjacent. Prefixes tend to show /q/ before stems with /k/ and /h/,

/qil-kum/ 'to soak through and through'

/qil-hik'in/ qihik'in 'to bathe in the morning'

and /x/ before stems with /q/ and /x/.

/xil-qen/ 'to dissolve, wash away'

/xil-yoxon/ xiyoxon '[water] to be muddied, roiled'

But immediately before /k/, /x/ appears in most cases.

/max-kitwon/ 'to pull a rope out'

/ax-kla?/ 'to crack acorns with the teeth'

### 273 Ablaut

There are a few marginal cases suggestive of vowel ablaut in stems and prefixes. Ablaut in stems is usually between the low vowels /e/ and /o/, while in prefixes it is between the high vowels /i/ and /u/. Such examples are far from productive, but do not seem entirely accidental. They may represent the synchronic relics of a phonological process once more widespread.

Low vowel ablaut between /e/ and /o/ in stems relates otherwise identical stems with semantic similarities.

/ps-nekey/ 'to be bent back'

/wala-ps-nokoy/ wolopsnokoy 'to turn a sommersault'

wekey 'to lie scattered, spread about'

wokoy 'to lie, be prone'

/ax-lelen/ exlelen 'to cry, shout'

/ax-lolon/ oxlolon '(animal) to grunt, snort'

-keken 'to spread'

/nax-kokon/ noxkokon 'to stoop over'

wel- 'to shake'

wol- 'to swing, twist'

Examples with alternations other than /e ~ o/ include /a/ in alternation with another low vowel,

-tatan 'to beat, pound'

/i-teten/ 'to pound'

ph<sup>h</sup>atatan ~ ph<sup>h</sup>ototon 'to fall apart'

wayap 'to trade, exchange'

/ax-weyep/ exweyep 'to change'

and /o/ in alternation with /i/.

-noxš 'nose'

ma<sup>h</sup>nixš 'to take snuff'

xu<sup>h</sup>nixš 'to sniffle, snuff'

-lomol 'to be piled up, on top of'

milimol 'mountain (range)' (cf. mi- 'locative' 552)

High vowel alternation between /i/ and /u/ occur in otherwise identical prefixes, although in each case one of the vowels is far more common than the other. The more common member of the pair is given first:

su- ~ si- 'causative'

/su-pili-nan/ 'to drop [tran.]'

/si-naxil/ 'to erect [tran.]'

qili- ~ qulu- 'of vision, seeing'

/qulu-ni-koyi/ ~ /xili-ni-koyi/ 'to look back'

aqulu- ~ aqili- 'of, with a long thin object'

/aqulu-kuy/ 'to touch with the end of a stick'

/axili-wil-pi/ 'to tie horizontals on a house frame'

maqili- ~ maqulu- 'of, with a rope, line'

/maxili-nan/ ~ /maxulu-nan/ '[snake] to crawl'

il- ~ ulu- 'of water'

/il-kum/ ~ /ulu-kum/ '[water] to reach (up to a point)'

/il-tap/ 'to leak, take on water'

/ulu-mes/ 'to wade across'

This pair il- ~ ulu- is unusual in that the expected fuller alternations of il- ~ \*ili- and \*ul- ~ ulu- are not found, although il- ~ ili- occurs in Barbareno. The preconsonantal /l/ of il- is never deleted, suggesting that possibly its retention is the result of a sporadic vowel syncope from the longer form \*ili-.

Alternant forms with /u/ are subject to the back vowel harmony rule (286.11).

/s-qul-tiwič/ šqitiwič 'he watches, is an onlooker'

Several prefixes display both the pil- ~ pili- and /q ~ x/ alternations, and three of them show /i ~ u/ ablaut as well: qili- ~ qulu-, aqulu- ~ aqili-, and maqili- ~ maqulu-. Thus, a single prefix here can have eight unpredictable alternative forms

qil-	qili-	qul-	qulu-	
xil-	xili-	xul-	xulu-	'of vision, seeing'

and even more by the regular operation of such phonological rules as back vowel harmony (286.11) and preconsonantal l-deletion (286.22), although not all of these



are in fact attested.

qi- qu- qɨ- qɨl- qɨli-  
xi- xu- xɨ- xɨl- xɨli-

274 Alternation of /s/ and /š/, /c/ and /č/

The dental and palatal sibilants /s/ and /š/ and the affricates /c/ and /č/ are in alternation in a few prefixes and formatives, especially in the unanalyzable sibilant formatives ps-/pš-, c-/č-, and ks-/kš- (q.v., 612.3) which sometimes occur between prefix and stem.

Examples are, with ps-/pš-,

/wala-ps-nokoy/ wolopsnokoy 'to turn a sommersault'

/wala-pš-kal/ 'to turn one's ankle'

with c-/č-,

/aqul-c-ʔelew/ aqučelew 'to stick out the tongue'

/uti-č-ʔapaṃ/ utičapaṃ 'to fall on one's knee(s)'

and with ks-/kš-.

/pana-ks-patin/ 'to fall with a thud'

/qul-kš-nini/ 'to snarl, show the teeth'

The formative aqs-/aqš- (q.v., 612.2) shows a similar unpatterned alternation.

/su-uti-aqs-nowon/ sutoqsnowon 'to smoke (a pipe)'

/axš-vey/ exšvey 'to melt, dissolve'

Many other lexical items are recorded alternatively with /s/ or /š/, especially in final and preconsonantal positions in the word, as in

ʔoqhoš ~ ʔoqhoš 'sea otter'

-ʔickow ~ -ʔičkow 'buttocks'

skumu ~ škumu 'four'

step ~ štep 'flea'

Such examples give more the impression of free variation than of morphophonemic alternation. The alternation in prefixes and formatives, however, is quite consistently recorded.

### 275 Alternation of /l/ and /n/

The alternation of /l/ and /n/ is a rather complex issue in Ineseno. A few formatives have alternant forms with /l/ and /n/, such as

ʔala- ~ ʔana-

/ʔala-štɪwɪkš/ 'dark blue soapstone'

/ʔana-šɪyɪ/ 'broken fragment of stone pot'

and ʔanaq- ~ ʔalaq-

/ʔanaq-puw/ 'wild cat'

/ʔalax-woškoloy/ ʔoloxwoškoloy 'duck sp'

It may be that such an alternation relates the prefixes pana- 'of noise, impact,' as in

/pana-ks-patɪn/ 'to fall with a thud'

and aqpala- 'of crushing motion,' perhaps to be analyzed as aq-pala-, in

/aqpala-čɪwɪkɪn/ 'to be oppressed (in a nightmare)'

There are a few sporadic examples of an interchange of /l/ and /n/ in other forms, where one form is basic.

[ʔixpališ] for ʔixpaniš 'acorn'

[palapak] for /pana-pak/ 'to pop, burst'

[minimol] for milimol 'mountain range'

The only evidence of what might be sound symbolism linked with this alternation is the suggestive pair

kalaš 'to breathe'

kanaš 'to pant'

but no other forms seem to be related in this fashion.

An apparently unprincipled alternation of /l/ and /n/ can be seen in many cognate sets.

Ineseño	Barbareño	Ventureño	
-in	-in	-il	'thee: object'
nañ	nañ	nał	'to go'
qolol	-	qonon	'mouse'
ʔalap-	ʔanap-	ʔatap- < *ʔalap-	'inhabitant of...'
ʔelemes	ʔenemes	-	'across'

In Ineseño there are also sporadic traces of a rule-governed shift of /l/ to /n/, parallel to the regular Barbareño rule that /l/ before dental and palatal obstruents becomes /n/.

/s-qul-taw/ squntaw 'lightning flashes'

/s-qil-čičʔ/ sqincičʔ 'he drowns'

/s-qil-tap/ sqintap 'he gets into the water'

A few rare examples before non-coronal consonants:

/c-ni-ulkuw/ čnunkuw 'a night-crawling insect'

/s-aqul-kot/ saqunkot 'it is short, low'

/s-aqul-peqen/ saqunpeqen 'place name: where a canyon ends'

This rule must once have been more active in Ineseño than these few relic forms indicate (although the shift is recorded quite consistently in these forms) but its

effect has largely been erased by another rule, no longer synchronically active, which deletes most preconsonantal nasals. Here are some Barbareño ~ Ineseño cognates illustrating this rule.

	Barbareño	Ineseño	
*-antik	-antik	-atɪk	'soul'
*anšin	anšin	ašin	'to eat (a meal)'
*pil-tap	pintap	pitap	'to fall in'
*yul-čí	yincí	yícɪ	'to be hot'

The only synchronic trace of the old n-deletion rule is in rule 286.33, by which a sequence of /n + š/ becomes /ç<sup>h</sup> - č/, best treated as a single operation.

/s-uš-qen-š/ šušqeč 'it is all used up, all gone'

/tapšun-šaš/ tapšuč<sup>h</sup>aš 'bog, marsh'

The old n-deletion rule also left a few exceptions,

wintiy 'ash tree'

unč<sup>h</sup>uš 'to feel a twinge of pain'

some of which may reflect the agentive prefix ?al- in forms which are no longer segmentable.

?ančačač 'minnow'

?antap 'member of a secret society'

## 276 Alternation of Final /n/ and Glottal Stop

Glottal stop is occasionally in an unpredictable alternation with final /n/. Often, both alternants of a particular form occur; those with final /n/ are more common.

axnisin ~ axnisi? 'to be ashamed'

ismeyepun - ismeyepu? 'to tease, flirt with'

/aq-sisin/ - /aq-sisi?/ 'to be mad, angry'

In a compound based on -sin 'to do ably, cleverly,' only the alternant with final glottal stop occurs.

/ʔal-qili-si?/ 'to be nosy'

A final glottalized /n̥/ may occasionally lose its nasality, remaining only as a final glottal stop. This particular alternation is specific to certain compounds and derivatives of a given stem, but not to others.

nañ 'to go' (free form)

-na? (bound form in some compounds, e.g. nu-na? 'to take,' akti-na? 'to come')

we? 'to sleep'

/su-wen̥/ 'to put to sleep'

/ali-š-wen̥/ 'to sleep with'

-qo? 'dog, pet'

/qo?-Vč/ qoč 'to have a dog, pet'

/qon̥-Vš/ qonuš 'dog, pet (non-possessed form)'

ʔepsu? 'basket-hat'

/ʔepsu?-iwaš/ ʔepšu?iwaš 'a worn-out basket-hat'

/ʔepsun̥-Vč/ ʔepšunič 'to have, wear a basket-hat'

## 278 Infixation of /h/

A very few forms of the shape CV(C) seem to show an infixated /h/, resulting in CVhV(C).

ǰho 'to be good'

ǰho<sup>h</sup>o 'good; to be good'

-ʔiɣ- in /ʔal-ʔiɣ-Vn/ ʔaliɣin 'to be large, old'

ʔihɣi 'to be long, tall'

-muw- in /s-muw-Vč/ šmuwič 'coast-dweller'

muhuw 'beach, south'

-k<sup>h</sup>u in hik<sup>h</sup>u 'who knows? (particle)'

k<sup>h</sup>uhu - hik<sup>h</sup>uhu 'who knows?'

čičiʔ 'child'

čičihiʔ 'children'

Only in the case of čičiʔ - čičihiʔ is there any clear relationship between the longer and shorter forms, but there is no other example of such a plural formation.

The infixation of /h/ seems to be a more common process in Ventureño, as evidenced by such cognate pairs as

Ineseño Ventureño

net net ~ nehet 'to do'

utišič utišihič 'to be hard, tough'

## 280 Phonological Rules: Introduction

This section presents the rule-governed morphophonemic alternations of Ineseño. By far the greatest morphophonemic complexity is in the verb: nearly every rule applies primarily or even exclusively to verbs, while there are no rules which do not apply to verbs (although a few have subsections which refer only to nouns). The phonological rules are grouped roughly into blocks dealing with similar segments and processes; these are the rules which govern vowel clusters, vowel quality, vowel epenthesis, sonorants, glottalization,

consonantal assimilation and aspiration, expressive processes, neutralization, and external sandhi. Alternations not governed by rule have been treated separately (270); the given alternant form of such alternating sets in a particular lexical item or compound serves as input to the phonological rules.

It is not claimed that the phonological rules presented below characterize Ineseno morphophonemics uniquely or exhaustively. A few minor alternations, unpredictable and of unspecifiable domain, have been omitted. More data, if available, might clarify these obscurer reaches of the morphophonemics.

#### 281 Rule Ordering

The ordering of the phonological rules in the following section is determined largely on the principles 1) that a rule should apply as late as possible (as discussed by W. Chafe in 'The Ordering of Phonological Rules,' 1968), 2) that similar processes should be ordered in a block whenever possible, and 3) that a graphic representation of the rule ordering (see 281.1 below) should be as clear and direct as possible. Many other alternative orderings are possible; the present ordering emerges as one resolution of the data with the principles above.

As a glance at the following chart (281.1) will show, the rules are interrelated in a rather complex way. Certain rules play especially crucial roles in the nexus

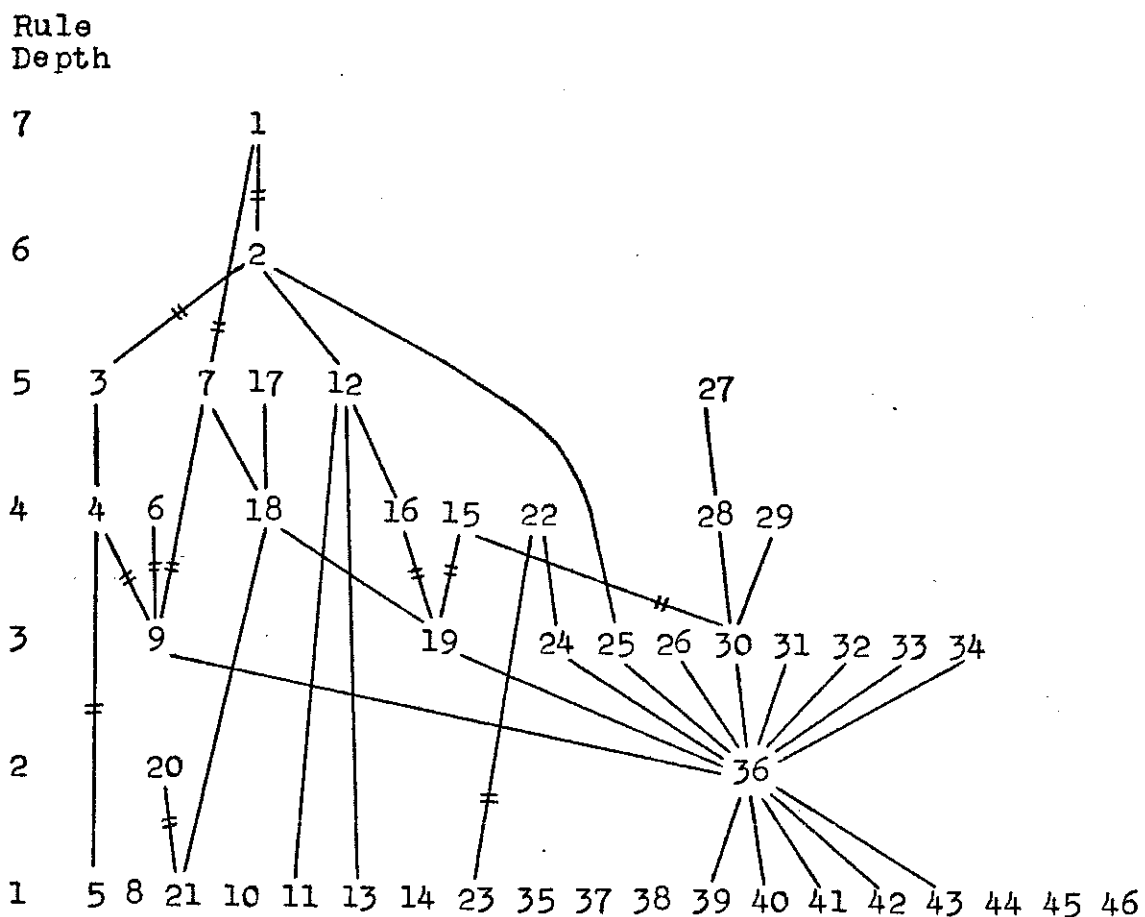
of ordered relationships: the CVC reduplication rule (286.36) above all, but also the l-epenthesis rule (286.09), the preconsonantal y-deletion rule (286.19), and the geminate obstruent aspiration rule (286.30).

In the discussion of the individual rules, ordering arguments are usually developed only for rules which cover similar phonological processes, such as the vowel cluster rules (286.01 - 286.09). Given the large inventory of rules, a thorough and explicit substantiation of the rule orderings posited below is not practical. It should be noted that with many of the rules divided into subrules, it is often the case that only one subsection of a particular rule is ordered with respect to some other rule.

A remarkable feature of the rules posited for Ineseno is the frequency of what Kiparsky (in 'Universal Grammar and Linguistic Change,' 1968) calls 'bleeding order,' in which the prior application of one rule shrinks the possible domain of application of a following rule, depriving it of a potential input. Bleeding order is especially common in the block of vowel cluster rules (286.01 - 286.09). For example, rule 286.04 epenthesizes a y-glide between /i/ and a following vowel in post-stem position, while rule 286.09 epenthesizes /l/ between adjacent vowels. A vowel sequence into which a y-glide is epenthesized by rule 286.04 is no longer subject to l-epenthesis by rule 286.09. Such cases of bleeding order are marked with a double bar (i.e. †) on the chart.



## 281.1 Graphic Display of Rule Orderings



## 281.2 Rule Blocks

1-9 vowel cluster rules

10-14 vowel quality rules

15-16, 23 vowel epenthesis rules

19-22 sonorant rules

17-18, 24-26 glottalization rules

27-34, 38 consonantal assimilation and aspiration rules

35-37 expressive processes

39-43 neutralization rules

44-46 external sandhi rules

## 281.3 Rule Inventory (286.01 - 286.47)

- .01 h-epenthesis
- .02 derivative suffix vowel deletion
- .03 prevocalic glottal stop deletion
- .04 y-epenthesis
- .05 prevocalic i/u-deletion
- .06 prevocalic a-deletion
- .07 remote suffix i-deletion
- .08 i-deletion in iš-, iy-
- .09 l-epenthesis
- .10 low vowel harmony
- .11 back vowel harmony
- .12 suffix vowel specification
- .13 central vowel suffix dissimilation
- .14 i-lowering in -ʔiʔ
- .15 i-epenthesis at personal boundaries
- .16 suffix sonorant cluster vowel epenthesis
- .17 prevocalic glottal stop prothesis
- .18 glottalization of C + ʔ
- .19 preconsonantal y-deletion
- .20 h-deletion in hik
- .21 remote prefix l-deletion
- .22 close prefix l-deletion
- .23 prefix sonorant cluster vowel epenthesis
- .24 sporadic glottalization
- .25 -VC derivative suffix glottalization
- .26 glottal shift

- .27 pre dental palatalization of s/c
- .28 sibilant harmony
- .29 back stop assimilation
- .30 geminate obstruent aspiration
- .31 aspiration of C + h
- .32 sporadic aspiration
- .33 n + š -> č/č<sup>h</sup> affrication
- .34 nasal assimilation
- .35 expressive reduplication
- .36 CVC reduplication
- .37 glottal infix
- .38 c + s -> c<sup>h</sup> affricate-spirant aspiration
- .39 preconsonantal deglottalization of C'/ʔ
- .40 preconsonantal deaspiration of c<sup>h</sup>
- .41 presuffix obstruent deglottalization
- .42 postconsonantal sonorant deglottalization
- .43 final cluster deglottalization
- .44 syncope of ʔini- -> -ʔni-
- .45 initial h-deletion
- .46 deletion of final V(ʔ)
- .47 boundary erasure

## 282 Morpheme Boundaries

Affixes in position classes close to the stem often behave differently than those in position classes further from the stem. Accordingly, the phonological rules refer to two distinct morpheme boundaries, in addition to the word boundary in the case of external sandhi and the

subphonemic detail rules (230). The two boundaries are symbolized as + and =; the boundary marked with = characterizes affixes close to the stem, while the + boundary marks those further away. These morpheme boundaries are hereafter referred to as 'close' = boundaries and 'remote' + boundaries, since by reference to actual sequential classes these terms seem less ambiguous than, say, 'close' versus 'open' or 'strong' versus 'weak.'

The close = boundary is weaker than the remote + boundary. Certain phonological processes applying both within morpheme boundaries and across close = boundaries are blocked across remote + boundaries, such as low vowel harmony by rule 286.10.

/ma+k+al+aqta=qen/ makaleqteqen 'what I pass by'  
Some rules apply only across remote + boundaries, such as preconsonantal l-deletion by rule 286.21.

/ʔal+qil=k̄il̄l̄l̄/ ʔaqilk̄il̄l̄l̄ 'something clear'  
Relatively few rules apply across both boundaries, such as the sibilant harmony rule 286.28.

/s+iš+tiš+i+yep=us/ sistisiyepus 'they (dual) show him'  
There are some parallels between rules applying across remote + boundaries and those applying across word boundaries, such as the deletion of one vowel before another by internal sandhi rule 286.05 and external sandhi rule 286.46.

The formalism of morpheme boundaries as presented in this section on phonological rules is kept as simple as possible (in other sections, both + and = boundaries

are indicated simply with a dash, i.e. -). Boundaries are indicated only after prefixes, and before suffixes. A string such as

/s+taya=nowon+waš/ štoyonowonowaš 'it stood upright' is to be interpreted as consisting of prefixes s+ and taya=, the stem nowon, and a suffix +waš. In the few cases where there is no compelling evidence to assign an affix one boundary or the other, the remote + boundary is assumed. Stem boundaries are not indicated at all. It should be mentioned that the notions of bound stems (e.g. -apay 'to be above,' cf. 615) and uniquely occurring stems (e.g. -memen 'to touch,' cf. 616), important in the morphology, have no phonological correlates: the same rules apply whether the stem is free, bound, or uniquely occurring.

Each rule is specified for which boundary it applies across; those few applying across both boundaries have the specification  $\{+\}$ . The morphological correlates of these morpheme boundaries are straightforward. All formatives (cf. 512 and 612) have the close = boundary. In nouns, all other affixes take the remote + boundary. In the verb, all suffixes closer to the stem than the past marker -waš have the close = boundary, as do prefixes closer to the stem than person/number markers and a few dozen prefixes which immediately follow these. All derivational suffixes are characterized by the close = boundary.

## 283 Rule Specificity

The specificity of the phonological rules varies widely. The more general rules apply across all morpheme boundaries to segments specified in purely phonological environments, although most of them apply primarily or even exclusively to the verb, which has a far more elaborate morphology than the noun. More specific rules may be restricted to, say, verbs but not nouns, or suffixes but not prefixes, or to one morpheme boundary but not another, and often to some combination of these restrictions. A rule which applies only to prefixes is marked as prestem, while rules restricted to suffixes are marked poststem.

A few of the rules make explicit reference to certain morphemes, especially the -VC derivative suffixes. Some of the more apparently general rules stated in purely phonological terms may actually apply to only a few morphemes, especially among the relatively small inventory of suffixes. The directionality of these rules is prevailingly outward from stems into prefixes and suffixes, as in the vowel quality rules (286.10 - 286.14). However, a few of the rules are retrogressive, such as the sibilant harmony rule (286.28).

## 284 Optional versus Obligatory Rules

A rule is obligatory unless specified as optional. The term 'optional' is used in two distinct senses of 'phonetically optional' versus 'lexically optional,'

although the boundary between the two senses is not a firm one. A rule applying in a phonetically optional sense operates on a given lexical item in some but not all of its occurrences; it produces two freely variant forms, as with rule 286.22 deleting /l/ before a palatal consonant.

/qil=čomín/ qilčomín ~ qičomín 'to soften by soaking'

A lexically optional application of a rule applies to some lexical items, in all of their occurrences, but not to other forms meeting the same environmental specifications. The l-deletion rule (286.22) cited as phonetically optional above is lexically optional in the examples

/yul=šot/ yulšot 'to peel by boiling'

/yul=čho/ yučho '[food] to be well-cooked, well-done'

The situation is further complicated by the fact that even rules which are obligatory in the vast majority of cases may occasionally be phonetically optional, as with preconsonantal l-deletion across + boundaries by rule 286.21 in

/p+al+miš/ palmiš ~ pamiš 'don't cry!'

or lexically optional, as in the same l-deletion rule.

/ʔal+xil/ ʔalxil 'one who is fat'

/ʔal+qili=síʔ/ ʔalqilisíʔ 'one who is nosy'

Several factors contribute to the confusion here. First, it is likely in many cases that only one of two variant forms was recorded, so that more forms are phonetically optional than the corpus suggests. Second, there is some degree of dialect mixture in the corpus on purely lexical grounds, although how much this factor

contributes to phonological inconsistency is uncertain. Third, as pointed out by M. R. Haas (personal communication), the last speakers of a moribund language might have fixed in their memory one variant form at the expense of others, thus favoring the lexically optional application of a rule. Fourth, as Beeler noted with his Barbareño informant in 'Sibilant Harmony in Chumash,' there was a certain resistance to allomorphy among the last speakers of the language. This can be seen in the Ineseño corpus as well: one informant, cryptically identified by Harrington as qud., was far less likely to apply the l-deletion rule 286.21 mentioned above. Finally, paradigmatic pressure accounts for some exceptions. For example, the l-deletion rule 286.22 is applied in context to

/wal=tun/ watun 'to be doubled'

but in an elicitation with the other numerals, l-deletion is suspended to give [waltun], parallel to [walpakas<sup>1</sup>] 'to be single,' and [walmasix] 'to be tripled.'

#### 285 The Form of Examples

Examples are cited with their underlying forms in slashes (e.g. /s+kitwon/ 'it emerges'). In those prefixes subject to alternations not governed by rule (270), the particular alternant occurring with the stem in question is cited, rather than some abstract representation of the alternating forms. With the prefix referring to vision, examples are:

/qili=wayan/ 'to look at, peer at'



/xil=apit/ 'to look upward'

/qulu=wašlik/ 'to look out at, peek'

/qil=hik/ qilik 'to look after, care for'

Glosses are given for the string as a whole; in the interests of economy of space morphemes are not glossed individually.

Derivations are given step by step, with each step followed by the number of the rule in question, along with a description or abbreviated form of the name of the rule.

/s+tal=memen/ 'he touches it'

s+tel=memen (10) low vowel harmony

štelmemen (27) pre dental palatalization of s/c

The form cited at the end of a derivation is devoid of any specification of predictable phonetic detail, although an application of the subphonemic detail rules (230) would give the final phonetic form [štelmemen].

For the sake of economy, rule 286.47 erasing morpheme boundaries is automatically applied along with the last rule of the derivation. The representations of morpheme boundaries may also be dropped at any preterminal stage in the derivation, if the rule in question obscures them either by coalescing two segments or by epenthesis of a segment which cannot be readily assigned to one morpheme or another. Both these processes are illustrated in

/k+kitwon+waš/ 'I emerged, came out'

k+kitwonowaš (16) suffix son-son V epenthesis

k<sup>h</sup>itwonowaš (30) geminate obstruent aspiration

In general, examples are quoted which focus primarily on the rule in question: in other words, the most compact examples possible. But lest this practice give an unwarranted impression of simplicity, it should be noted that it is quite common to find derivations to which several rules apply.

/s+sax=ni=al=tiʔ=Vš=Vn/	'she uses it as an apron'
s+sax=ni=al=tiʔ=š=Vn	(2b) derivative V deletion
s+sax=n=al=tiʔ=š=Vn	(5) prevocalic V deletion
s+sax=n=al=tiʔ=š=ɪn	(12) suffix V specification
s+sax=n=a=tiʔ=š=ɪn	(22a) pre dental l-deletion
s+sax=n=a=tiṣ̌=ɪn	(25) derivative glottalization
ṣ̌+ṣ̌ax=n=a=tiṣ̌=ɪn	(28) sibilant harmony
ṣ̌haxnatɪṣ̌ɪn	(30) geminate aspiration

## 286 Phonological Rules Catalogued

### 286.01 h-epenthesis

An epenthetic /h/ may appear between a stem-final vowel and the initial vowel of certain suffixes.

a) h-Epenthesis is obligatory after stem-final vowels before the yes-or-no question marker -ê

/ʔinu+ê/ 'is it true?'

ʔinuhê (1a) h-epenthesis

/ʔini+p+aqni+č<sup>h</sup>o+ê/ 'don't you like it?'

ʔinipaqnič<sup>h</sup>ohê (1a) h-epenthesis

and the nominal suffix -iwaš 'dead, defunct.'

/ʔal+am+aqša+iwaš/ 'an illness which has passed'

ʔalamaqšahiwaš (1a) h-epenthesis

/s+t̥+iwaš/ 'the name of one who is dead'

s+t̥hiwaš (1a) h-epenthesis

št̥hiwaš (28) sibilant harmony

b) The remote verbal suffix -iy 'repetitive' optionally triggers h-epenthesis after a stem-final /i/.

/k+ni+koyi+iy/ 'I return again'

knikoyihy (1b) h-epenthesis

c) With the verbal derivative suffixes -Vn and -Vč (q.v., 621 and 622), but not with the nominal derivative -Vš, h-epenthesis is optional after monosyllabic (C)CV stems.

/š̥i=Vn/ 'to climb a cliff; to form a cliff'

š̥ihVn (1c) h-epenthesis

š̥ih̥n (12) suffix vowel specification

/pa=Vč/ 'to have a staff; to walk with a staff'

pahVč (1c) h-epenthesis

pahač (12) suffix vowel specification

After other (C)CV stems, h-epenthesis does not occur, and the suffix vowel is deleted by rule (2).

/t̥i=Vn/ 'to name, to give a name to'

t̥in (2a) derivative suffix vowel deletion

(1) h-epenthesis

$\emptyset \rightarrow h$	/	a) V + — V <sup>-š̥</sup> , -iwaš
		b) i + — V <sup>-iy</sup> (optional)
		c) + (C)CV = — VC <sup>verbal deriv</sup> (optional)

$$\emptyset \rightarrow \begin{bmatrix} -\text{ant} \\ -\text{cor} \\ +\text{back} \\ +\text{asp} \end{bmatrix} \left/ \begin{array}{l} \text{a) } [+voc] + \text{ --- } [+voc]^{-e}, -iwa\check{s} \\ \text{b) } \begin{bmatrix} +voc \\ +high \\ -back \end{bmatrix} + \text{ --- } [+voc]^{-iy} \text{ (opt.)} \\ \text{c) } + ([+cons]) [+cons][+voc] = \text{ --- } \\ [+voc][+cons]\text{verbal deriv} \end{array} \right.$$

## 286.02 Derivative Suffix Vowel Deletion

The vowels of the -VC derivative suffixes may be deleted in certain environments.

a) The vowels of the two verbal derivative suffixes -Vn and -Vč are deleted after stem-final vowels, both in monosyllabic stems where h-epenthesis rule (1) has not applied,

/tɨ=Vn/ 'to name, give a name to'

tɨn (2a) derivative suffix vowel deletion

/wi+c=pu=Vn/ 'to cut branches off a tree'

wicpun (2a) derivative suffix vowel deletion

and after all longer stems.

/shamala=Vn/ 'to speak Ineseño'

shamalan (2a) derivative suffix vowel deletion

/ʔinu=Vč/ 'to be true'

ʔinuč (2a) derivative suffix vowel deletion

b) After a stem-final glottal stop, the vowels of all derivative suffixes are deleted, including that of the nominalizing suffix -Vš (q.v., 523.1) as well as the verbal derivatives -Vn and -Vč. The length of the stem is irrelevant for this rule.

/cayaʔ=Vn/ 'to make a cayaʔ (kind of basket)'

cayaʔ=n (2b) derivative suffix vowel deletion

cayan' (25) -VC derivative glottalization

/ʔoʔ=Vč/ 'to be wet, watery'

ʔoʔ=č (2b) derivative suffix vowel deletion

ʔoč̣ (25) -VC derivative glottalization

/ixtɪʔ=Vš/ 'roof, thatch'

ixtɪʔ=š (2b) derivative suffix vowel deletion

ʔixtɪʔ=š (17) prevocalic glottal stop

ʔixtɪṣ̌ (25) -VC derivative glottalization

(2) derivative suffix vowel deletion

V	→	∅	/	a)	V = — C	with -Vn, -Vč				
				b)	ʔ = — C	with all -VC derivative				
[+voc]	→	∅	/	a)	[+voc] = — [+cons]					
				b)	<table style="border: none; display: inline-table; vertical-align: middle;"> <tr><td style="border: 1px solid black; padding: 2px;">-ant</td></tr> <tr><td style="border: 1px solid black; padding: 2px;">-cor</td></tr> <tr><td style="border: 1px solid black; padding: 2px;">-back</td></tr> <tr><td style="border: 1px solid black; padding: 2px;">+glott</td></tr> </table>	-ant	-cor	-back	+glott	= — [+cons]
-ant										
-cor										
-back										
+glott										

### 286.03 Prevocalic Glottal Stop Deletion

A final glottal stop is optionally deleted before any vowel-initial suffix (except the -VC derivative suffixes (by virtue of rule (2)) and the nominal suffix -iwaṣ̌). The resulting vowel sequence is subject to l-epenthesis by rule (9).

/k+nu+naʔ=us/ 'I bring it for him'

k+nu+na=us (3) prevocalic ʔ deletion

knunalus (9b) l-epenthesis

/s+am+saq=kumuʔ+iy/ 'they measure it again'

s+am+saq=kumu+iy (3) prevocalic ʔ deletion

samsaqkumuliy (9b) l-epenthesis

Occasionally the final glottal stop is not deleted; the l-epenthesis rule (9) still applies in such cases, but

the epenthesized segment is glottalized.

/s+kutaʔ+iy/ 'she stands up again'

skuta<sup>1</sup>iy (9c) l-epenthesis

This is a matter of free variation, since the same form may be attested with the epenthetic /l/ both plain and glottalized.

(3) prevocalic glottal stop deletion (optional)

ʔ → ∅ / — {±} V poststem in verbs

$$\left[ \begin{array}{l} -\text{ant} \\ -\text{cor} \\ -\text{back} \\ +\text{glott} \end{array} \right] \rightarrow \emptyset / \text{---} \left\{ \begin{array}{l} + \\ - \end{array} \right\} [+v\text{oc}]$$

#### 286.04 y-Epenthesis

A y-glide may be epenthesized between /i/ and a following vowel, although the process differs between prefixes and suffixes.

a) Across close = boundaries in suffixes, y-epenthesis is obligatory both between stem and suffix,

/s+kuti=in/ 'he sees you'

skuti<sup>1</sup>iyin (4a) y-epenthesis

and between one suffix and another.

/uni+<sup>1</sup>leqen=pi=Vš/ 'inheritance: something left behind'

uni+<sup>1</sup>leqen=piyVš (4a) y-epenthesis

uni+<sup>1</sup>leqen=piyaš (12) suffix vowel specification

ʔuni<sup>1</sup>leqenpiyaš (17b) prevocalic glottal stop

Across remote + boundaries, /i/ is deleted by rule (7).

/<sup>1</sup>ka<sup>1</sup>pa+k+eyep+li+ê/ 'if only I had stayed on the path!'

<sup>1</sup>ka<sup>1</sup>pa<sup>1</sup>keyep<sup>1</sup>ê (7) prevocalic suffix i-deletion

b) In prefixes characterized by the remote + boundary, the treatment of /i/ varies between deletion of the /i/ before a following vowel, or else y-epenthesis. With several highly productive prefixes (e.g. sili- 'desiderative,' api- 'quickly,' wati- 'of disintegration,' uti- 'inceptive, quickly,' etc.), i-deletion rule (5) and y-epenthesis are optional alternatives depending on speech tempo. After an example with qili- 'habitual,'

/s+qili+aqs=pa?/ sqiliyaqspa? ~ sqilaqspa? 'he smokes'  
Harrington's notes state explicitly that the longer form [sqiliyaqspa?] occurs in slow speech, while the reduction to [sqilaqspa?] is a feature of rapid speech. But given Harrington's marking of pauses in slow elicitation forms, both i-deletion and y-epenthesis seem acceptable at either tempo. Another example, where both alternatives cannot be quoted for the same stem, is based on sili- 'desiderative.'

/k+sili+itaq/ 'I want to hear'

ksiliyitaq (4b) y-epenthesis

/k+sili+axi+kuy/ 'I want to grab it'

ksilaxikuy (5) prevocalic i/u deletion

Some prefixes are attested only with /i/ deleted, others only with y-epenthesis. A couple of easily segmentable prefixes always take y-epenthesis; there are ali- 'continuative,'

/s+ali+oxoxon/ 'he is coughing'

saliyoxoxon (4b) y-epenthesis

and ki- 'diminutive force.'

/s+ki+uni+sumu?/ 'it is a little dark (at twilight)'  
 skiyunisumu? (4b) y-epenthesis

On the other hand, two common prefixes ni- 'transitiver' and ti- 'unanalyzable' obligatorily show i-deletion. In opaque compounds, especially those involving uniquely occurring stems, i-deletion is the rule.

/wati+aalam/ watalam 'to be choked with weeds'

/uti+aq=kalan/ utaqkalan 'to barb, catch with a barb'

/uni+exmeš/ unexmeš 'to despair, lose hope'

(4) y-epenthesis

∅ → y /	a) i = — V	poststem
	b) i + — V	prestem: oblig. with ali-, ki-; blocked for ni-, ti-; opt. ---

∅ → $\begin{bmatrix} +\text{son} \\ +\text{high} \\ -\text{back} \end{bmatrix}$ /	a) $\begin{bmatrix} +\text{voc} \\ +\text{high} \\ -\text{back} \end{bmatrix}$ = — [+voc]
	b) $\begin{bmatrix} +\text{voc} \\ +\text{high} \\ -\text{back} \end{bmatrix}$ + — [+voc]

#### 286.05 Prevocalic i/u Deletion

In prefixes characterized by a remote + boundary, a high vowel is deleted before another vowel. The vowel subject to deletion is nearly always final /i/ in a polysyllabic prefix, where optional y-epenthesis by rule (4) has not occurred,

/s+uti+otoy'in/ 'he falls down, sprawls out'

sutotoy'in (5) prevocalic i/u deletion

but the vowel may be /u/ in a few cases.



/s+ulu+apay/ 'it pounces'

sulapay (5) prevocalic i/u deletion

A trio of very common CV- prefixes obligatorily drop their vowel before a following vowel, su- 'causative,'

/su+ipyototon/ 'to cause to boil'

sipyototon (5) prevocalic i/u deletion

ni- 'transitivizer,'

/ni+aqša=Vn/ 'to harm'

ni+aqša=n (2a) derivative suffix vowel deletion

naqšan (5) prevocalic i/u deletion

and ti- 'unanalyzable.'

/ti+aq=pey/ 'to stick to [tran.]'

t+aq=pey (5) prevocalic i/u deletion

t+eq=pey (10) low vowel harmony

teqpey (24) sporadic glottalization

The pair ti- and ni- is marked as exempt from y-epenthesis in the preceding rule (4).

A prefix which retains a vowel cluster at morpheme boundaries is nu- 'concomitant action.'

/k+nu+aqiwīwīn/ knuaqiwīwīn 'I carry it while swimming'

(5) prevocalic i/u deletion

{i,u} → ∅ / — + V prestem, except for nu-

[+voc  
+high] → ∅ / — + [+voc]

#### 286.06 Prevocalic a-Deletion

A final /a/ in a prefix may be deleted before a following vowel.

a) The remote prefix *iwa-* 'action of short duration' retains a vowel cluster before most vowels,

/s+iwa+alpat/ siwaalpat 'he runs for a while'

/k+iwa+uš=koy/ kiwauškoy 'I coil it up in a moment'  
but the final /a/ is deleted before low vowels /e/ and /o/, to prevent a sequence of non-identical low vowels.

/s+iwa+eqwel/ 'he does it in a moment'

siweqwel (6a) prevocalic a-deletion

b) Across close = boundaries, final /a/ is deleted in most cases,

/k+wašla=otoy<sup>1</sup>in/ 'I lie flat on the ground'

k+wašl=otoy<sup>1</sup>in (6b) prevocalic a-deletion

kwošlotoy<sup>1</sup>in (10) low vowel harmony

while epenthetic /l/ appears in some.

/k+iy+ušla=apay/ 'we raise a house frame'

kiyušlalapay (9a) l-epenthesis

Some of these examples are ambiguous; there is a common unanalyzable prefix *al-* with close = boundary, which in conjunction with vowel deletion would look like l-epenthesis. For example, the surface form [ušlalapay] above might actually reflect either /ušla=apay/ with l-epenthesis or /ušla=al=apay/ with vowel deletion. In still other cases, it is not clear whether the underlying form of the prefix contains a final /l/ or not. The solution here is simply to make the deletion of prevocalic /a/ across close prefix boundaries optional.

## (6) prevocalic a-deletion

$a \rightarrow \emptyset /$ 
 $\begin{array}{l} \text{a) } \text{---} + \{e, o\} \quad \text{for iwa-} \\ \text{b) } \text{---} = V \quad \text{prestem, optional} \end{array}$

$\begin{bmatrix} +\text{voc} \\ -\text{high} \end{bmatrix} \rightarrow \emptyset /$ 
 $\begin{array}{l} \text{a) } \text{---} + \begin{bmatrix} +\text{voc} \\ -\text{high} \\ \alpha\text{back} \\ \alpha\text{round} \end{bmatrix} \\ \text{b) } \text{---} = [+voc] \end{array}$

## 286.07 Remote Suffix i-Deletion

A final /i/ is deleted before vowel-initial remote suffixes -iy ~ -ini ~ -es 'repetitive,' -ê 'yes-or-no question,' and even -ʔay 'repetitive imperative,' with its initial glottal stop. The /i/ to be deleted may belong either to the stem, if h-epenthesis rule (1) has not applied,

/s+kuti+iy/ 'he sees it again'

skutiy (7) remote suffix i-deletion

/s+uqma=ni=koyi+es/ 'he goes back outside'

suqmanikoyes (7) remote suffix i-deletion

/yit+ʔay/ 'come again!'

yit+ʔay (7) remote suffix i-deletion

yitay (18) glottalization of C + ʔ

or the /i/ may belong to another suffix.

/qil=hik=šaši+ʔay/ 'take better care of yourself!'

qil=hik=šaš+ʔay (7) remote suffix i-deletion

qil=hik=šašay (18) glottalization of C + ʔ

qilikšašay (20) h-deletion in hik

Any vowel other than /i/ is retained in this environment, developing the epenthetic /l/ governed by rule (9).

## (7) remote suffix i-deletion

$$i \rightarrow \emptyset / \text{---} + (?) V \quad \text{poststem}$$

$$\left[ \begin{array}{l} +\text{voc} \\ +\text{high} \\ -\text{back} \end{array} \right] \rightarrow \emptyset / \text{---} + \left( \left[ \begin{array}{l} -\text{ant} \\ -\text{cor} \\ -\text{back} \\ +\text{glott} \end{array} \right] \right) [+ \text{voc}]$$

## 286.08 i-Deletion in iš-, iy-

When the dual and plural number markers iš- and iy- occur with the relativizing prefix ma-/ha- (q.v., 521), the vowel of the number marker is deleted.

/ma+iš+al+axuti=wil/ 'the two who are talking (initial)'

mašalaxutiwil (8) i-deletion in iš-, iy-

/ha+iy+al+nañ+pi/ 'where they are going (non-initial)'

ha+y+al+nañ+pi (8) i-deletion in iš-, iy-

ha+y+a+nañ+pi (21) remote prefix l-deletion

hayanapi (39) preconsonantal deglottalization

The probable intermediate step here was that /i/ was reduced to a y-glide, which was then lost in the following palatal consonant. Given the high specificity of this rule in terms of the segments and morphemes involved, the rule can be stated very simply.

## (8) i-deletion in iš-, iy-

$$V \rightarrow \emptyset / V + \text{---} \quad \text{with iš-, iy-}$$

$$[+\text{voc}] \rightarrow \emptyset / [+ \text{voc}] + \text{---}$$

## 286.09 l-Epenthesis

There is a regular epenthesis of /l/ between adjacent vowels in all of the environments not covered in the preceding rules, as well as between final vowels and glottal

suffixes.

a) In prefixes, l-epenthesis is obligatory across all close prefix boundaries (except for the few cases where /a/ has been deleted before a following vowel by rule (6)).

/naqti=al=apay/ 'to get back out of the way'

naqtilalapay (9a) l-epenthesis

/ulu=elew/ 'to wade'

ululelew (9a) l-epenthesis

/axuti=al=koy/ 'to sew around'

axutilal=koy (9a) l-epenthesis

axutilolkoy (10) low vowel harmony

The large number of prefixes with alternant shapes like pil- ~ pili- 'in the air' (cf. 271) usually show the shorter form before a following vowel. But occasionally they show the longer form with the extra vowel; here an epenthetic /l/ occurs. This is determined lexically by the stem, rather than by speech tempo as with y-epenthesis versus i-deletion (e.g. [sqiliyaqspa?] ~ [sqilaqspa?], cf. rules (4b) and (5)). Examples with kil- ~ kili- 'rapid motion':

/s+kil=elew/ skilelew 'he falls down'

/s+kili=apit/ 'he climbs up quickly'

skililapit (9a) l-epenthesis

b) In suffixes, l-epenthesis occurs across all boundaries after any final vowel except /i/ (to which y-epenthesis rule (5) and remote suffix i-deletion rule (7) apply).

/s+aqta=cî+iy/ 'he hits [the mark] again'

saqtacîliy (9b) l-epenthesis

/s+api+č<sup>h</sup>o=it/ 'I have a stroke of good luck'

s+api+č<sup>h</sup>olit (9b) l-epenthesis

šapič<sup>h</sup>olit (28) sibilant harmony

The optional deletion of a final glottal stop by rule (3) brings two vowels together and triggers l-epenthesis.

/k+nu+na<sup>?</sup>=us/ 'I bring it for him'

k+nu+na=us (3) prevocalic <sup>?</sup>-deletion

knunalus (9b) l-epenthesis

c) Even when a final glottal stop has not been deleted by rule (3), l-epenthesis occurs before vowel-initial verbal suffixes (but not nominal -iwaš); /l/ is glottalized.

/s+am+su+saq=sumu<sup>?</sup>=it/ 'they make me taste it'

samsusaqsumu<sup>l</sup>it (9c) l-epenthesis

/s+kuta<sup>?</sup>+iy/ 'she stands up again'

skuta<sup>l</sup>iy (9c) l-epenthesis

d) When a suffix begins with a glottal stop (i.e. -<sup>?</sup>i<sup>?</sup> 'instrumental nominalizer' and -<sup>?</sup>ay 'repetitive imperative'), a glottalized epenthetic /<sup>l</sup>/ appears after a stem-final vowel

/tap=sa=<sup>?</sup>i<sup>?</sup>/ 'toothpick'

tapsa<sup>l</sup>i<sup>?</sup> (9d) l-epenthesis

/wi+č<sup>h</sup>o+<sup>?</sup>ay/ 'even it up some more!'

wič<sup>h</sup>o<sup>l</sup>ay (9d) l-epenthesis

or stem-final glottal stop.

/p<sup>l</sup>i<sup>?</sup>=<sup>?</sup>i<sup>?</sup>/ 'ladle, dipper'

p<sup>l</sup>i<sup>?</sup> (9d) l-epenthesis

Even the suffixed glottal stop of the imperative takes an epenthetic /l/ after final vowels and glottal

stop, although this epenthetic /l/ is never intervocalic.

/kuti+ʔ/ 'look'

kuti<sup>l</sup> (9d) l-epenthesis

/nu+naʔ+ʔ/ 'bring it!'

nuna<sup>l</sup> (9d) l-epenthesis

But in nouns, a suffixed glottal stop does not cause l-epenthesis either as a nominalizing suffix

/haxwi=ʔ/ haxwiʔ 'clothes, clothing'

or as part of CVC reduplication of nouns.

/kawayu+ʔ + R/ 'horses (Span. caballo)'

kawkawayuʔ (36d) CVC reduplication

(9) l-epenthesis

a)  $\emptyset \rightarrow l / V \text{ --- } = V$  prestem

b)  $\emptyset \rightarrow l / V \text{ --- } \left\{ \begin{smallmatrix} + \\ = \end{smallmatrix} \right\} V$  poststem in verbs

c)  $V \text{ ? } \left\{ \begin{smallmatrix} + \\ = \end{smallmatrix} \right\} V \rightarrow viV$  poststem in verbs

d)  $V \text{ (?) } + \text{ ? } \rightarrow vi$  poststem in verbs

a)  $\emptyset \rightarrow [+lat] / [+voc] \text{ --- } = [+voc]$

b)  $\emptyset \rightarrow [+lat] / [+voc] \text{ --- } \left\{ \begin{smallmatrix} + \\ = \end{smallmatrix} \right\} [+voc]$

c)  $[+voc] \left[ \begin{smallmatrix} -ant \\ -cor \\ -back \\ +glott \end{smallmatrix} \right] \left\{ \begin{smallmatrix} + \\ = \end{smallmatrix} \right\} [+voc] \rightarrow [+voc] \left[ \begin{smallmatrix} +lat \\ +glott \end{smallmatrix} \right] [+voc]$

d)  $[+voc] \left( \left[ \begin{smallmatrix} -ant \\ -cor \\ -back \\ +glott \end{smallmatrix} \right] \right) + \left[ \begin{smallmatrix} -ant \\ -cor \\ -back \\ +glott \end{smallmatrix} \right] \rightarrow [+voc] \left[ \begin{smallmatrix} +lat \\ +glott \end{smallmatrix} \right]$

286.10 Low Vowel Harmony

Within close = boundaries, successive low vowels in prefixes are assimilated to low vowels in stem-initial

syllables. An example shows low vowel harmony in the prefix *aq-/ax-* 'with the mouth.'

*/aq=lep/* 'to lick'  
           *eqlep* (10) low vowel harmony  
*/ax=tap/* 'to put into the mouth'  
           *axtap* (10) low vowel harmony  
*/ax=loq/* 'to bite a hole in'  
           *oxloq* (10) low vowel harmony

Before high stem vowels, the prefix vowel remains /a/.

Low vowel harmony operates over a series of successive low vowels, both within the bounds of a single prefix

*/s+aqta=pow/* '[a projectile] veers off'  
           *soqtopow* (10) low vowel harmony

and across multiple prefixes with the close = boundary.

*/s+wala=nax=pey/* 'he is leaning (against something)'  
           *swelenexpey* (10) low vowel harmony

*/s+qal=wala=tepet/* 'he rolls up and ties a bundle'  
           *s+qel=wele=tepet* (10) low vowel harmony

*sqelewetePET* (23b) prefix son-son V epenthesis

But a high vowel blocks the propagation of low vowel harmony; any vowel to the left of a high vowel is the unmarked low vowel /a/.

*/s+axtipal=pok'=Vn/* 'he inflates it'

*s+axtipol=pok'=Vn* (10) low vowel harmony

*saxtipolpokin* (12) suffix vowel specification

In the formulation of the low vowel harmony rule, as in the succeeding vowel quality rules (11) through (14), possible combinations of intervening consonants are ignored



as irrelevant.

(10) low vowel harmony

$$\begin{array}{l}
 a \rightarrow \begin{array}{l} e / \text{---} = e \\ o / \text{---} = o \end{array} \\
 \begin{array}{l} [+voc] \\ [-high] \end{array} \rightarrow \begin{array}{l} [\alpha\text{back}] \\ [\alpha\text{round}] \end{array} / \text{---} = \begin{array}{l} [-high] \\ [\alpha\text{back}] \\ [\alpha\text{round}] \end{array} \\
 \begin{array}{l} [+back] \\ [-round] \end{array} / \text{---}
 \end{array}$$

286.11 Back Vowel Harmony

The back vowel /u/ in a prefix is centralized to /ɨ/ before /ɨ/ in a stem-initial syllable, obligatorily across close = boundaries,

/yuq=cɨ/ 'to be sharp-pointed'

yɨqɨ (11) back vowel harmony

/qul=tɨwɨč/ 'to watch, be an onlooker'

qɨl=tɨwɨč (11) back vowel harmony

qɨtɨwɨč (22a) pre dental l-deletion

and optionally across remote + boundaries.

/su+pɨl/ supɨl 'to smear with pitch'

/su+kɨmɨn/ 'to fool someone'

sɨkɨmɨn (11) back vowel harmony

As with low vowel harmony, this process operates across successive occurrences of /u/ in prefixes.

/nu+su+tɨ=l=pl/ 'to swear, vow'

nɨsɨtɨlpi (11) back vowel harmony

(11) back vowel harmony

u → ɨ / --- {<sub>ɨ</sub>} ɨ optional across + boundary

$$\begin{bmatrix} +\text{voc} \\ +\text{high} \\ +\text{back} \end{bmatrix} \rightarrow \begin{matrix} [-\text{round}] / \text{---} \\ [+round] / \text{---} \end{matrix} \left\{ \begin{matrix} + \\ = \end{matrix} \right\} \begin{bmatrix} +\text{high} \\ +\text{back} \\ -\text{round} \end{bmatrix}$$

## 286.12 Suffix Vowel Specification

With certain suffixes where the vowel is marked simply as V or [+voc], vowel quality is determined by the quality of the preceding vowel in either the stem or another suffix. The suffix vowel may be uniquely determined by the preceding vowel, or there may be some variation. In all of these cases, it is more economical simply to list suffix vowels by the quality of the preceding vowel rather than to predict them by rule.

a) In the suffixes -Vš 'resultative nominalizer; alienable possession' and -nVš 'reciprocal; plural object,' the suffix vowel is uniquely determined by the stem vowel. It is /a/ after high vowels /i/ and /u/,

/miy=Vš/ 'string, twine'

miyaš (12) suffix vowel specification

/puq=Vš/ 'belongings of the dead, to be burned'

puqaš (12) suffix vowel specification

/ɨ/ after central vowels /ɨ/ and /a/,

/xalpɨk=Vš/ 'infant on cradle (non-possessed)'

xalpɨkɨš (12) suffix vowel specification

/p+iš+išmax=nVš/ 'you two throw stones at one another'

pišišmaxniš (12) suffix vowel specification

and with the low vowels /e/ and /o/, asymmetrically, the suffix vowel is /e/ after /e/, but /u/ after /o/.

/tɪ+yep=Vě/ 'news, tidings'

tiyepěš (12) suffix vowel specification

/mol=Vě/ 'something toasted'

moluš (12) suffix vowel specification

b) With the verbalizing suffixes -Vn and -Vě, the quality of the suffix vowel is subject to considerable variation, although the vowel with -Vě is often /i/ after any stem vowel. A few examples are

/ʔiʷ=Vn/ 'to cut'

ʔiʷin (12) suffix vowel specification

/yol=Vn/ 'to be blue'

yolin (12) suffix vowel specification

/nuy=Vě/ 'to be dirty, grimy'

nuyič (12) suffix vowel specification

/teleq=Vě/ 'to have a tail, be be-tailed'

teleqeč (12) suffix vowel specification

Occasionally the suffix vowel may vary even with the same stem, as in

/toý=Vě/ 'to play the deer-hoof rattle'

toýoč - toýič

and the stem -kow- 'to tip.'

/pil=kow=Vn/ 'to spill, tip over [intran.]'

pilkowon (12) suffix vowel specification

/xil=kow=Vn/ '[boat] to capsize'

xilkowin (12) suffix vowel specification

When the suffix -Vn is used as a verbal augment (q.v., 612.1) rather than as a derivative suffix, the suffix vowel is very likely to be identical with the stem vowel.

One example is [pilkowon] quoted above (but not [xilkowin]); another is based on the stem wel- 'to shake,' which can be seen unaugmented in welewele 'to sway.'

/s+wel=Vn/ 'it shakes; there is an earthquake'

swelen (12) suffix vowel specification

When multiple suffixes follow a stem, usually in cases of multiple derivation, the vowels of the suffixes are not all specified simultaneously. The first suffix is specified according to the stem vowel, while the second suffix is specified according to the vowel of the first suffix. An example is

/uš=qoý=Vn=Vš/ 'shellfish that has been gathered'

uš+qoý=in=Vš (12) suffix V spec.: /i/ after /o/

uš+qoý=in=aš (12) suffix V spec.: /a/ after /i/

?ušqoýinaš (17b) prevocalic glottal stop

Simultaneous specification would give the incorrect surface form \*[?ušqoýinuš]. The quality of the second derivative suffix is determined not by the stem qoý 'olivella shell,' but by the primary derivative [ušqoýin] 'to gather shellfish.'

The rule for suffix vowel specification is a list showing the quality of suffix vowels after a given stem vowel. Listings are in order of relative frequency.

(12) suffix vowel specification

stem:	i	ɨ	u	e	a	o
-Vn	e,u	ɨ,i	i,e	e,u	i,u,a	i,u,o
-Vč	i,e	ɨ,i	i	i,e,u	i,u,a	i,u,o
-Vš, -nVš	a	ɨ	a	e	ɨ	u

## 286.13 Central Vowel Suffix Dissimilation

In close suffixes with a central vowel underlyingly represented as /a/ (i.e. -šaši 'reflexive,' -šaš and -štaš 'nominalizers'), vowel height is specified by dissimilation with the height of the preceding vowel: low /a/ after high vowels,

/k+tikuy=šaši/ 'I rely on myself'

ktikuyšaši (13) central V suffix dissimilation

/xuti+nañ=pi=šaš/ 'something bothersome, harmful'

xuti+nañ=pi=šaš (13) central V suffix dissimilation

xutinanpišaš (39a) preconsonantal deglottalization

and high /ɨ/ after low vowels.

/tiqšlay=šaš/ 'something slippery'

tiqšlayšɨš (13) central V suffix dissimilation

/k+su+al=puy=Vn=šaši/ 'I get myself wet'

k+s+al=puy=Vn=šaši (5) prevocalic i/u deletion

k+s+al=puy=an=šaši (12) suffix vowel specification

k+s+al=puy=an=šɨši (13) central V suffix dissim.

k+š+al=puy=an=šɨši (28) sibilant harmony

kšalpuyač<sup>h</sup>ɨši (33a) n + š → č/č<sup>h</sup> affrication

Two other suffixes with /a/ (i.e. -waš 'past,' and -ʔay 'repetitive imperative'), are characterized by the remote + boundary, which blocks central vowel dissimilation. Here, /a/ occurs after low vowels as well as high.

/k+exweyep+waš/ kexweyepwaš 'I changed it'

/kitwon+ʔay/ 'come out again!'

kitwonay (18) glottalization of C + ʔ

(13) central vowel suffix dissimilation

a → ɨ / v<sup>low</sup> = --- poststem

$$\begin{array}{l} \left[ \begin{array}{l} +\text{voc} \\ -\text{high} \end{array} \right] \rightarrow \left[ \begin{array}{l} \alpha\text{high} \\ +\text{back} \\ -\text{round} \end{array} \right] / \left[ \begin{array}{l} +\text{voc} \\ -\alpha\text{high} \end{array} \right] = \text{---} \\ \left[ \begin{array}{l} +\text{back} \\ -\text{round} \end{array} \right] / \text{---} \end{array}$$

286.14 i-Lowering in -ʔiʔ

The vowel of the instrumental nominalizing suffix -ʔiʔ is lowered to /e/ after a preceding /i/.

/hik<sup>ʔ</sup>=ʔiʔ/ 'tool, instrument'

hik<sup>ʔ</sup>=ʔeʔ (14) i-lowering in -ʔiʔ

hikeʔ (18) glottalization of C + ʔ

/su+api+wil<sup>ʔ</sup>=ʔiʔ/ 'kindling, firewood'

s+api+wil<sup>ʔ</sup>=ʔiʔ (5) prevocalic i/u deletion

s+api+wil<sup>ʔ</sup>=ʔeʔ (14) i-lowering in -ʔiʔ

sapiwileʔ (18) glottalization of C + ʔ

In the suffix vowel specification rule (12) there is a parallel to this rule: the verbalizing suffix -Vn, which is often realized as [-in], usually occurs as [-en] after /i/.

/ʔayip<sup>ʔ</sup>=Vn/ 'to poison'

ʔayip<sup>ʔ</sup>en (12) suffix vowel specification

/piw<sup>ʔ</sup>=Vn/ 'to cost, be expensive'

piw<sup>ʔ</sup>en (12) suffix vowel specification

But since the underlying form here is -Vn rather than \*-in, this parallel cannot be accounted for by the rule lowering -ʔiʔ. There are other suffixes with /i/ which show no evidence of lowering (e.g. -it 'me,' -iyuw 'us,

you (obj.), -pi 'locative,' etc.).

(14) i-lowering in -ʔiʔ

i → e / i = ʔ — ʔ in -ʔiʔ

$$\begin{bmatrix} +\text{voc} \\ +\text{high} \\ -\text{back} \end{bmatrix} \rightarrow [-\text{high}] / \begin{bmatrix} +\text{voc} \\ +\text{high} \\ -\text{back} \end{bmatrix} = \begin{bmatrix} -\text{ant} \\ -\text{cor} \\ -\text{back} \\ +\text{glott} \end{bmatrix} - \begin{bmatrix} -\text{ant} \\ -\text{cor} \\ -\text{back} \\ +\text{glott} \end{bmatrix}$$

### 286.15 i-Epenthesis at Personal Boundaries

An epenthetic /i/ appears to prevent certain potential consonant clusters between person/number markers and stems, but not within closer boundaries.

a) Stem-initial aspirated or glottalized spirants always cause i-epenthesis.

/k+s<sup>h</sup>ewu/ 'my awl'

kis<sup>h</sup>ewu (15a) i-epenthesis

/p+xim̥/ 'your large storage basket'

pixim̥ (15a) i-epenthesis

/k+iy+s<sup>h</sup>amala=Vn/ 'we speak Ineseño'

k+iy+s<sup>h</sup>amala=n (2a) derivative suffix V deletion

kiyishamalan (15a) i-epenthesis

In certain lexical items which are attested only with person/number markers, or which have no other forms unambiguously indicating the stem, it is possible that this section of the i-epenthesis rule applies.

[sis<sup>h</sup>il̥n] 'the wind blows from the sea'

[sisaxp̥n] 'it is rough, bumpy'

b) Stem-initial aspirated or glottalized affricates generally cause i-epenthesis in nouns,

/s+čiwis/ 'his rattle'  
 sičiwis (15b) i-epenthesis

/k+čayaš/ 'my trail, road'  
 kičayaš (15b) i-epenthesis

with with some exceptions.

/k+čiy/ kčiy 'my niece, nephew'

With verbs, i-epenthesis is possible,

/s+čiwis=Vč/ 'he plays the rattle'  
 s+čiwis=uč (12) suffix vowel specification  
 sičiwis=uč (15b) i-epenthesis  
 šičiwišuč (28) sibilant harmony

/s+ch<sup>h</sup>aqyalin/ 'he is in love'  
 sch<sup>h</sup>aqyalin ~ sich<sup>h</sup>aqyalin (15b) i-epenthesis

but not likely.

/s+čičč/ sčičč 'it is sharp'  
 /k+čamin/ kčamin 'I know'

Examples of ambiguous lexical items which may reflect the operation of this section of the i-epenthesis rule:

[kičis] 'my younger sibling'  
 [sičonoyin] 'he dislikes it'

c) Stem-initial clusters of a strident segment plus a semivowel /w/ or /y/ cause i-epenthesis.

/s+swa<sup>ʔ</sup>/ 'its tule hood (for a cradle)'  
 siswa<sup>ʔ</sup> (15c) i-epenthesis

/s+cyiw/ 'its edge'  
 sicyiw (15c) i-epenthesis

/p+čwin/ 'your buckskin apron, dress'  
 pičwin (15c) i-epenthesis



/k+xwapš/ 'I am pricked with nettles'

kixwapš (15c) i-epenthesis

Ambiguous examples include

[kicyulaʔ] 'I am fond of it'

[siswixiʔ] 'his blanket'

d) Stem-initial consonant clusters beginning with a coronal spirant /s/ or /š/ (but not /x/) cause i-epenthesis.

/s+sqelemet/ 'her forehead carrying band'

sisqelemet (15d) i-epenthesis

/k+smɫliʔ/ 'my bark apron, dress'

kismɫliʔ (15d) i-epenthesis

/s+škiy=in+ê/ 'does it hurt you?'

siškiy=in+ê (15d) i-epenthesis

šiškiyinê (28) sibilant harmony

This is not the case within closer boundaries,

/s+maq=skumu/ smaqsकुmu 'it is four-ply, four-stranded'

although in one case Harrington noted an alternation

/aq=škiy/ aqškiy ~ aqšškiy 'to writhe, wiggle'

where [aqškiy] occurred in careful speech, and [aqšškiy] with its epenthetic vowel occurred in less careful speech.

Ambiguous examples include

[kistus] 'my baby, infant'

[siskon] 'his family'

[kištanimuʔ] 'my niece, nephew (said to orphan)'

e) A prefixed consonant plus a cluster with an initial consonant identical to the prefixed consonant may cause i-epenthesis, although examples are rare.

/p+pleʔ/ 'you perish, are lost'

pipleʔ (15e) i-epenthesis

/k+kwalʔ/ 'my room (Span. cuarto)'

kikwalʔ (15e) i-epenthesis

/k+kseŋ=Vn/ 'I am a kseŋ (ceremonial official)'

k+kseŋ=un (12) suffix vowel specification

kiksenun (15e) i-epenthesis

The examples [siswaʔ] and [siswixiʔ] given above are open to this interpretation also. Note that non-identical consonants cause no i-epenthesis.

/s+pleʔ/ spleʔ 'it dies, is lost'

/no+k+pleʔ/ nokpleʔ 'I will die, perish'

(15) i-epenthesis at personal boundaries

- $\emptyset \rightarrow i$  /
  - a) C + — {sšx} {glottal aspirated}
  - b) C + — {cč} {glottal aspirated} opt. in verb
  - c) C + — C<sup>strid</sup> {w} {y}
  - d) C + — {š}C
  - e) C<sub>1</sub> + — C<sub>1</sub>C<sub>2</sub>

- $\emptyset \rightarrow$ 
 $\begin{bmatrix} +voc \\ +high \\ -back \end{bmatrix}$  /
  - a) [+cons] + —  $\begin{cases} [+cont \\ +strid \\ +glott] \\ [+cont \\ +strid \\ +asp] \end{cases}$
  - b) [+cons] + —  $\begin{cases} [-cont \\ +strid \\ +glott] \\ [-cont \\ +strid \\ +asp] \end{cases}$
  - c) [+cons] + — [+strid]  $\begin{bmatrix} +son \\ +high \end{bmatrix}$

d) [+cons] + ---  $\left[ \begin{array}{c} +cor \\ +strid \end{array} \right]$  [+cons]

e)  $\left[ \begin{array}{c} +cons \\ \psi \end{array} \right]$  + ---  $\left[ \begin{array}{c} +cons \\ \psi \end{array} \right]$  [+cons]

### 286.16 Suffix Sonorant Cluster Vowel Epenthesis

A vowel is epenthesized between adjacent sonorants in poststem position: between stem and suffix and between one suffix and another. The quality of the epenthetic vowel is determined either by the stem vowel, or the suffix vowel, or both. Suffix vowels are the three apex vowels /i a u/, although one exception with an initial sonorant and an unspecified vowel is -nVš 'reciprocal; plural object.' This exceptional suffix is not attested after any final sonorant other than /y/, where it causes y-deletion by rule (19) rather than vowel epenthesis.

a) With /i/ in the suffix, the epenthetic vowel is /i/ too; the one example is -li 'directional.'

/s+kum+li/ 'he arrives there'

skumili (16a) suffix son-son V epenthesis

/k+ik<sup>h</sup>+l+li/ 'I bring it there'

kik<sup>h</sup>+lili (16a) suffix son-son V epenthesis

/s+iy+elew+li/ 'they go down there'

siyelewilli (16a) suffix son-son V epenthesis

b) With /a/ in the suffix, the epenthetic vowel is the same as the vowel immediately preceding the suffix in the underlying form. The only example is -waš 'past,' which by virtue of its remote boundary is immune to the central vowel suffix dissimilation governed by rule (13).

/k+eqwel+waš/ 'I did it, made it'

keqwelewaš (16b) suffix son-son V epenthesis

/p+kuy+waš/ 'you took it'

pkuyuwaš (16b) suffix son-son V epenthesis

/s+am+net=in+waš/ 'they did it to you'

s+am+net=iniwaš (16b) suffix son-son V epenthesis

šamnetiniwaš (28) sibilant harmony

c) With /u/ in the suffix, of which the examples are -mu? 'locative nominalizer,' -wun 'plural object,' and -wun' 'plural,' the epenthetic vowel is /u/ after low vowels,

/s+eqwel=wun/ 'he makes them'

seqweluwun (16c) suffix son-son V epenthesis

/s+kitwon=mu?/ 'where it comes out: coming-out place'

skitwonumu? (16c) suffix son-son V epenthesis

and harmonic with a preceding high vowel.

/ma+k+ičtīn'wun/ 'my children'

makičtīn'wun (16c) suffix son-son V epenthesis

/aqmil=mu?/ 'spring: drinking place'

aqmilimu? (16c) suffix son-son V epenthesis

?aqmilimu? (17b) prevocalic glottal stop

(16) suffix sonorant cluster vowel epenthesis

a)  $\emptyset \rightarrow i$  /  $C^{son} + \text{---} C^{son} i$

b)  $\emptyset \rightarrow v_1$  /  $v_1 C^{son} + \text{---} C^{son} a$

c)  $\emptyset \rightarrow \begin{cases} u / v^{low} C^{son} \{+\} \text{---} C^{son} u \\ v_1 / v_1^{high} C^{son} \{+\} \text{---} C^{son} u \end{cases}$

- a)  $\emptyset \rightarrow \begin{bmatrix} +\text{voc} \\ +\text{high} \\ -\text{back} \end{bmatrix} / [+son] + \text{---} [+son] \begin{bmatrix} +\text{voc} \\ +\text{high} \\ -\text{back} \end{bmatrix}$
- b)  $\emptyset \rightarrow [+voc] / [+voc] [+son] + \text{---} [+son] \begin{bmatrix} +\text{voc} \\ -\text{high} \end{bmatrix}$
- c)  $\emptyset \rightarrow \left\{ \begin{array}{l} \begin{bmatrix} +\text{voc} \\ +\text{high} \\ +\text{back} \\ +\text{round} \end{bmatrix} / \begin{bmatrix} +\text{voc} \\ -\text{high} \end{bmatrix} [+son] \{=\} \text{---} [+son] \begin{bmatrix} +\text{voc} \\ +\text{high} \\ +\text{back} \end{bmatrix} \\ \begin{bmatrix} +\text{voc} \\ +\text{high} \\ \alpha\text{back} \\ \alpha\text{round} \end{bmatrix} / \begin{bmatrix} +\text{voc} \\ +\text{high} \\ \alpha\text{back} \\ \alpha\text{round} \end{bmatrix} [+son] \{=\} \text{---} [+son] \begin{bmatrix} +\text{voc} \\ +\text{high} \\ +\text{back} \end{bmatrix} \end{array} \right.$

### 286.17 Prevocalic Glottal Stop

An initial vowel of either a verb or prefix is automatically prefaced with a glottal stop when initial in the word: in imperative and nominalized forms.

a) With imperative forms lacking the second person marker p-, the final segment is automatically glottalized and initial vowels take a preceding glottal stop.

/ikš=it+?/ 'give it to me!'

ʔikš=it+? (17a) prevocalic glottal stop

ʔikšit' (18) glottalization of C + ?

Occasionally in the imperative, glottal stop may preface vowels preceded by certain vowel-final remote suffixes such as tani- 'please, just a little,' akti- 'motion toward,' iwa- 'for a moment,' or nu- 'concomitant action.'

/iwa+uxniwɪn+?/ 'hurry for a moment!'

ʔiwa+ʔuxniwɪn+? (17a) prevocalic glottal stop

ʔiwaʔuxniwɪn' (18) glottalization of C + ?

b) Similarly, initial vowels of nominalized forms take

/u<sup>1</sup>iš=mu<sup>?</sup>/ 'handle' (cf. [kuliš] 'I grasp')

ʔu<sup>1</sup>išmu<sup>?</sup> (17b) prevocalic glottal stop

/axi+yep=<sup>?</sup>/ 'medicine' (cf. [kaxiyep] 'I cure')

ʔaxi+yep=<sup>?</sup> (17b) prevocalic glottal stop

ʔaxiyep<sup>1</sup> (18) glottalization of C + ʔ

Even when a person marker precedes the initial vowel, glottal stop appears, showing that prefixation of the person marker is secondary to nominalization.

/s+axi+yep=<sup>?</sup>/ 'his medicine'

s+ʔaxi+yep=<sup>?</sup> (17b) prevocalic glottal stop

ʔsaxiyep<sup>1</sup> (18) glottalization of C + ʔ

Glottal stop appears even with inalienably possessed derivative forms, where because of obligatory person/number markers the initial vowel is never word-initial.

/s+aqša=Vn=Vš/ 'his death'

s+aqša=n=Vš (2a) derivative suffix V deletion

s+aqša=n=iš (12) suffix vowel specification

s+ʔaqša=n=iš (17b) prevocalic glottal stop

ʔsaqša=n=iš (18) glottalization of C + ʔ

šaqšan<sup>1</sup>iš (28) sibilant harmony

The only exceptions to this rule are inalienably possessed derivatives with -∅ suffix.

/k+ackaw/ kackaw 'my mistake; I make a mistake'

/s+i<sup>1</sup>saxp<sup>1</sup>n/ sisaxp<sup>1</sup>n 'his pimple; it is rough, bumpy'

(17) prevocalic glottal stop

∅ → ʔ / a) # — V in imperative verbs  
 b) (person) (number) + — V in noun, except -∅ derivative

$$\emptyset \rightarrow \begin{bmatrix} \text{-ant} \\ \text{-cor} \\ \text{-back} \\ \text{+glott} \end{bmatrix} \left/ \begin{array}{l} \text{a) } \# \text{ --- [+voc]} \\ \text{b) } (\text{person}) (\text{number}) + \text{ --- [+voc]} \end{array} \right.$$

## 286.18 Glottalization of C + ?

A consonant plus a following glottal stop coalesce to form a single glottalized segment.

/k+ʔap/ 'my house'

kap (18) glottalization of C + ?

/ma+l+ʔip=us/ 'what he says to him'

malipus (18) glottalization of C + ?

/k+iy+is=ʔeneq/ 'our sister'

kiyiseneq (18) glottalization of C + ?

/k+uti+č=ʔapam/ 'I fall on my knee(s), bump my knee(s)'

kutičapam (18) glottalization of C + ?

When the consonant is already glottalized, there is no change.

/hik=ʔiʔ/ 'tool, instrument'

hik=ʔeʔ (14) i-lowering in -ʔiʔ

hikeʔ (18) glottalization of C + ?

/maq=su=nan+ʔay/ 'stretch it some more!'

maqsunanay (18) glottalization of C + ?

Glottalized segments originating by this rule are reduplicated intact in CVC reduplication.

/s+ʔamin + R/ 'he is naked'

samin (18) glottalization of C + ?

samsamin (36d) CVC reduplication

It should be noted that this rule is one of the most general in the body of phonological rules: it applies

across all morpheme boundaries and in both prefixes and suffixes.

(18) glottalization of C + ?

$$C \left\{ \begin{array}{c} + \\ = \end{array} \right\} ? \rightarrow \acute{C}$$

$$[+cons] \left\{ \begin{array}{c} + \\ = \end{array} \right\} \left[ \begin{array}{l} -ant \\ -cor \\ -back \\ +glott \end{array} \right] \rightarrow \left[ \begin{array}{l} +cons \\ +glott \end{array} \right]$$

### 286.19 Preconsonantal y-Deletion

Before a following consonant, /y/ is deleted with varying degrees of regularity.

The /y/ of the plural marker iy- is regularly dropped.

/k+iy+kí?/ 'we, us (plural)'

kíkí? (19) preconsonantal y-deletion

/s+iy+nán'/ 'they (plural) go'

sínán' (19) preconsonantal y-deletion

Before glottal stop, /y/ may be deleted

/s+iy+?ap/ 'their house'

sí?ap (19) preconsonantal y-deletion

or it may coalesce as a single glottalized segment by the preceding rule (18).

/s+iy+?ap/ 'their house'

siyap (18) glottalization of C + ?

With the suffixes -š 'multiple object; intransitive' and -nVš 'reciprocal; plural object,' y-deletion is optional, though more common than retention of the /y/.



/k+uq=puy=š/ 'I wad them up'

kuqpuyš ~ kuqpuš (19) preconsonantal y-deletion

/s+iš+ti+aq=pey=nVš/ 'they (dual) stick to each other'

s+iš+t+aq=pey=nVš (5) prevocalic i/u deletion

s+iš+t+eq=pey=nVš (10) low vowel harmony

s+iš+t+eq=pey=neš (12) suffix vowel specification

s+iš+t+eq=pey=neš ~ s+iš+t+eq=pe=neš (19) y-deletion

s+iš+t+eq=<sup>1</sup>pey=neš ~ s+iš+t+eq=<sup>1</sup>pe=neš (24) sporadic ?

šišteq<sup>1</sup>peyneš ~ šišteq<sup>1</sup>peneš (28) sibilant harmony

In those few cases where the suffix sonorant cluster vowel epenthesis rule (16) has not applied, /y/ is always deleted before a following sonorant.

/ni<sup>1</sup>my+muxmux/ 'to pulverize between the palms'

ni<sup>1</sup>mumuxmux (19) preconsonantal y-deletion

/i<sup>1</sup>caqliwiy=mu<sup>?</sup>/ 'cape, shoulder blanket'

?i<sup>1</sup>caqliwiy=mu<sup>?</sup> (17b) prevocalic glottal stop

?i<sup>1</sup>caqliw<sup>?</sup>mu<sup>?</sup> (19) preconsonantal y-deletion

A final /y/ is retained before other suffixes; there are no prefixes other than iy- 'plural' which end in /y/.

(19) preconsonantal y-deletion

y → ∅ / — {<sub>=</sub><sup>+</sup>} C oblig. for iy-; opt. for -š, nVš; suspended ---

$\left[ \begin{array}{l} +\text{son} \\ +\text{high} \\ -\text{back} \end{array} \right] \rightarrow \emptyset / \text{---} \left\{ \begin{array}{l} + \\ = \end{array} \right\} [+cons]$

286.20 h-Deletion in hik

The scope of this rule is small; it is limited almost entirely to the stem hik 'to do,' where /h/ is

deleted after /l/ in any prefix, either close

/qil=hik/ 'to look after, care for'

qilik (20) h-deletion in hik

or remote.

/p+al+hik/ 'don't do it!'

palik (20) h-deletion in hik

Another sporadic example of h-deletion across a close = boundary is

/k+su+mal=hawa?/ 'my sister-in-law (wife's sister)'

ksumalawa? (20) h-deletion

but otherwise /l/ is deleted before /h/ across close boundaries, as specified by rule (22).

(20) h-deletion in hik

h → ∅ / l + — in hik

$\left[ \begin{array}{l} -\text{ant} \\ -\text{cor} \\ -\text{back} \\ +\text{asp} \end{array} \right] \rightarrow \emptyset / [+lat] + \text{---}$

(286.21) Remote Prefix l-Deletion

Across remote boundaries, prefix-final /l/ is nearly always deleted preconsonantly. The morphemes involved are l- 'third person relative subject,' al- 'negative imperative,' al- 'subordinate,' and ?al- 'agentive.'

/ma+l+kitwon/ 'what comes out; one who comes out'

makitwon (21) remote prefix l-deletion

/p+iš+al+nan/ 'don't you (dual) go!'

pišanan (21) remote prefix l-deletion

/ʔal+matl+nanʔ/ 'coyote: the slinker'

ʔamatinanʔ (21) remote prefix l-deletion

Occasionally /l/ is retained optionally in al-,

/p+al+miš/ 'don't cry!'

palmiš - pamiš (21) remote prefix l-deletion

while retention of /l/ in ʔal- is an obligatory feature of a few forms.

/ʔal+xil/ ʔalxil 'one who is fat'

/ʔal+qili=siʔ/ ʔalqilisiʔ 'one who is nosy'

By the prior operation of the glottalization rule (18), /l/ is retained before any initial glottal stop as a single glottalized segment /l̥/.

/p+al+ʔuw/ 'don't eat it!'

pa<sup>l̥</sup>uw (18) glottalization of C + ʔ

(21) remote prefix l-deletion

l → ∅ / --- + C prestem

[+lat] → ∅ / --- + [+cons]

#### 286.22 Close Prefix l-Deletion

The only sonorant which occurs in prefix-final position across close boundaries is /l/, which may be deleted before certain classes of consonants.

a) The deletion of /l/ before dental consonants /t c s n l/ is quite regular.

/s+pil=tap/ 'he jumps in, falls in'

spitap (22a) close prefix l-deletion

/tal=siq/ 'to grasp firmly, tightly'

tasiq (22a) close prefix l-deletion

/xal=nowon/ 'to fly'

xol=nowon (10) low vowel harmony

xonowon (22a) close prefix l-deletion

There are a few rare exceptions to this rule, though never before the sonorants /n/ and /l/.

/xil=tikay/ xiltikay 'to float'

/mal=čiwikin/ malčiwikin 'to get tired'

b) The deletion of /l/ before palatal consonants /č/ and /š/ is optional.

/qil=čomin/ 'to soften by soaking [intran.]'

qilčomin ~ qičomin (22b) close prefix l-deletion

/yul=čho/ '[food] to be well cooked, well done'

yučho (22b) close prefix l-deletion

/yul=šot/ yulšot 'to peel by boiling'

c) The deletion of /l/ is optional before non-dental sonorants /m w y/. In some compounds /l/ is deleted,

/pil=mes/ 'to dart across, skip across'

pimes (22c) close prefix l-deletion

/xil=yoxon/ '[water] to be muddied, roiled'

xiyoxon (22c) close prefix l-deletion

while in others it is retained.

/mal=waq/ malwaq '[infant] to emerge from the womb'

/tal=masix/ talmasix 'to grasp three together'

/xal=mes/ 'to jump across'

xelmes (10) low vowel harmony

d) l-Deletion also occurs before /h/, although examples are rare.

/qil=hikɨn/ 'to bathe at dawn'

qihikɨn (22d) close prefix l-deletion

/tiwal=hikɨn/ 'to arrive at dawn'

tiwahikɨn (22d) close prefix l-deletion

l-Deletion occurs between one prefix and another,  
as well as between prefix and stem.

/qal=naqal=tun/ 'to tie two together'

qanaqatun (22a) close prefix l-deletion

/su+xul=wali=tap/ 'to spy on'

suxuwalitap (22c) close prefix l-deletion

(22) close prefix l-deletion

- l → ∅
- a) — = <sub>c</sub>dental
  - b) — = {ɔ̃ ɛ̃} optional      prestem
  - c) — = {m w y} optional
  - d) — = h

- [+son] → ∅
- a) — =  $\begin{bmatrix} +ant \\ +cor \end{bmatrix}$
  - b) — =  $\begin{bmatrix} -ant \\ +cor \end{bmatrix}$
  - c) — = [+son]
  - d) — =  $\begin{bmatrix} -ant \\ -cor \\ -back \\ +asp \end{bmatrix}$

### 286.23 Prefix Sonorant Cluster Vowel Epenthesis

The deletion of /l/ before non-dental sonorants  
/m w y/ across close boundaries by rule (22) is optional.  
If /l/ is not deleted, there is a further option to epen-  
thesize a vowel between /l/ and the following sonorant.

a) The epenthetic vowel agrees with the prefix vowel when it is a high vowel.

/yul=wil=pi/ '[food] to be burned onto (a pot)'

yuluwilpi (23a) prefix son-son V epenthesis

/su+yul=wew'/ 'to avert the gaze when angry'

suyuluwew' (23a) prefix son-son V epenthesis

Most such prefixes, however, show the pil- ~ pili- alternation (q.v., 271) and are ambiguous on this point. Only yul- 'of heat' and il- 'of water' do not have alternating forms; the few examples of [yulu-] are all phonologically conditioned.

b) The epenthetic vowel agrees with the stem vowel when the prefix vowel is low.

/tal=wil=pi/ 'to wrap around'

taliwilpi (23b) prefix son-son V epenthesis

/qal=wiy/ 'to tie up, wrap up'

qaliwiy (23b) prefix son-son V epenthesis

When both vowels are low, the low vowel harmony rule (10) guarantees identity of stem, prefix, and epenthetic vowels.

/pal=wayap=š/ 'to be crossed (like an X)'

palawayapš (23b) prefix son-son V epenthesis

/sus+al=yoxon/ 'to shake up a liquid'

sus+ol=yoxon (10) low vowel harmony

susoloyoxon (23b) prefix son-son V epenthesis

Vowel epenthesis may also occur between one prefix and another.

/tal=waš=nan'/ 'to reach out for'

talawašnan (23b) prefix son-son V epenthesis

/qal=wala=tepet/ 'to roll up and tie a bundle'

qel=wele=tepet (10) low vowel harmony

qeleweletepet (23b) prefix son-son V epenthesis

(23) prefix sonorant cluster vowel epenthesis

∅ → a)  $V_1 / v_1^{\text{high}} 1 \text{ ---} = [+son]$

b)  $V_2 / v_1^{\text{low}} 1 \text{ ---} = [+son] V_2$

a)  $\left[ \begin{array}{c} +\text{voc} \\ +\text{high} \end{array} \right] / \left[ \begin{array}{c} +\text{voc} \\ +\text{high} \end{array} \right] [+son] \text{ ---} = [+son]$

∅ → b)  $\left[ \begin{array}{c} +\text{voc} \\ \psi \end{array} \right] / \left[ \begin{array}{c} +\text{voc} \\ -\text{high} \end{array} \right] [+son] \text{ ---} = [+son] \left[ \begin{array}{c} +\text{voc} \\ \psi \end{array} \right]$

#### 286.24 Sporadic Glottalization

In certain lexical items, one segment undergoes an unpredictable glottalization, constant in each occurrence of that form. Except in remote affixes, this sporadic glottalization may affect almost any segment non-initial in the verb compound, especially /l/.

a) Obstruents may undergo sporadic glottalization in any non-initial position in stems, suffixes, and close prefixes,

/k+uš=p<sup>h</sup>at/ 'I rummage through it'

kušp<sup>h</sup>at (24a) sporadic glottalization

/ʔihiy=Vš 'length; tallness, stature'

ʔihiy=iš (12) suffix vowel specification

ʔihiyiš (24a) sporadic glottalization

/masix=Vč/ 'to be three, be a trio'

masix=ič (12) suffix vowel specification

masix=ič (24a) sporadic glottalization

mašixič (28) sibilant harmony

An obstruent as second member of a consonant cluster may be subject to sporadic glottalization.

/ti+aq=pey/ 'to stick to [trans.]'

t+aq=pey (5) prevocalic i/u deletion

t+eq=pey (10) low vowel harmony

teqpey (24a) sporadic glottalization

b) The sporadic glottalization of sonorants occurs only in intervocalic environments.

/s+kal=wiy/ 'he cuts a notch in it'

s+ka=wiy (22c) close prefix l-deletion

skawiy (24b) sporadic glottalization

/ata=apay/ 'to be on top of'

atalapay (9a) l-epenthesis

atalapay (24b) sporadic glottalization

(24) sporadic glottalization

a)  $c^{-son} \rightarrow \acute{c} / V(C)(=) \text{ —}$

b)  $c^{son} \rightarrow \acute{c} / V(=) \text{ — } V$

a)  $[-son] \rightarrow [+glott] / [+seg] (=) \text{ —}$

b)  $[+son] \rightarrow [+glott] / [+voc] (=) \text{ — } [+voc]$

286.25 -VC Derivative Suffix Glottalization

A stem-final glottal stop and the consonant of -VC derivative suffixes -Vn, -Vč, and -Vš, after the deletion



of the suffix vowel by rule (2), coalesce as a single glottalized segment.

/cayaʔ=Vn/ 'to make a cayaʔ (kind of basket)'

cayaʔ=n (2) derivative suffix V deletion

cayan̩ (25) -VC derivative suffix glottalization

/ʔoʔ=Vč/ 'to be wet, watery'

ʔoʔ=č (2) derivative suffix V deletion

ʔoč̩ (25) -VC derivative suffix glottalization

/ixtɪʔ=Vš/ 'roof, thatch'

ixtɪʔ=š (2) derivative suffix V deletion

ʔixtɪʔ=š (17b) prevocalic glottal stop

ʔixtɪš̩ (25) -VC derivative suffix glottalization

(25) -VC derivative suffix glottalization

ʔ = c → č̩ in -VC derivative suffixes

$$\begin{bmatrix} -\text{ant} \\ -\text{cor} \\ -\text{back} \\ +\text{glott} \end{bmatrix} = [+cons] \rightarrow \begin{bmatrix} +\text{cons} \\ +\text{glott} \end{bmatrix}$$

#### 286.26 Glottal Shift

When a morpheme-final glottal stop or glottalized segment appears in an environment in which glottalization is to be neutralized, the glottalization occasionally shifts one syllable back in the word onto the final segment of a suffix.

/k+ušteweʔ+wəš/ 'I pricked myself'

kuštewəwəš̩ (26) glottal shift

/s+lox̩=it/ 'he surpasses me'

s+lox̩=it̩ (26) glottal shift

šloxit̩ (27) pre dental palatalization of s/c

The first example here might be alternatively accounted for as sporadic glottalization of /š/ in -waš, but the second example supports the glottal shift rule, since personal object suffixes (i.e. -it 'me' in [šloxit̚]) are not subject to sporadic glottalization. Another clear example is

/qoŋ=Vš/ 'dog, pet (non-possessed)'

qoŋ=uš (12) suffix vowel specification

qonuš (26) glottal shift

(26) glottal shift: optional

a) ?  $\left\{ \begin{array}{c} \pm \\ \pm \end{array} \right\}$  (C)VC → (C)VĊ

b) Ċ  $\left\{ \begin{array}{c} \pm \\ \pm \end{array} \right\}$  (C)VC → c(C)VĊ

a)  $\left[ \begin{array}{c} -ant \\ -cor \\ -back \\ +glott \end{array} \right] \left\{ \begin{array}{c} \pm \\ \pm \end{array} \right\} ([+cons])[+voc][+cons] \rightarrow$   
 $([+cons])[+voc] \left[ \begin{array}{c} +cons \\ +glott \end{array} \right]$

$\left[ \begin{array}{c} +cons \\ +glott \end{array} \right] \left\{ \begin{array}{c} \pm \\ \pm \end{array} \right\} ([+cons])[+voc][+cons] \rightarrow$   
 $\left[ \begin{array}{c} +cons \\ -glott \end{array} \right] ([+cons])[+voc] \left[ \begin{array}{c} +cons \\ +glott \end{array} \right]$

#### 286.27 Predental Palatalization of s/c

Across morpheme boundaries, /s/ is regularly shifted to /š/ before the dental consonants /t n l/.

/s+tepuʔ/ 'he gambles'

štepuʔ (27) predental palatalization of s/c

/s+niʔ/ 'his neck'

šniʔ (27) predental palatalization of s/c

/s+lokin/ 'he cuts it'

šlokin (27) predental palatalization of s/c

With less regularity, /c/ becomes /č/ in this environment too; there are far fewer cases of preconsonantal /c/.

/pil=c=nunux/ 'to fall and blunt tip'

pi=c=nunux (22a) close prefix l-deletion

pičnunux (27) predental palatalization of s/c

An exception:

/xal=c=telelen/ 'to wear the hair tied at the neck'

xel=c=telelen (10) low vowel harmony

xecteelen (22a) close prefix l-deletion

The shift of /s/ to /š/ before the other dental consonants /s/ and /c/ is blocked by the following sibilant harmony rule (28), so the present rule specifies palatalization before non-strident dental consonants.

(27) predental palatalization of s/c

{s c} → {š č} / — {±} {t n l} optional for /c/

$$\begin{bmatrix} +\text{ant} \\ +\text{cor} \\ +\text{strid} \end{bmatrix} \rightarrow [-\text{ant}] / \text{---} \begin{bmatrix} \pm \end{bmatrix} \begin{bmatrix} +\text{cons} \\ +\text{ant} \\ +\text{cor} \\ +\text{strid} \end{bmatrix}$$

#### 286.28 Sibilant Harmony

The sibilant harmony rule governs the cooccurrence of dental and palatal spirants and affricates within the word by a process of retrogressive assimilation. All sibilants are either dental /s c/ or palatal /š č/, as determined by the last sibilant in the word.

With the exception of -us 'third singular object,'

/s+api+č<sup>h</sup>o=us/ 'he has a stroke of good luck'

s+api+č<sup>h</sup>olus (9b) l-epenthesis

sapic<sup>h</sup>olus (28) sibilant harmony

the sibilants in suffixes are all palatal (e.g. -waš 'past,' -Vč 'stative verbalizer,' -šaši 'reflexive,' etc.), so that the direction of sibilant harmony from suffixes is prevailingly toward palatalization.

/s+xalam=š/ 'it is wrapped'

šxalamš (28) sibilant harmony'

/k+sɨpɨt+waš/ 'I made acorn mush'

kšɨpɨtwaš (28) sibilant harmony

/s+apɨ+č<sup>h</sup>o=us+waš/ 'he had a stroke of good luck'

s+apɨ+č<sup>h</sup>olus+waš (9b) l-epenthesis

šapɨč<sup>h</sup>olušwaš (28) sibilant harmony

Examples of sibilant harmony working from stems into prefixes show a more even distribution of dental assimilation

/s+ušla=sɨq/ 'he presses it tight'

suslasɨq (28) sibilant harmony

and palatal assimilation.

/k+su+šoyɨn/ 'I darken it, make it black'

kšušoyɨn (28) sibilant harmony

Sibilant harmony operates even across long stretches of intervening syllables devoid of sibilants,

/k+su+kɨli=mekeken=š/ 'I straighten myself up'

k+šusukɨli=mekeken=š (28) sibilant harmony

kšukɨlimekekeč (33b) n + š → č/č<sup>h</sup> affrication

but occasional exceptions to the rule appear in the corpus, particularly across longer words,

/no+k+su+wati+č<sup>h</sup>oʔ/ noksuwatič<sup>h</sup>oʔ 'I'll make him stop'  
or where the pre-dental palatalization rule (27) operates.

/s+ti+yep=us/ 'he tells him'

štiyepus (27) pre dental palatalization of s/c

In a few examples, sibilant harmony may operate across only part of the word, as in the third person dual marker s-iš- in

/s+iš+lu=sisin/ 'they (dual) are grown awry'

šišlusisin (28) sibilant harmony

The sibilant harmony rule (28) follows the pre dental palatalization rule (27), where palatalization may spread

/s+is=tī?/ 'he finds it'

s+iš=tī? (27) pre dental palatalization of s/c

šiš-tī? (28) sibilant harmony

or else be reversed by subsequent vowel harmony.

/s+net=us/ 'he does it to him'

š+net=us (27) pre dental palatalization of s/c

snetus (28) sibilant harmony

(28) sibilant harmony

a) {s c} → {š č} / — (C<sub>1</sub><sup>n</sup>) {±} {š č}

b) {š č} → {s c} / — (C<sub>1</sub><sup>n</sup>) {±} {s c}

$\left[ \begin{array}{l} +\text{cor} \\ +\text{strid} \end{array} \right] \rightarrow [\alpha\text{ant}] / \text{---} ([+\text{cons}]_1^n) \{ \pm \} \left[ \begin{array}{l} \alpha\text{ant} \\ +\text{cor} \\ +\text{strid} \end{array} \right]$

#### 286.29 Back Stop Assimilation

Before a plain /q/, unaspirated and non-glottalized, a preceding /k/ (i.e. k- 'first person singular') is backed to the same point of articulation. By the subsequent operation of the geminate obstruent aspiration rule (30), this assimilated sequence becomes /q<sup>h</sup>/.

/k+qoʔ/ 'my dog, pet'

q+qoʔ (29) back stop assimilation

q<sup>h</sup>oʔ (30) geminate obstruent aspiration

/k+qili=weʔ/ 'I am sleepy'

q+qili=weʔ (29) back stop assimilation

q<sup>h</sup>iliweʔ (30) geminate obstruent aspiration

Before aspirated or glottalized /q/, /k/ remains unchanged (although subphonemically it develops an aspirated release (q.v., 235)).

/k+q<sup>h</sup>apq<sup>h</sup>ap/ kq<sup>h</sup>apq<sup>h</sup>ap 'I am thin, slender'

/k+q<sup>h</sup>uluyuq/ kq<sup>h</sup>uluyuq 'my brain'

This rule could also apply to the prefix tak- 'with the hand' if it appeared before /q/, but there are no such examples.

(29) back stop assimilation

$$k \rightarrow q / \text{---} \left\{ \begin{array}{l} + \\ = \end{array} \right\} q \left\{ \begin{array}{l} -\text{asp} \\ -\text{glott} \end{array} \right.$$

$$\left[ \begin{array}{l} -\text{cont} \\ -\text{cor} \\ +\text{high} \end{array} \right] \rightarrow [-\text{high}] / \text{---} \left\{ \begin{array}{l} + \\ = \end{array} \right\} \left[ \begin{array}{l} -\text{cont} \\ -\text{high} \\ +\text{back} \\ -\text{glott} \\ -\text{asp} \end{array} \right]$$

### 286.30 Geminate Obstruent Aspiration

A geminate obstruent coalesces to a single aspirated segment, provided that the second obstruent is neither glottalized nor aspirated.

/k+kuti/ 'I see'

k<sup>h</sup>uti (30) geminate obstruent aspiration

/p+popoč/ 'you paternal grandfather'

p<sup>h</sup>opoč (30) geminate obstruent aspiration

/s+sinay/ 'he puts it away'

shinay (30) geminate obstruent aspiration

By the prior operation of the sibilant harmony rule (28), sequences of /s-š/ and /š-s/ become aspirates too.

/s+šay/ 'his daughter'

ššay (28) sibilant harmony

ghay (30) geminate obstruent aspiration

This rule operates across close boundaries also.

/s+was=sisin/ 'the terrain is rugged'

swashisin (30) geminate obstruent aspiration

/k+tak=kuy/ 'I take hold of it'

ktakhuy (30) geminate obstruent aspiration

When the second consonant is aspirated or glottalized, reduction of the cluster to an aspirate is blocked.

/ma+k+k<sup>h</sup>iwis/ makk<sup>h</sup>iwis 'my stone jar'

/ʔini+k+k<sup>h</sup>ili=tap/ ʔinikkilitap 'I don't rush in'

Here, there is a release between the two identical consonants; the first has some degree of subphonemic aspiration (as described in 235 on subphonemic detail). The only exception to this rule is /x/, which has no aspirated counterpart. Geminate clusters of /x/ arise only in reduplicated environments (e.g. /xuxaw<sup>h</sup>+ʔ + R/ xuxuxaw<sup>h</sup> 'coyotes') by rule (36), where the sequence /xx/ is simplified to /x/.

(30) geminate obstruent aspiration

$C_1 \left\{ \begin{array}{l} + \\ - \end{array} \right\} C_1 \rightarrow C_1^h$  where  $C_1$  is -son, -glott, -asp

$$\begin{bmatrix} -\text{son} \\ \psi \end{bmatrix} \left\{ \begin{matrix} + \\ = \end{matrix} \right\} \begin{bmatrix} -\text{son} \\ -\text{glott} \\ -\text{asp} \\ \psi \end{bmatrix} \rightarrow \begin{bmatrix} -\text{son} \\ +\text{asp} \\ \psi \end{bmatrix}$$

## 286.31 Aspiration of C + h

A sequence of obstruent plus /h/ coalesces as a single aspirated segment.

/k+hawaʔ/ 'my maternal aunt'

k<sup>h</sup>awaʔ (31) aspiration of C + h

/ma+p+hik/ 'what you own'

map<sup>h</sup>ik (31) aspiration of C + h

/s+iš+halala 'they (dual) are quarreling

š+iš+halala (28) sibilant harmony

šiš<sup>h</sup>alala (31) aspiration of C + h

Treatment of the aspirate as a single segment is necessitated by the option of carrying aspiration over in CVC reduplication by rule (36),

/k+hawaʔ + R/ 'my maternal aunts'

k<sup>h</sup>awaʔ (31) aspiration of C + h

k<sup>h</sup>awk<sup>h</sup>awaʔ (36d) CVC reduplication

as treated in more detail in the discussion of rule (36).

(31) aspiration of C + h

c<sup>-son</sup> + h → c<sup>h</sup>

$$[-\text{son}] + \begin{bmatrix} -\text{ant} \\ -\text{cor} \\ -\text{back} \\ +\text{asp} \end{bmatrix} \rightarrow \begin{bmatrix} -\text{son} \\ +\text{asp} \end{bmatrix}$$

## 286.32 Sporadic Aspiration with Derivative Suffixes

The verbal derivative suffixes -Vn and -Vč have the



effect of aspirating a preceding stem-final /p/ or /k/ in a few morphemes.

/ʔap=Vn/ 'to build a house'

ʔap=an (12) suffix vowel specification

ʔap<sup>h</sup>an (32) sporadic aspiration

/liyɨk=Vč/ 'to be in the middle'

liyɨk=ɨč (12) suffix vowel specification

liyɨk<sup>h</sup>ɨč (32) sporadic aspiration

Other suffixed forms, such as

/ʔap+iwaš/ ʔapiwaš 'a ruined, deserted house'

show that aspiration cannot be regarded as inherent in the stem (i.e. \*ʔap<sup>h</sup>). Neither is aspiration inherent in the suffixes -Vn and -Vč, which sometimes glottalize a preceding segment rather than aspirating it, by the sporadic glottalization rule (24).

(32) sporadic aspiration with derivative suffixes: opt.

$\{p\ k\} \rightarrow \{p^h\ k^h\} / \text{---} = \begin{cases} -Vč \\ -Vn \end{cases}$  optional with derivatives

$\begin{bmatrix} -cont \\ -cor \\ \alpha ant \\ -dhigh \\ -glott \end{bmatrix} \rightarrow [+asp] / \text{---} = [+voc][+cons]$

286.33 n + š → č/č<sup>h</sup> Affrication

A sequence of /n/ plus /š/ is affricated to /č/ or /č<sup>h</sup>/; the loss of the /n/ is by a diachronic rule (discussed in 275 on the alternation of /l/ and /n/) which is no longer operative synchronically.

a) Before a vowel in the same morpheme to which the /š/ belongs, the affricated segment is aspirated /č<sup>h</sup>/.

/tapšun=šaš/ 'bog, marsh'

tapšučhaš (33a) n + š → č/č<sup>h</sup> affrication

/k+ušta=aqša=Vn=šaši/ 'I cure myself'

k+ušta=aqša=n=šaši (2a) derivative suffix V deletion

k+uštalaqša=n=šaši (9a) l-epenthesis

k+uštalaqša=n=šiši (13) central V suffix dissim.

k+uštalaqša=n=šiši (24) sporadic glottalization

kuštalaqšač<sup>h</sup>šiši (33a) n + š → č/č<sup>h</sup> affrication

b) In other environments, the affricated segment is unaspirated /č/. These environments include before a following consonant, with the nominalizing suffix -štaš,

/xančiyin=štaš/ 'something disgusting'

xančiyin=štaš (28) sibilant harmony

xančiyičtaš (33b) n + š → č/č<sup>h</sup> affrication

and before an immediately following morpheme boundary, with the suffix -š 'intransitive; plural object.'

/s+uš=qen=š/ 'it is all used up'

š+uš=qen=š (28) sibilant harmony

šušqeč (33b) n + š → č/č<sup>h</sup> affrication

/s+lok<sup>i</sup>n=š+iy/ 'it is broken again'

š+lok<sup>i</sup>n=š+iy (28) sibilant harmony

šlokičiy (33b) n + š → č/č<sup>h</sup> affrication

The deletion of the /n/ is included in this rule, since there are no other synchronic traces of n-deletion. Possible glottalization of final /n/ is lost in the process.

/ʔini+s+axni=sukuta<sup>n</sup>=š/ 'he has no pity'

ʔini+š+axni=šukuta<sup>n</sup>=š (28) sibilant harmony

ʔinišaxnišukutač (33b) n + š → č/č<sup>h</sup> affrication

(33)  $n + \xi \rightarrow \check{c}/\check{c}^h$  affrication

$$n = \xi \rightarrow \begin{cases} \text{a) } \check{c}^h & / \text{ --- } v \\ \text{b) } \check{c} & / \text{ ---} \end{cases}$$

$$\begin{bmatrix} +\text{nasal} \\ +\text{cor} \end{bmatrix} = \begin{bmatrix} +\text{cont} \\ +\text{high} \\ +\text{strid} \end{bmatrix} \rightarrow \begin{cases} \text{a) } \begin{bmatrix} -\text{cont} \\ +\text{high} \\ +\text{strid} \\ +\text{asp} \end{bmatrix} & / \text{ --- } [+v\text{oc}] \\ \text{b) } \begin{bmatrix} -\text{cont} \\ +\text{high} \\ +\text{strid} \\ -\text{glott} \\ -\text{asp} \end{bmatrix} & / \text{ ---} \end{cases}$$

#### 286.34 Nasal Assimilation

There is an optional, though rare, assimilation of nasals to the position of articulation of following stops of certain classes.

a) The /m/ of am- 'indefinite subject' may be assimilated to a dental stop.

/s+am+ti+lokin/ 'they cut it off; it is cut off'

samtilokin ~ santilokin (34a) nasal assimilation

/s+am+tepu?/ 'they gamble'

samtepu? ~ santepu? (34a) nasal assimilation

b) Final /n/ may be assimilated to the labial stop of the suffix -pi 'locativizer.'

/qunun=pi/ 'to do, act'

qunumpi (34b) nasal assimilation

/s+xuti+nan=pi/ 'it bothers him, is harmful to him'

s+xuti+nan=pi ~ s+xuti+nam=pi (34) nasal assimilation

sxutinanpi ~ sxutinampi (39a) precons. deglott.

There are practically no examples of /n/ before /k/ and /q/, except by a sporadic shift of /l/ to /n/, as in

/aqul=kot/ aqunkot 'to short, low'

and there is no evidence of assimilation here. Neither does /m/ assimilate to a following /k/ or /q/. It should be noted that nasal assimilation never occurs in reduplicated environments (e.g. /p+?aniš+? + R/ 'panpaniš' 'your paternal uncles').

(34) nasal assimilation: optional

a) m → n / — + {t c}

b) n → m / — = p

[+nasal] → [αcor] / — {+} 

-cont
+ant
αcor

#### 286.35 Expressive Reduplication

There are three mutually exclusive patterns of expressive reduplication which need not be ordered with respect to other rules; these three are all treated together under a single heading. They are medial, bisyllabic, and wuluwul reduplication, patterned like the corresponding forms of lexical reduplication (discussed in 264 - 266). None of these is as common as CVC reduplication by rule (36), and they are all limited to verbs, except for a few rare nominal derivatives (e.g. mu'cu'cu? 'kind of small bead' from mu'cu? 'small one,' or wi'yiwiy 'tapeworm' from wi'y 'to be notched').

In the following discussion, the patterns of medial, bisyllabic, and wuluwul reduplication are abbreviated in the derivations as R<sub>1</sub>, R<sub>2</sub>, and R<sub>3</sub> respectively. CVC reduplication by rule (36), which is much more common,

is abbreviated simply as R in the derivations.

a) Medial Reduplication

The medial consonant of a CVCVC stem may be reduplicated, with the stem vowel inserted between the two occurrences of the medial consonant. There are no examples of medial reduplication of CVCVC stems in which the two vowels are not identical.

/s+mixin + R<sub>1</sub>/ 'he is very hungry'

smixixin (35a) medial reduplication

/ʔini+p+siyʔ + R<sub>1</sub>/ 'don't miss (the mark)!'

ʔinipsiyʔiyʔ (35a) medial reduplication

Even a CVC stem may take medial reduplication when the -Vn and -Vč augments (q.v., 612.1) give it the form CVCVC.

/s+wi+p<sup>h</sup>at=Vn + R<sub>1</sub>/ 'he knocks it to pieces'

s+wi+p<sup>h</sup>at=an (12) suffix vowel specification

swip<sup>h</sup>atatan (35a) medial reduplication

CVC reduplication by rule (36) may cooccur with medial reduplication.

/ma+iy+al+aqi=mow=Vn + R<sub>1</sub> + R/ 'the fancy ones'

ma+y+al+aqi=mow=Vn (8) i-deletion in iš-/iy-

ma+y+al+aqi=mow=on (12) suffix vowel specification

ma+y+al+aqi=mowowon (35a) medial reduplication

mayalaqlaqimowowon (36c) CVC reduplication

b) Bisyllabic Reduplication

While bisyllabic reduplication occurs lexically with simple unprefixated stems (e.g. yuluyuluk 'to be angry'), syntactic bisyllabic reduplication occurs only with

prefixed stems, although the stem may be a uniquely occurring stem plus some formative (e.g. ax=k<sup>h</sup>ulun 'to make a racket').

/s+ali+kow=Vn + R<sub>2</sub>/ 'it is soaring'

s+ali+kow=on (12) suffix vowel specification

salikowokowon (35b) bisyllabic reduplication

/s+quti+woyon=š + R<sub>2</sub>/ 'it is very crooked'

š+quti+woyon=š (28) sibilant harmony

š+quti+woyoč (33b) n + š → č/č<sup>h</sup> affrication

šqutiwoyowoyoč (35b) bisyllabic reduplication

Although the final consonant of the CVCVC stem is dropped in the first reduplicated sequence (e.g. woyo-woyoč), if a prefix ends in a consonant, that consonant is reduplicated along with the stem-initial consonant. All of the examples involve either /q/ or /x/.

/s+max=telen + R<sub>2</sub>/ '[a rope] is dragging on the ground'

s+mex=telen (10) low vowel harmony

smextelextelen (35b) bisyllabic reduplication

There are a few verbs which must take either medial or bisyllabic reduplication, with the simple unreduplicated form unattested.

/s+ax=k<sup>h</sup>ulun + R<sub>1</sub>/ 'he is making a racket'

saxk<sup>h</sup>ululun (35a) medial reduplication

/s+ax=k<sup>h</sup>ulun + R<sub>2</sub>/ 'he is making a racket'

saxk<sup>h</sup>uluxk<sup>h</sup>ulun (35b) bisyllabic reduplication

Another such verb is /max=telen/ '[rope] to drag on the ground,' which appears as either [mextelelen] or [mextelextelen].

c) wuluwul Reduplication

Productive examples of this pattern, based on a CVC stem, are quite rare; a non-verbal example is nox ~ noxonox, both meaning 'something great, large.' A few verbs must take either bisyllabic or wuluwul reduplication.

/s+maq=su=wol + R<sub>3</sub>/ 'he is swinging a rope'

smaqsuwollowol (35c) wuluwul reduplication

/s+maq=su=wol=Vn + R<sub>2</sub>/ 'he is swinging a rope'

s+maq=su=wol-on (12) suffix vowel specification

smaqsuwollowolon (35b) bisyllabic reduplication

(35) expressive reduplication: optional

a) medial reduplication

C<sub>1</sub>VC<sub>2</sub>VC<sub>3</sub> -> C<sub>1</sub>VC<sub>2</sub>VC<sub>2</sub>VC<sub>3</sub>

b) bisyllabic reduplication

(C<sub>x</sub>)=C<sub>1</sub>VC<sub>2</sub>VC<sub>3</sub> -> (C<sub>x</sub>)C<sub>1</sub>VC<sub>2</sub>V(C<sub>x</sub>)C<sub>1</sub>VC<sub>2</sub>VC<sub>3</sub>

c) wuluwul reduplication

C<sub>1</sub>VC<sub>2</sub> -> C<sub>1</sub>VC<sub>2</sub>VC<sub>1</sub>VC<sub>2</sub>

286.36 CVC Reduplication

CVC reduplication is by far the most common mode of reduplication in Chumash (cf. 261 on lexical CVC reduplication). CVC reduplication with nouns denotes plurality or collectivity, while in verbs it has a repetitive, intensive, or continuative force. The process of CVC reduplication in nouns includes a simultaneous glottalization of the final consonant, or else glottal stop after a final vowel. In the derivations, CVC reduplication of nouns is represented as /+ʔ + R/, and the glottalization

of final consonants occurs in the same operation as CVC reduplication. If final glottalization were to occur before reduplication, by the usual  $C + ? \rightarrow \acute{C}$  glottalization rule (18), yet another step would be necessary in many derivations to neutralize glottalization in the initial sequence of CVC forms (e.g. for the stage  $*x\acute{i}p\acute{x}i\acute{p}$  in  $/x\acute{i}p+? + R/$   $x\acute{i}p\acute{x}i\acute{p}$  'rocks, stones'). The suffix  $-iwa\acute{s}$  'dead, defunct' does not count as part of the stem in the final glottalization of nouns, as shown by  $/kawayu+iwa\acute{s}/$  in  $/ma+p+kawayu+?+iwa\acute{s} + R/$  'the horses that were yours'

mapkawkawayu<sup>?</sup>iwa<sup>š</sup> (36d) CVC reduplication

Stems which do not fit the dominant CVC pattern are brought into conformity with it for the purposes of CVC reduplication. These are CV(?) stems, stems with initial consonant clusters, and stems with initial vowels.

a) CV(?) stems lacking final consonants are reduplicated with /h/ as final consonant of the initial CVC sequence. Practically all of the examples are nouns, taking a final glottal stop:  $CV(?) + R \rightarrow CVh-CV?$ .

$/ku+? + R/$  'people'

kuhku<sup>?</sup> (36a) CVC reduplication

$/ya^{?+?} + R/$  'arrows'

yahya<sup>?</sup> (36a) CVC reduplication

When a lexically reduplicated CV(?) stem is subject to CVC reduplication, it follows the same pattern.

$/s+pepe^{?+?} + R/$  'his older siblings'

spehpepe<sup>?</sup> (36a) CVC reduplication

The few verbal examples of reduplicated CV(?) stems do



not all agree on the /h/ of the initial sequence; some have the /h/,

/s+yiʔ + R/ 'he is spending the night'

syihyiʔ (36a) CVC reduplication

while others do not.

/s+c̣i + R/ 'it is sharp'

ṣi c̣i (36a) CVC reduplication

A non-CV(?) stem following this pattern is

/s+woʔoʔ + R/ 'he is lying'

swohwoʔoʔ (36a) CVC reduplication

b) Stem-initial consonant clusters may or may not be retained intact in CVC reduplication. The initial consonant is usually deleted in the second sequence,

/skon+ʔ + R/ 'worms, reptiles'

skonkon (36b) CVC reduplication

/štexex+ʔ + R/ 'rivers'

štextexex (36b) CVC reduplication

but it may be optionally retained.

/qweleqweł+ʔ + R/ 'cottonwood trees'

qwełqweleqweł (36b) CVC reduplication

/xšap+ʔ + R/ 'rattlesnakes'

xšapxšap ~ xšapšap (36b) CVC reduplication

/cyiʔw+ʔ + R/ 'kinds, sorts'

cyiʔwcyiʔw ~ cyiʔwyiʔw (36b) CVC reduplication

cyiʔwcyiʔw ~ cyiʔwyiʔw (39a) preconsonantal deglott.

There are too few examples of this sort to determine what factors govern the deletion or retention of the initial consonant of the cluster. However, initial clusters

which might arise across morpheme boundaries are never reduplicated; e.g.

/s+kitwon + R/ 'it is coming out'

skitkitwon (36d) CVC reduplication

would never appear alternatively as \*[skitskitwon].

c) With vowel initial stems, the reduplicated sequence maintains an invariant CVC shape by including any consonant immediately preceding the stem.

/s+atik + R/ 'he is alive'

satsatik (36c) CVC reduplication

/ma+l+eqwel + R/ 'what he is doing, making'

maleqleqwel (36c) CVC reduplication

/k+ičtîñ+ʔ + R/ 'my children'

kičkičtîñ (36c) CVC reduplication

Stem-initial glottal stop is treated as a consonant when no other consonant precedes

/ʔonoq+ʔ + R/ 'turkey vultures'

ʔonʔonoq (36d) CVC reduplication

d) With CVC(...) stems, reduplication is a straightforward matter.

/kawayu+ʔ + R/ 'horses (Span. caballo)'

kawkawayuʔ (36d) CVC reduplication

/s+xolox+ʔ + R/ 'his ribs'

sxolxolox (36d) CVC reduplication

/k+lokîñ + R/ 'I am cutting it'

k+loklokîñ (36d) CVC reduplication

kloklokîñ (39a) preconsonantal deglottalization

In the CVC reduplication of stems with initial /h/ and /ʔ/,

these segments do not coalesce with the preceding consonant as single aspirated or glottalized segments.

/huču+ʔ + R/ 'dogs'

hučučuʔ (36d) CVC reduplication

/ʔal+aqša=Vn+ʔ + R/ 'the dead'

ʔal=aqša=n (2a) derivative suffix V deletion

ʔalʔalaqšanʔ (36d) CVC reduplication

But by the prior operation of the C + ʔ → Ć glottalization rule (18), stem-initial glottal stop coalesces with any preceding consonant as a single glottalized segment. This glottalized segment is carried over in reduplication, just as are underlying glottalized segments (e.g. /ʔaya+ʔ + R/ ʔayʔayaʔ 'abalones').

/k+ʔaniš+ʔ + R/ 'my paternal uncles'

ʔaniš (18) glottalization of C + ʔ

kankanišʔ (36d) CVC reduplication

/s+ʔamɪn + R/ 'he is naked'

ʔamɪn (18) glottalization of C + ʔ

samsamɪnʔ (36d) CVC reduplication

Underlying aspirates are reduplicated intact, as in

/ǰhumaš+ʔ + R/ 'islanders'

ǰhumǰhumašʔ (36d) CVC reduplication

but the treatment of aspirated segments which may arise across morpheme boundaries is less regular. Aspiration may be carried over, as in

/k+kuti + R/ 'I am looking, seeing'

k<sup>h</sup>uti (30) geminate obstruent aspiration

k<sup>h</sup>utk<sup>h</sup>uti (36d) CVC reduplication

/k+hawaʔ+ʔ + R/ 'my maternal aunts'

khawaʔ (31) aspiration of C + h

khawkhawaʔ (36d) CVC reduplication

or it may not be. The effect here is essentially an anomaly in the rule ordering, since reduplication must be regarded as preceding aspiration.

/k+kuti + R/ 'I am looking, seeing'

k+kutkuti (36d) CVC reduplication

khutkuti (30) geminate obstruent aspiration

/k+hawaʔ+ʔ + R/ 'my maternal aunts'

k+hawhawaʔ (36d) CVC reduplication

khawhawaʔ (31) aspiration of C + h

The example [khutkuti] could simply be attributed to a failure on Harrington's part to hear or transcribe aspiration, but this is certainly not true of [khawhawaʔ].

In addition to such alternative pairs as [khutkhuti ~ khutkuti] and [khawkhawaʔ ~ khawhawaʔ], further evidence of this anomalous ordering is that geminate clusters created through reduplication may undergo aspiration, transcribed by Harrington in such environments as both pre- and post-aspirated.

/s+asmimn + R/ 'it is humming, buzzing'

sassasmimn (36c) CVC reduplication

sas<sup>h</sup>asmimn ~ sahsasmimn (30) geminate aspiration

The aspiration rules (30) and (31) seem to be optionally ordered relative to CVC reduplication by rule (36), except in those cases in which CVC reduplication creates a geminate cluster for rule (30) to operate on.

The environment of CVC reduplication is generally the first CVC sequence following person/number markers. This initial CVC sequence may belong either to a stem or to a prefix, or it may straddle both.

/s+pil=tap + R/ 'it is falling in'

s+pi=tap (22a) close prefix l-deletion

spitpitap (36d) CVC reduplication

However, certain prefixes regularly shift reduplication onto the following CVC sequence. These include around a dozen verbal prefixes in position classes immediately following person/number markers (cf. 683 for a more detailed discussion of non-reduplicating prefixes),

/s+akti+kuti + R/ 'he comes to see'

saktikutkuti (36d) CVC reduplication

/k>wi+čeq + R/ 'I pound it to pieces'

kwičeqčeq (36d) CVC reduplication

as well as a few unanalyzable noun formatives (q.v., 513).

/ʔaya=tulutul+ʔ + R/ 'butterflies'

ʔayatultulutul (36d) CVC reduplication

/ʔanaq=čan+ʔ + R/ 'old women'

ʔanaqčančan (36d) CVC reduplication

In addition, two irregular reduplications are /ʔeneq+ʔ + R/ ʔeneqneq 'women' and ʔihiy 'to be long' (e.g. [sihiyhij] 'it is very long') and its derivative /ʔihiy+ʔ+ʔ + R/ ʔihiyhiy 'men' (cf. /s+iy+is=hiy+ʔ + R/ siyis<sup>h</sup>iyhiy 'their husbands').

(36) CVC reduplication: optional

- a)  $\begin{cases} CV(?) \rightarrow CVh-CV? & \text{in noun} \\ CV(?) \rightarrow CVh-CV(?) & \text{optional in verb} \\ C_1V_1C_1V_1(?) \rightarrow CVh-CVCV(?) & \text{in noun} \end{cases}$
- b)  $C_1C_2VC_3 \rightarrow \begin{cases} C_1C_2VC_3-C_1C_2VC_3 \\ C_1C_2VC_3-C_2VC_3 \end{cases}$  in noun
- c)  $C_1 + VC_2 \rightarrow C_1VC_2-C_1VC_2$
- d)  $C_1VC_2 \rightarrow C_1VC_2-C_1VC_2$

### 286.37 Glottal Infix

Like the various modes of syntactic reduplication described in rules (35) and (36), glottal infixation is an expressive phonological process; it has an intensifying force. A CVC sequence, the final syllable of polysyllabic forms, shows an infixēd glottal stop: CVC  $\rightarrow$  CV<sup>ʔ</sup>VC

/mɪk + -ʔ-/ 'very far away'

mɪ<sup>ʔ</sup>ɪk (37) glottal infix

/nox + -ʔ-/ 'a very large one'

no<sup>ʔ</sup>ox (37) glottal infix

/s+yuxpan + -ʔ-/ 'he is very sick'

syuxpa<sup>ʔ</sup>an (37) glottal infix

/s+utišič+waš + -ʔ-/ 'it was very hard, difficult'

š+utišič+waš (28) sibilant harmony

šutišičwa<sup>ʔ</sup>aš (37) glottal infix

Stress was marked in this last example as [šutišičwa<sup>ʔ</sup>aš].

While little can be said about stress (cf. 227), it appears that penultimate stress assignment follows glottal infixation here.

(37) glottal infix: optional

$CV_1C \rightarrow CV_1^?V_1C / \_ \#$

$[+cons] \left[ \begin{array}{c} +voc \\ \psi \end{array} \right] [+cons] \rightarrow$

$[+cons] \left[ \begin{array}{c} +voc \\ \psi \end{array} \right] \left[ \begin{array}{l} -ant \\ -cor \\ -back \\ +glott \end{array} \right] \left[ \begin{array}{c} +voc \\ \psi \end{array} \right] [+cons]$

286.38  $c + s \rightarrow c^h$  Affricate-Spirant Aspiration

Parallel to the aspiration of a geminate obstruent cluster by rule (30), a sequence of affricate plus the corresponding spirant becomes an aspirated affricate:

$c + s \rightarrow c^h, \check{c} + \check{s} \rightarrow \check{c}^h.$

/s+šuyuač=šaši/ 'it is formidable'

s+šuyuač=ššiši (13) central V suffix dissimilation

š+šuyuač=ššiši (28) sibilant harmony

š<sup>h</sup>uyuač=ššiši (30) geminate obstruent aspiration

š<sup>h</sup>uyuač<sup>h</sup>šiši (38) affricate-spirant aspiration

Such a sequence may arise through CVC reduplication.

/s+icyula<sup>?</sup>=it + R/ 'he is very fond of me'

s+icyula<sup>?</sup>it (9c) l-epenthesis

sicsicyula<sup>?</sup>it (36c) CVC reduplication

sic<sup>h</sup>icyula<sup>?</sup>it (38) affricate-spirant aspiration

But unlike the more general geminate aspiration rule (30), which must apply both before and after the CVC reduplication rule (36), there is no compelling reason to order this highly specific rule (38) to precede reduplication.

(38) c + s → c<sup>h</sup> affricate-spirant aspiration

a) c  $\left\{ \begin{smallmatrix} + \\ \_ \\ \_ \end{smallmatrix} \right\}$  s → c<sup>h</sup>

b) č  $\left\{ \begin{smallmatrix} + \\ \_ \\ \_ \end{smallmatrix} \right\}$  š → č<sup>h</sup>

$$\left[ \begin{array}{l} -\text{cont} \\ +\text{strid} \end{array} \right] \left\{ \begin{array}{l} + \\ \_ \\ \_ \end{array} \right\} \left[ \begin{array}{l} +\text{cont} \\ +\text{cor} \\ +\text{strid} \end{array} \right] \rightarrow \left[ \begin{array}{l} -\text{cont} \\ +\text{cor} \\ +\text{strid} \\ +\text{asp} \end{array} \right]$$

### 286.39 Preconsonantal Deglottalization

Glottalization is neutralized in preconsonantal environments across morpheme boundaries.

a) The glottalization of a final consonant is lost before a consonant-initial suffix.

/sɪp̚=muʔ/ 'load, burden'

sɪpmuʔ (39a) preconsonantal deglottalization

/s+xuti+naŋ=pi/ 'it is bothersome, harmful'

sxutinapi (39a) preconsonantal deglottalization

/p+tišik̚+waš/ 'you recognized him'

ptišikwaš (39a) preconsonantal deglottalization

This rule follows reduplication, since any segment brought into preconsonantal position by reduplication is deglottalized.

/s+k̚om̚in + R/ 'the wind is dying down'

s+k̚om̚k̚om̚in (36d) CVC reduplication

skom̚k̚om̚in (39a) preconsonantal deglottalization

b) A final glottal stop is dropped before a following consonant.

/noʔ+k̚š/ 'I myself'

nok̚š (39b) preconsonantal deglottalization



/loʔ=wun/ 'those over there'

lowun (39b) preconsonantal deglottalization

/k+ixtɪʔ=š/ 'I do much thatching'

kixtɪš (39b) preconsonantal deglottalization

Note the deletion of glottalization in [kixtɪš] above versus its retention before a derivative suffix by rule (25) in /ixtɪʔ=Vš/ ʔixtɪš 'roof, thatch.'

(39) preconsonantal deglottalization

a)  $\dot{c} \rightarrow c$

b)  $\text{ʔ} \rightarrow \emptyset$

/ —  $\left\{ \begin{array}{l} + \\ = \end{array} \right\} c$

a)  $\left[ \begin{array}{l} -\text{son} \\ +\text{glott} \end{array} \right] \rightarrow [-\text{glott}]$

b)  $\left[ \begin{array}{l} -\text{ant} \\ -\text{cor} \\ -\text{back} \\ +\text{glott} \end{array} \right] \rightarrow \emptyset$

/ —  $\left\{ \begin{array}{l} + \\ = \end{array} \right\} [+cons]$

#### 286.40 Preconsonantal Deaspiration

An aspirated segment is deaspirated when it comes to stand before a following consonant. Since no morpheme ends in an aspirated segment, the only environment in which this rule applies is following the CVC reduplication rule (36).

/ʔoq<sup>h</sup>oš<sup>h</sup>+ʔ + R/ 'sea otters'

ʔoq<sup>h</sup>ʔoq<sup>h</sup>oš<sup>h</sup> (36d) CVC reduplication

ʔoqʔoq<sup>h</sup>oš<sup>h</sup> (40) preconsonantal deaspiration

/s+am+tach<sup>h</sup>an + R/ 'they are playing tach<sup>h</sup>an (a game)'

s+am+tach<sup>h</sup>tach<sup>h</sup>an (36d) CVC reduplication

samtactach<sup>h</sup>an (40) preconsonantal deaspiration

## (40) preconsonantal deaspiration

$$ch \rightarrow c / \text{---} c$$

$$\begin{bmatrix} -son \\ +asp \end{bmatrix} \rightarrow [-asp] / \text{---} [+cons]$$

## 286.41 Presuffix Obstruent Deglottalization

The glottalization of a final obstruent is preserved before the verbal derivative suffixes -Vn and -Vč and the nominal suffix -iwaš 'dead, defunct,'

/ʔayip=Vn/ 'to poison'

ʔayipen (12) suffix vowel specification

/teleq=Vč/ 'to have a tail, be be-tailed'

teleqeč (12) suffix vowel specification

/wot+iwaš/ wotiwaš 'a former chief, dead chief'

but glottalization is dropped before all other suffixes, including the derivative nominalizing suffix -Vš as well as all inflectional suffixes with initial vowels (before consonant-initial suffixes glottalization is neutralized by the preconsonantal deglottalization rule (39)).

/k+lox=us/ 'I beat him, surpass him'

kloxus (41) presuffix obstruent deglottalization

/s+uxnik=it/ 'he gets away from me'

suxnikit (41) presuffix obstruent deglottalization

/su+kep=Vš/ 'a Christian: one who is bathed, baptized'

su+kep=eš (12) suffix vowel specification

šu+kep=eš (28) sibilant harmony

šukepeš (41) presuffix obstruent deglottalization

Final glottalized sonorants, however, remain glottalized both before derivational suffixes

/wačkay<sup>1</sup>=Vn/ 'to make a wačkay<sup>1</sup> (carrying basket)'

wačkay<sup>1</sup>in (12) suffix vowel specification  
and inflectional suffixes.

/s+ici+nān<sup>1</sup>=it/ sicinānit 'he comes after me'

(41) presuffix obstruent deglottalization

c<sup>1</sup>-son → c / — {<sub>=</sub><sup>+</sup>} VC except for -Vn, -Vč,  
and -iwaš  
[-son  
+glott] → [-glott] / — {<sub>=</sub><sup>+</sup>} [+voc] [+cons]

#### 286.42 Postconsonantal Sonorant Deglottalization

A glottalized sonorant which comes to follow a consonant loses its glottalization. There are a very few bound stems which have initial glottalized sonorants; of these, -<sup>1</sup>may 'to cover, overwhelm' and -<sup>1</sup>leqen 'to extend beyond' happen to occur with prefixes with final consonants.

/s+iy+itax=<sup>1</sup>may/ 'they are astonished'

siyitaxmay (42) postcons. son. deglottalization

/s+aqta=ax=<sup>1</sup>leqen/ '[an arrow] passes clear through it'

s+aqt=ax=<sup>1</sup>leqen (6) prevocalic a-deletion

s+eqt=ex=<sup>1</sup>leqen (10) low vowel harmony

seqtexleqen (42) postcons. son. deglottalization

This rule also applies in reduplicated environments, where stem-initial glottal stop has coalesced with a preceding sonorant as a single glottalized segment.

/k+<sup>1</sup>al+<sup>1</sup>ip + R/ 'I think; I say'

ka<sup>1</sup>lip (18) glottalization of C + <sup>1</sup>

ka<sup>1</sup>lip<sup>1</sup>lip (36d) CVC reduplication

ka<sup>1</sup>lip<sup>1</sup>lip (42) postcons. son. deglottalization

/ma+s+iy+ʔap+ʔ + R/ 'their houses'

ma+s+iyap (18) glottalization of C + ʔ

ma+s+iyapyap (36d) CVC reduplication

masiyapyap (42) postcons. son. deglott.

(42) postconsonantal sonorant deglottalization

$\overset{\cdot}{c}_{\text{son}} \rightarrow c / \text{---} (\{\overset{\cdot}{\text{---}}\}) c$

$\left[ \begin{smallmatrix} +\text{son} \\ +\text{glott} \end{smallmatrix} \right] \rightarrow [-\text{glott}] / \text{---} (\{\overset{\cdot}{\text{---}}\}) [+cons]$

### 286.43 Final Cluster Deglottalization

Final consonant clusters which come to be glottalized, in imperative verbs and reduplicated nouns, lose their glottalization.

/šaxšitupš+ʔ/ 'be quiet!'

šaxšitupš (18) glottalization of C + ʔ

šaxšitupš (43) final cluster deglottalization

/mokokš+ʔ + R/ 'cockleburrs'

mokmokokš (36d) CVC reduplication

mokmokokš (43) final cluster deglottalization

It is more economical to have a single rule applying to both of these cases than to limit the environment of final glottalization in imperative and reduplicated constructions.

(43) final cluster deglottalization

$\overset{\cdot}{c} \rightarrow c / c \text{---} \#$

$\left[ \begin{smallmatrix} +\text{cons} \\ +\text{glott} \end{smallmatrix} \right] \rightarrow [-\text{glott}] / [+cons] \text{---} \#$

## 286.44 Syncopy of ?ini- to -?ni-

In an operation spanning both internal and external sandhi, the negative prefix ?ini- is syncopated to -?ni- in certain environments.

a) After other outer prefixes (q.v., 660), all of which have final vowels, syncopation occurs.

/no+?ini+k+nañ/ 'I will not go'

no?niknañ (44a) syncopy of ?ini- to -?ni-

/ma+?ini+s+čho/ 'that which is not good'

ma+?ini+š+čho (28) sibilant harmony

ma?niščho (44a) syncopy of ?ini- to -?ni-

b) Syncopation also occurs after certain particles which immediately precede ?ini-,

/##moqe#?ini+k+ali+čho##/ 'I am no longer pleased'

moqe?nikaličho (44b) syncopy of ?ini-

/##haku#?ini+s+kuti##/ 'if he had not seen it'

haku?niskuti (44b) syncopy of ?ini- to -?ni-

even when ?ini behaves as a particle rather than a verbal prefix.

/##moqe#?ini#čiči?##/ '[he is] no longer a child'

moqe?ničiči? (44b) syncopy of ?ini- to -?ni-

The irregular syncopy of ?ini- and wil in the one form /?ini+s+wil/ ?insil 'it does not exist; no, nothing' follows the more regular pattern of syncopy after prefixes

/ma+?ini+s+wil/ ma?nisil 'what does not exist'

and particles.

/##moqe#?ini+s+wil##/ moqe?nisil 'what does not exist'  
no longer exists

(44) syncopy of ?ini- to -?ni-

?ini- → -?ni- /

a) V + —  
b) V # — with particles

[+voc  
+high  
-back] → ∅ /

a) [+voc] +  $\begin{bmatrix} -\text{ant} \\ -\text{cor} \\ -\text{back} \\ +\text{glott} \end{bmatrix}$  —  $\begin{bmatrix} +\text{nas} \\ +\text{cor} \end{bmatrix} \begin{bmatrix} +\text{voc} \\ +\text{high} \\ -\text{back} \end{bmatrix}$   
b) [+voc] #  $\begin{bmatrix} -\text{ant} \\ -\text{cor} \\ -\text{back} \\ +\text{glott} \end{bmatrix}$  —  $\begin{bmatrix} +\text{nas} \\ +\text{cor} \end{bmatrix} \begin{bmatrix} +\text{voc} \\ +\text{high} \\ -\text{back} \end{bmatrix}$

#### 286.45 Initial h-Deletion

At normal speech tempo, word-initial /h/ is deleted after almost any final segment in the preceding word: optionally after a vowel, and practically obligatorily after any consonant, including glottal stop. Harrington noted marginally that /h/ remains after final spirants /s š x/ even in rapid speech, but his usual transcription is not in accord with this observation. Word-initially within the phrase, /h/ occurs in the connective particles hi and ha (q.v., 710), the non-initial ha- form of the article ma-/ha- (q.v., 542), and in some of the demonstrative pronouns (q.v., 430).

a) The deletion of /h/ after final consonants is quite regular, except in more careful elicitation forms marked by pauses between words.

/##s+akti+na?#hi#xuxaw## 'coyote is coming'

saktina? ixuxaw (45a) initial h-deletion

/##k+sili+wil#ha#kič#heni##/ 'I want one like this one'

ksiliwil akič eni (45a) initial h-deletion



The optional application of this rule produces alternant forms such as [sxalkumpi ataʔ ~ sxalkump ataʔ] and [kuneʔ alesqenus ~ kun alesqenus]. However, vowel elision nearly always occurs in appositive constructions with the demonstrative pronouns, such as heki 'that,'

/##heki#ha+ʔeneq##/ 'that woman'

heki#a+ʔeneq (45b) initial h-deletion

hek aʔeneq (46) elision of final V(ʔ)

or hečiʔ 'this.'

/##hečiʔ#ha+k+ičtĩn##/ 'this child of mine'

hečiʔ#a+k+ičtĩn (45a) initial h-deletion

heč akičtĩn (46) elision of final V(ʔ)

The full forms of these demonstratives are usually seen only in non-appositive constructions, such as

/##k+aqni=čho=waš#heki##/. 'I liked that one'

kaqničhowaš eki (45a) initial h-deletion

Vowel elision is blocked when the final vowel or vowel plus glottal stop belongs to a monosyllabic (C)CV or (C)CVʔ noun or verb stem.

/##ma+qsi#ha#s+su+yul=mon##/ 'the sun warms it'

ma+qsi#ha#s+su+yulumon (23a) prefix V epenthesis

ma+qsi#ha#shuyulumon (30) geminate aspiration

maqsi (h)ashuyulumon (45b) optional h-deletion

/##s+aqta=čĩ#hi#kay##/ 'he hits the mark'

saqtačĩ (h)ikay (45b) optional h-deletion

/##s+akti+naʔ#ha+ku##/ 'someone is coming'

saktinaʔ aku (45a) initial h-deletion

With particles, however, monosyllabic (C)CV forms nearly



always show vowel elision before a following vowel.

/##na#hi#pi'##/ 'and you'

na#i#pi' (45b) initial h-deletion

nipi' (46) elision of final V(?)

/##ha#kša#hi#xuxaw'##/ 'and as for coyote'

ha#kša#i#xuxaw' (45b) initial h-deletion

hakšixuxaw' (46) elision of final V(?)

/##pa#ha+l+wil##/ 'just what there is'

pa#ha+wil (21) remote prefix l-deletion

pa#a+wil (45b) initial h-deletion

pawil (46) elision of final V(?)

(46) elision of final vowel (and glottal stop)

V (?) → ∅ / — # V except (C)CV(?) nouns, verbs

[+voc]  $\left( \begin{array}{l} [-ant \\ -cor \\ -back \\ +glott] \end{array} \right) \rightarrow / \text{ — } \# [+voc]$

#### 286.47 Boundary Erasure

This is the last of the series of phonological rules, erasing morpheme boundaries and word boundaries. In the interests of economy of space, this rule has been applied automatically along with the last applicable phonological rule in the derivations presented in the preceding pages. Examples of full derivations involving an overt statement of the boundary erasure rule are:

/ʔini+k+naxili=naʔ/ 'I am not loaded down'

ʔiniknaxilinaʔ (47) boundary erasure

/##s+čamɪn#nanɪ#nɪ#kay##/	'he knows too'
š+čamɪn#nanɪ#nɪ#kay	(28) sibilant harmony
š+čamɪn#nanɪ#ɪ#kay	(45b) initial h-deletion
š+čamɪn#nanɪ#ɪ#kay	(46) elision of final V(ʔ)
ščamɪn nanɪkay	(47) boundary erasure

At this point the subphonemic detail rules (discussed in 230) produce the final surface phonetic forms of these strings: [ʔinik<sup>h</sup>naxilinaʔa] and [ščamɪn nanɪkay].

(47) boundary erasure

{ = + # } → ∅

## 290 Morphemization

Forms which might be segmented by an analyst probing the depths of a language's morphology are often treated as single morphemes by the speakers of the language. This process, morphemization, a term coined by Julius Moshinsky, obscures and obliterates morpheme boundaries. It can be seen at work on several fronts in Ineseño. It is particularly evident in certain exceptions to otherwise general phonological rules, in exceptions to prefix ordering, and in many uniquely occurring stems which seem to have become fused with partially segmentable prefixes.

a) The weakening of morpheme boundaries can be seen in cases where the low vowel harmony rule (10), which applies only across close = boundaries, applies across remote + boundaries as well.

- /ʔal+al=koy/ 'porpoise: one that goes around'  
 ʔal=al=koy morpheme boundary weakening  
 ʔolokoy (10) low vowel harmony
- /su+api+elew/ 'to get entangled; to be compromised'  
 s+ap+elew (5) prevocalic i/u deletion  
 s+ap=elew morpheme boundary weakening  
 sepelew (10) low vowel harmony
- /su+mati+eqen/ 'to dodge'  
 su+mat+eqen (5) prevocalic i/u deletion  
 su+mat=eqen morpheme boundary weakening  
 sumeteqen (10) low vowel harmony

With the exception of the agentive prefix ʔal-, the prefix in such cases usually retains little segmentable meaning of its own.

By comparison with Barbareno xo/xonon 'to rob, steal,' Ineseno ʔolxoʔ/ʔolxon- 'id.' can be seen to be an example of total loss of a morpheme boundary.

- /ʔal+xoʔ/ 'to rob, steal (lit. to be one who steals)'  
 ʔal=xoʔ morpheme boundary loss  
 ʔolxoʔ (10) low vowel harmony

This new stem takes the regular agentive form.

- /ʔal+ʔolxoʔ/ ʔalolxoʔ 'thief, robber'

b) The complete loss of morpheme boundaries can be seen with monosyllabic (C)CV(?) stems in the deletion of final vowel and glottal stop before a following vowel by rule (46). Normally, (C)CV(?) stems are immune to such deletion, unless they are sufficiently fused with prefixes to be felt to be single units.

/##s+si+ni+we <sup>?</sup> #ha+ku##/	'it kills people'
s+siniwe <sup>?</sup> #ha+ku	morpheme boundary loss
s <sup>h</sup> iniwe <sup>?</sup> #ha+ku	(30) geminate aspiration
s <sup>h</sup> iniwe <sup>?</sup> #a+ku	(45a) initial h-deletion
s <sup>h</sup> iniw aku	(46) deletion of final V(?)

/##s+yul= <sup>?</sup> ci#ha+ <sup>?</sup> o <sup>?</sup> ##/	'the water is hot'
s+yil= <sup>?</sup> ci#ha+ <sup>?</sup> o <sup>?</sup>	(11) back vowel harmony
s+y <sup>?</sup> i= <sup>?</sup> ci#ha+ <sup>?</sup> o <sup>?</sup>	(22a) close prefix l-deletion
s+y <sup>?</sup> i <sup>?</sup> ci#ha+ <sup>?</sup> o <sup>?</sup>	morpheme boundary loss
s+y <sup>?</sup> i <sup>?</sup> ci#a+ <sup>?</sup> o <sup>?</sup>	(45b) initial h-deletion
sy <sup>?</sup> i <sup>?</sup> c a <sup>?</sup> o <sup>?</sup>	(46) deletion of final V(?)

c) Some compounds of prefix plus stem behave as fused units, in which the prefix does not behave in strict accordance with its usual position class relative to other prefixes (as discussed in 678). A couple of examples involve the causative prefix *su-*, which is normally in a position class following person/number markers very closely.

/su+wayan/ suwayan 'to lift: to cause to hang'

/su+axsil=<sup>?</sup>š/ šaxšilš 'to fish: to cause many to bite'

Semantically, these compounds are sufficiently specialized to be treated as single units vis-à-vis other prefixes, which would normally follow *su-*.

/ali+su+wayan/ alisuwayan 'to hold aloft'

/uni+su+axsil=<sup>?</sup>š/ unišaxšilš 'to fish at night'

d) An extremely common process is the fusion of uniquely occurring stems (q.v., 616) with various partially segmentable prefixes. Prefixes here range from completely

unanalyzable formatives (q.v., 512 and 612) such as  
aq-/ax- and ?anaq-

/aq=kam/ aqkam 'to get stuck (in an opening)'

/ax=teteč/ exteteč 'to be satisfied, content'

/?anaq=puw/ ?anaqpuw 'wild cat'

to forms which can be readily identified with analyzable  
prefixes, such as ?al- 'agentive' in

/?al+miyi?/ ?almiyi? 'condor'

aqni- 'of mental activity,'

/aqni=suwewen/ aqnisuwewen 'to think of'

tal- 'of touching,'

/tal=memen/ telmemen 'to touch'

and yul- 'of heat.'

/yul=plučen/ yulplučen '[burned skin] to slough off'

e) Reduplicated stems (q.v., 260), which abound in  
Chumash, are quite similar to uniquely occurring stems in  
that both are based on sequences which never occur in  
their simplex form. Some such forms reduplicated on the  
CVC pattern have a special status; they show medial con-  
sonant clusters which are permitted neither within single  
morphemes nor across morpheme boundaries.

lewlew 'mythological creature'

qewqew 'roadrunner'

hočhoč 'warbler'

/aq=loyloy/ oqloyloy 'to gnaw'

On the border between lexical and syntactic redupli-  
cation, some cases of regular syntactic reduplication  
involve a greater semantic differentiation than usual:

yilaʔ 'all, everything'

/yilaʔ+ʔ + R/ yilyilaʔ 'tool(s), belonging(s)'

axmuyun 'to burn, smart (with pain)'

/axmuyun + R<sub>2</sub>/ axmuyuxmuyun 'to have courage'

-ʔamɪn̄ 'body, flesh; seed'

/s+ʔamɪn̄ + R/ 'samsamɪn̄ 'he is naked'

-atik 'N: soul; V: to heal, recover'

/s+atik + R/ 'he is alive'

Should the simple form become obsolete, or either form undergo greater semantic shift, the derived forms here would have full status as lexical reduplications. Such processes operating over a long span of time may account in part for the origin of lexical reduplication.

Another aspect of morphemization in reduplicated forms is that the optional syntactic reduplication of a form might become obligatory, in which case reduplication would become an inherent feature of the stem. The stem *mixin* 'to be hungry,' for example, is nearly always attested in a medially reduplicated form [*mixin̄*]. The rarer simplex form *mixin* might eventually be replaced by the reduplicated form in every occurrence. A few comparative examples of this aspect of morphemization are Barbareño *kwel̄* 'cottonwood' versus Ineseño *qweleqwele* with its wuluwul reduplication, and Ineseño /-kow=Vn/ -kowon ~ -kowin 'to be tipped' versus Barbareño *kowowon* 'to be on one's side' with its medial reduplication.

## 300 Non-Native Elements in Ineseño

Non-native elements in Ineseño include not only a host of Spanish loans, but also a number of terms found in other Californian languages.

## 310 Shared Californian Terms

There are a number of terms in Chumash which are either shared with or borrowed from other Californian languages, principally Yokuts. Some of these terms are widespread in Chumash, being found at least in Ineseño and Barbareño. Others are restricted to Ineseño, although perhaps they occur in the other inland Chumashan dialects, of which much less is known.

These terms have come to my attention in a rather haphazard fashion. Some were cited by Harrington as being similar to Tejon Yokuts (abbreviated Tej. by Harrington), or to Tulareño Yokuts (abbreviated Tul.), no doubt one of the Buena Vista dialects of Yokuts at the southwestern extreme of the central valley. Other terms have been pointed out by Madison Beeler, Kathryn Klar, and Geoffrey Gamble, who are presently working on the linguistic geography of the inland Chumash speech area as it borders on Yokuts and Shoshonean territory. A few other terms have been gleaned from A. L. Kroeber's 'Yokuts Dialect Survey' (Anthropological Records, 11:3, 1963) and W. Bright's 'A Luiseño Dictionary' (UCPL 51, 1968).

ʔalala 'man's exclamation of surprize,' cf. Luiseño

ʔalalá. 'exclamation of surprize or pleasure,' from  
Bright's Luiseño dictionary.

ʔaxi 'homosexual, transvestite,' cf. Mojave ʔaxi 'id.,'  
cited by Harrington in the Ineseño manuscript

čiyaw 'ten,' cf. Yokuts ɬieu, ɬiau, etc. 'id.,' in most  
dialects, cited by Kroeber, 'Yokuts Dialect Survey.'

The native Chumash forms can be seen in Barbareño

keleškóm and Ventureño kaškóm, based on ʔiškom 'two.'

čipik 'beaver,' cf. Yokuts töpük, döpuk, etc. 'id.,' in  
most dialects, cited by Kroeber. This form occurs in  
Barbareño as čipik.

čoq 'blackbird,' cf. Yokuts čak 'id.,' in most dialects,  
cited by Kroeber. The Barbareño form is čoq.

heswasin 'to play jai-lai,' cited by Harrington as not  
native Ineseño, but with no source identified.

kapit 'ball of acorn dough baked in hot ashes,' cf.

Tulareño Yokuts kapit 'id.,' cited by Harrington.

k<sup>h</sup>iwis 'stone jar,' cf. Yokuts k<sup>h</sup>iwis 'id.,' cited by  
Harrington. Harrington gives k<sup>h</sup>iws as the Barbareño  
equivalent; Beeler gives kiwš.

momoy 'toloache, Jimson weed,' cf. Gabrieliño manit,

Migueleño monoi, Central Miwok mo·nuya, Chawchilla

Yokuts momu? (personal communication, Jeff Gamble).

muhu 'great horned owl,' this form is said to be wide-  
spread in the Uto-Aztecan languages, cf. Gabrieliño  
muhut (Kathryn Klar, personal communication).



noqoc 'iron,' cf. Tejon Yokuts nokoc 'id.,' cited by Harrington. The Barbareño form is noqoc.

paxa? 'ceremonial official,' cf. Luiseño paxá? 'id.,' from Bright's Luiseño dictionary.

talip 'sinew-backed bow,' cf. Yokuts talip 'id.,' cited by Harrington. Kroeber gives talip, talip, dalip, etc. in most dialects. The Barbareño form is talip.

wic 'bird, generic,' cf. Yokuts wic, wic 'eagle, condor' in most dialects, cited by Kroeber. The Barbareño form is wit 'condor,' and Beeler cites Tubatulabal wits in his Barbareño dictionary. This form is said to be widespread in southern central California, with various semantic shifts.

yox ~ yux 'snake sp.,' cf. Yokuts yax 'watersnake,' cited by Kroeber for most dialects.

It is likely that in aboriginal times there was a good deal of intercourse between the Chumash and neighboring tribes. Certainly among the Chumash themselves there was much travel to attend fiestas. Asphalt balls and shell beads of Chumash manufacture were traded into the central valley and the southern sierra region. Harrington's notes contain detailed accounts of one of his Ineseño informant's journeys to the Tejon, to the central valley, and to points intermediate. This informant had some knowledge of the Yokuts dialect of the Tejon (kašinašmu?), and knew a few words of the Chumashan dialects of La Paleta (sxenen), Cuyama (kuyam), and San Emigdio (tašlipun).

## 320 Spanish Loans in Ineseño

Ineseño contact with Spanish began in 1804 with the founding of the mission Santa Ynez. Even earlier, Ineseño speakers must occasionally have come in contact with Spanish in their normal intercourse with the Barbareño, whose intensive contact with Spanish had begun decades earlier with the founding in the 1780's of the presidio and the mission Santa Barbara. Spanish was learned at the missions, and continued as a second language even after English had replaced Spanish as the dominant language of the area.

The influence of Spanish on Ineseño was a strong one; scores of Spanish loans are attested in the manuscript. Earlier loans are characterized by a fairly extensive assimilation to native patterns, while later loans diverge less from their original Spanish form. The treatment of older loans is more consistent, and parallels almost exactly the treatment of Spanish loans in Barbareño. The discussion of loans will treat the Spanish vowel system, those Spanish consonantal phonemes borrowed unchanged, those altered in some way, Spanish consonant clusters, and various other adaptations to Chumash morphology.

## 321 Treatment of Spanish Vowels

The Spanish vowels /i a u/ pass unchanged into Chumash.

Spanish	Ineseño
/i/ hilo 'thread'	ʔilu
máquina 'machine, auto'	makina
iglesia 'church'	ʔilesiya

	Spanish	Ineseño
/a/	zapato 'shoe'	sapatu
	fresada 'blanket'	pilisala
	hacha 'axe'	ʔača
/u/	aluchar 'to wrestle'	ʔalučal
	gamusa 'buckskin'	kamusa
	durazno 'peach'	lulasnu

The mid vowels /e/ and /o/ are borrowed unchanged in stressed position.

/e/	aveja 'bee'	ʔawexa
	velo 'sail'	welu
/o/	olla 'pot'	ʔoya
	adobe	ʔalowis

In stressed position, however, the treatment of /e/ and /o/ varies. In final position and in other positions in older borrowings, /e/ and /o/ are raised to /i/ and /u/ respectively.

/e/ → /i/	llave 'key'	yawi
	fresada 'blanket'	pilisala
	tomate 'tomato'	tumati
/o/ → /u/	gato 'cat'	katu
	borrego 'lamb'	wulewu 'sheep'
	tomate 'tomato'	tumati

In later borrowings, unstressed /e/ and /o/, at least in non-final position, are borrowed intact.

/e/	semana 'week'	semana
	escuela 'school'	ʔeskwela
	eloti 'ear of corn'	ʔeloti

/o/	botella 'bottle'	woteya
	botón 'button'	woton
	toro 'bull'	tolo

An epenthetic /y/ appears after /i/, whether original or raised from /e/, before another vowel. This process is parallel to the morphophonemic rule of y-epenthesis (286.04) in native forms.

fierro 'iron'	xiyelu
misión 'mission'	misiyon
anteojo 'eye-glasses'	?antiyoxo

Initial vowels of both nouns and verbs are prefaced with glottal stop, which remains even when consonantal prefixes are added. A parallel is the morphophonemic rule of prevocalic glottal stop (286.17).

/k-?awuxa/ k'awuxa	'my needle (Span. aguja)'
/s-?aliyal/ s'aliyal	'he drives (Span. arrear)'
/k-iy-?alasal/ kiyalasal	'we pray (Span. a rezar)'

### 322 Unaltered Spanish Consonants

Those Spanish consonantal phonemes borrowed into Chumash with little or no change (except perhaps in consonant clusters) are /p t č k s x m n w l y/.

/p/	papas 'potatoes'	papas
	pañó 'handkerchief'	payu
/t/	te 'tea'	te
	cuarta 'riding whip'	kwalta
/č/	chivo 'goat'	čiwu
	hacha 'axe'	?ača

/k/	caballo 'horse'	kawayu
	tabaco 'tobacco'	tawaku
/s/	zanja 'ditch'	saxa
	waso 'glass'	wasu
/x/	jugar 'to play'	xuwal
	gentil 'gentile'	xintila
/m/	misa 'mass'	misa
	gamusa 'buckskin'	kamusa
/n/	enaguas 'petticoats'	nawas
	cajón 'box'	kaxon
/w/	Joaquín	xwakin
	escuela 'school'	ʔeskwela
/l/	lana 'wool'	lana
	papel 'paper'	papel
/y/	llave 'key'	yawi
	mais 'corn'	mays

### 323 Altered Spanish Consonants

The remaining consonantal phonemes of Spanish are altered to some degree in loans: /b d g f r R ñ/. Of these, /b g f/ show alternative treatments.

/b/ → /w/	chivo 'goat'	čiwu
	borrego 'lamb'	wulewu 'sheep'
	ventana 'window'	wentana
	Pablo	pawlu
↻ /p/	bendito 'saint'	pentitu

Note the different treatments wentana and pentitu of /b/ in the nearly identical environments of ventana and

bendito. No complementation is evident here, but Chumash /w/ is the usual reflex of Spanish /b/.

/d/ → /l/	dedal 'thimble'	lelal
	adobe	?alowis
/g/ → /w/	aguja 'needle'	?awuxa
	borrego 'lamb'	wulewu 'sheep'
	jugar 'to play'	xuwal
	enaguas 'petticoats'	nawas
/k/	gato 'cat'	katu
	gamusa 'buckskin'	kamusa
	guisar 'to stew'	kisal

The pattern here seems to be that Chumash /k/ appears before front vowels, both /k/ and /w/ are found before /a/, and /w/ occurs in other environments: before back vowels /o/ and /u/ and the semivowel /w/.

/f/ → /p <sup>h</sup> /	freir 'to fry'	p <sup>h</sup> ilil
/p/	frijol 'bean'	piliholi
	café 'coffee'	kape
/x/	fierro 'iron'	xiyelu

Aspiration is consistently written for p<sup>h</sup>ilil, but in other cases the Chumash reflex of /f/ is plain /p/. The velar spirant in xiyelu no doubt reflects a Spanish dialectal peculiarity rather than a Chumash innovation.

/r/ → /l/	toro 'bull'	tolo
	riata 'lasso'	liyata
	jugar 'to play'	xuwal
/R/ → /l/	borrego 'lamb'	wulewu
	burro	wulu

/ñ/ -> /y/ pano 'handkerchief' payu

In a few words, segments from this set may occur in their original form; perhaps such items are to be regarded not so much as borrowings as Spanish words used in an Ineseño context.

### 324 Spanish Consonant Clusters

The treatment of consonant clusters in Spanish loans is variable, depending on the degree of assimilation to native patterns. Consonant clusters may be borrowed intact, simplified to a single Chumash segment, or broken up by vowel epenthesis.

a) Clusters borrowed intact include both those borrowed unchanged segment for segment, and those with some minor change, such as of Spanish /r/ to Chumash /l/. Unchanged clusters include:

/nt/	ventana 'window'	wentana
/ns/	garbanzo	kalawansu
/st/	basto 'pleat'	wastu
/sn/	durasno 'peach'	yulasnu
/kl/	clavo 'nail'	klawu
/ls/	bolsa 'pocket'	wolsa
/ys/	mais 'corn'	mays
/xw/	Juan	xwan
/kw/	cuarta 'riding whip'	kwalta
/skw/	escuela 'school'	?eskwela

Clusters with some minor change include:

/rt/ -> /lt/ tortilla toltiya

/ld/	->	/lt/	caldo	'soup'	kaltu
/rn/	->	/ln/	carne	'meat'	kalni
/mb/	->	/mp/	tambor	'drum'	tampol
/nd/	->	/nt/	sandía	'watermelon'	santiya
/bl/	->	/wl/	pueblo	'town'	puwewlu

b) Clusters simplified to a single segment, usually by the loss of the first member of a cluster, include:

/dr/	->	/l/	padre	'priest'	pali
/rd/	->	/l/	cerdazo	'sieve'	selasu
/gl/	->	/l/	iglesia	'church'	ʔilesiya
/gw/	->	/w/	guarnición	'harness'	walnisyon
/nx/	->	/x/	zanja	'ditch'	saxa

c) The remaining clusters, which are broken up by epenthetic vowels, all contain at least one sonorant. When the segment for segment rendition of a Spanish original into Chumash produces unacceptable clusters, they are broken up by processes of vowel epenthesis parallel to those which operate in native words (cf. morphophonemic rules 286.16 and 286.23). These unacceptable clusters include a stop plus sonorant before a high vowel,

trigo	'wheat'	tiliwu
cruz	'cross'	kulus
fresada	'blanket'	pilisala

as well as certain sonorant clusters,

sombrero	'hat'	sumulelu
soldado	'soldier'	sululalu 'white man'
indio	'Indian'	ʔiniyu



garbanzo

kalawansu

and a couple of less patterned cases of epenthesis.

pueblo 'town'

puwewlu

comulgar 'to take communion' komulukal

### 325 Other Adaptations of Spanish Loans

There are various adaptations of Spanish loans to native patterns.

The glottal stop which appears before initial vowels, even when preceded by consonantal prefixes,

/k-ʔača/ kača 'my axe (Span. hacha)

has a parallel in native nominal derivation (e.g.

/aqša-Vn-Vš/ ʔaqšaniš 'death' from /aqša-Vn/ aqšan 'to die').

Loans are not only inflected for the usual categories of person, number, and tense, but they are also subject to derivation along native patterns.

/k-sapatu-Vč/ kšapatuč 'I wear shoes (zapato)'

/s-kamisa-Vč/ škamišač 'he wears a shirt (kamisa)'

/kisal-Vš/ kišališ 'stew (guisar 'to stew)'

/ʔalasal-Vš/ ʔalašališ 'a prayer (a rezar 'to pray)'

The Spanish trabajar 'to work' is borrowed as talawaxač, perhaps influenced by the occurrence of a prefix tal- 'with the hand,' and shows an adaptation to the common final alternation of /n/ and /č/ in verbs (q.v., 614).

A few Spanish phrases have been borrowed whole as units in Chumash.

a pie -> ʔapiye 'to walk, go on foot'

a caballo -> 'akawayu 'to ride horseback'

a rezar -> 'alasal 'to pray

la mesa -> lamesa 'table'

a la mision -> 'alamision 'mission'

Examples of loan translations of Spanish idioms

include:

/ma-s-tix ha-ʔoʔ/ maštix aʔoʔ 'pool, lit.: eye of the  
water (ojo de agua)'

/ma-s-šik ha-ʔoʔ/ maš<sup>h</sup>ik aʔoʔ 'waterbug, lit.: louse  
of the water (chinche de agua)'

/s-ikš-it ha-s-mit/ šikšit asmīt 'he turns his back on  
me, lit.: gives me his back (me da la loma)'

/s-yik-us-wun ha-čayaš/ 'he gives them free rein, lit.,  
gives them the road (les da el camino)'

A better command of idiomatic California Spanish would doubtless have revealed even more such loan translations in the Spanish glosses in the manuscript.

## 400 Pronominal Elements

This section on pronouns includes the discussion of personal pronouns, relative and interrogative pronouns, demonstrative pronouns, numerals, and quantifiers. As a general comment on pronominal forms, there is a distinction of singular, dual, and plural number in free and prefixed personal pronouns; elsewhere number is either singular or non-singular (cf. 560 on number in the noun).

## 410 Personal Pronouns

The system of personal pronouns includes both free and bound forms. Bound forms are prefixed subject or possessive markers and suffixed object markers, while free forms are not restricted syntactically to subject or object uses. Free and prefixed pronominal forms show first, second, and third person forms, with singular, dual, and plural numbers, as well as a prefixed indefinite subject marker. Suffixed forms make fewer distinctions.

## 411 Prefixed forms

Prefixed pronominal forms mark the subject in the verb and the possessor in the noun. They are transparent combinations of person and number markers.

	singular	dual	plural	indefinite
first	k-	k-iš-	k-iy-	
second	p-	p-iš-	p-iy-	
third	s-	s-iš-	s-iy-	s-am-

The indefinite subject marker am- occurs only in the third

person as a subject marker, never as a possessive. For a more detailed discussion of special constructions involving person-number markers in the verb, see section 650.

Examples of prefixed pronominal forms:

/k-ičtān/ 'my child'

/p-pu/ p<sup>h</sup>u 'your arm, hand'

/s-iš-īlikān/ šišīlikān 'they (dual) live, are seated'

/s-am-ʔip-it/ samipit 'they (indefinite) tell me'

#### 412 Suffixed Forms

Suffixed pronominal forms mark the object in verbs, including the reflexive and reciprocal, with fewer distinctions than in the prefixed subject forms: the only numbers marked are singular versus non-singular, and the first and second person non-singular forms are identical. Unlike the prefixed pronominal forms, none of these suffixed forms is morphologically transparent.

	sing.	non-sing.	reflexive	reciprocal
first	-it	{-iyuw}	{-šaši ~ -šiy}	{-nVš}
second	-in			
third	-us ~ ∅	-wun		

In the third person singular, most verbs take no overt object markers, while some take -us.

/k-axšiš/ 'I call him'

/s-ti-yep-us/ 'he tells him'

Even for such verbs, -us usually marks an indirect object or benefactive construction rather than the direct object (cf. 631.1 on special uses of suffixed object pronouns).

/s-am-su-eqen-us/ sameqenus 'they take it from him'

/iškĩhin-it-ʔ/ ʔiškĩhĩnit 'keep it for me!'

Verbs which take -us also use it in conjunction with the plural object marker -wun.

/k-yik-us-wun/ 'I give it to them'

The plural object marker -wun is related to -wun', used to pluralize nouns and demonstratives (cf. 561).

The reflexive marker is nearly always -šaši;

/p-qil-hik-šaši/ pqilikšaši 'take care of yourself!'

the form -šiy' is very rarely attested. These two forms are reconciled as -šašiy' a few times in the corpus,

/s-šuyuwač-šašiy'/ šhuyuwač<sup>h</sup>šiy' 'it is formidable'

but it is unlikely that this is the underlying form of the reflexive. The reciprocal marker -nVš, as in

/s-iy-ʔič-axin-š-nVš/ šiyičaxičnaš 'they are enemies of one another'

is occasionally used to mark plural objects.

/s-wip-nVš/ šwipniš 'he beats them'

#### 413 Free Forms

Some free forms are monomorphemic, while others consist of the corresponding prefixed forms plus a suffixed pronominal formative kiʔ.

	singular	dual	plural
first	noʔ	k-iš-kiʔ	/k-iy-kiʔ/ kikiʔ
second	piʔ	p-iš-kiʔ	/p-iy-kiʔ/ pikiʔ
third	kay	—	/kay-wun'/ kayuwun'

The free form piʔ has a consonantal identity with the

prefixed form p-, but the other free forms no? and kay are totally unrelated to the corresponding prefixed forms. The third person free form kay is actually demonstrative in origin, filling this gap in the pronominal system. Both the plural with -wun' and the lack of a dual form are characteristic of demonstrative pronouns. The form kay is [+animate] only; for a [-animate] referent, one of the purely demonstrative pronouns is used, although a demonstrative may be [+animate] also.

Free forms are used in conjunction with bound forms, never as replacements for them. Free forms are nearly always emphatic subjects, as in

/no? ?ini-k-čamɪn/ 'I don't know'

more rarely, emphatic objects,

/s-itaq-it hi no?/ 'he hears me'

and they occur in various predications lacking finite verbs (q.v., 710), which would have no prefixed forms.

/kay ka wot/ 'he [is] a chief'

/ha kša hi pi? tikali?/ hakšipi? tikali? 'and how [are] you?: and / as for / you / how?'

Free forms are made intensive by a suffix -kš.

	singular	dual	plural
first	/no?-kš/ nokš	/k-iš-ki?-kš/ kiškikš	/k-iy-ki?-kš/ kikikš
second	/pi?-kš/ pikš	/p-iš-ki?-kš/ piškikš	/p-iy-ki?-kš/ pikikš
third	/ki?-kš/ kikš	(/s-iš-ki?-kš/) (šiškikš)	/ki?-kš-wun/ kikšwun'

The free form kay does not appear in an intensive form; the third person intensive forms are composed of the pronominalizing formative kiʔ seen in free forms (e.g. /k-iy-kiʔ/ kikiʔ 'we (plural)') plus the intensive -kš. The dual form [šiškikš] is given paradigmatically, but it is not attested in context. Examples of intensive forms:

/keʔ hi noʔ-kš k-hik/ keʔ inokš k<sup>h</sup>ik 'this is mine:  
this / I myself / I own'

/s-eqwel kiʔ-kš/ seqwel kikš 'he makes it himself'

/s-qil-hik-šaši kiʔ-kš/ šqilikšaši kikš 'he cures  
himself by himself'

The intensive form /kiʔ-kš/ kikš is even used as a verb stem, glossed 'to be one's own; to be alone.'

/ʔini-s-kiʔ-kš/ ʔiniškikš 'it is not his own'

/s-wali-kiʔ-kš/ šwalikikš 'he is alone'

/s-aqšū-kiʔ-kš ha-sipit-Vš/ šaqšikikš ašipitiš 'he eats  
acorn mush by itself (not mixed with other foods)'

#### 420 Relative and Interrogative Pronouns

The system of relative-interrogative pronouns is not particularly symmetrical. Some forms are both relative and interrogative, while others are only interrogative. The constructions in which any one of them might be found are not necessarily paralleled by the others. For example, kuneʔ 'who' has a reduplicated plural /kuneʔ-ʔ + R/ kunkuneʔ, while tikaliʔ 'which one' takes the plural suffix -wun' in /tikaliʔ-wun'/ tikaliwun' 'which ones.'

Some of the relative-interrogative pronouns used

interrogatively may occur with a noun in a noun-noun predication (q.v.,     ),

/kune<sup>?</sup> hi pi<sup>?</sup>/ kun ipi<sup>?</sup> 'who [are] you?'

/suku<sup>?</sup> hi poñ-ê/ suk<sup>?</sup> ipoñê 'what kind of tree [is it]?'

/tikali<sup>?</sup> heki/ tikal eki 'which one [is] that?'

/ʔapšti<sup>?</sup> ha-ku/ how many people [are there]?'

but there are few examples of one of these forms in apposition with a noun in a regular verbal predication.

/tikali<sup>?</sup> ha-takak no-k-uliš/ tikal atakak nokuliš

'which chicken (lit. quail) shall I catch?'

/suku<sup>?</sup> ha-qsi hi kipi<sup>?</sup>/ suk<sup>?</sup> aqsi ikipi<sup>?</sup> 'what day [is it] today?'

A stylistic peculiarity of those relative-interrogative pronouns which can be used relatively (i.e. kune<sup>?</sup> 'who,' suku 'what,' tikali<sup>?</sup> 'which,' and taka<sup>?</sup> 'where') is that even when they are used interrogatively, the following verb is usually in a relative form (cf. 874 on relativization).

/kune<sup>?</sup> ha-l-ili<sup>?</sup>kin hi mam/ kun ali<sup>?</sup>kin imam 'who is inside?: who [is it] who is inside?'

/suku<sup>?</sup> ha-p-al-hik/ suk<sup>?</sup> apalik 'what are you doing?: what [is] what you are doing?'

/taka<sup>?</sup> ha-iy-al-nan/ tak ayanan 'where are they going?: where [is it that they are] ones who are going?'

But relativization is not obligatory here.

/kune<sup>?</sup> ha s-is-ti<sup>?</sup>/ kun ašišti<sup>?</sup> 'who found it?'

/suku<sup>?</sup> ha s-iy-tepu<sup>?</sup>/ suk<sup>?</sup> asitepu<sup>?</sup> 'what [game] are they playing?'



Two of the relative-interrogative pronouns may be used in a more strictly nominal sense: kune? 'who' in the sense of 'someone, anyone,'

/moqe ?ini-s-wil ha-kune?/ moqe?nisil akune? 'there is no longer anyone [who speaks Ineseño]: already / does not exist / anyone'

as well as suku 'what' and its reduplicated form /suku-? + R/ suksuku? in the sense of 'something, anything.'

/p-iš-kuti ha-suku/ 'you (dual) see something'

/s-akti-nu-na?-it ha-suku-? + R/ saktinunalit asuksuku? 'he brings me something'

421 kune? 'who'

The form kune? 'who' may be used both as a relative and as an interrogative pronoun. Interrogative examples, if not in predications lacking a finite verb,

/kune? hi pi?/ kun ipi? 'who [are] you?'

/kune? ka s-?ap he?/ kune? ka?ap e? 'whose house is this?: who / his house / this'

/kune?-? + R/ kunkune? 'who [are they]?'

may be followed either by a relative form of the verb,

/kune? ha-l-tap/ kun atap 'who came in?: who [is] the one who enters?'

or by a non-relative verb form.

/kune? ha s-is-ti?/ kun ašišti? 'who found it?'

A relative example of kune? is

/s-qulu-wašlik ha kune? ha-l-aqta-qen/ šquluwašlik akun aleqteqen 'he peeks to see who is passing by: he

peeks (at) / who / one who passes by'

In a nominal construction, kune? may mean 'someone, anyone,'

/ʔini-s-kuti ha-kune?/ ʔiniskut akune? 'he doesn't

see anyone'

and it even occurs in a possessed form in

/ʔini-s-wil ha-s-kune?/ ʔinsil askune? '[coyote]

doesn't have anyone: does not exist / his someone'

422 suku ~ sukiku 'what, what kind of'

The forms suku and sukiku are largely synonymous, although suku is more common. Both may be interrogative,

/suku hi poñ-e/ suk ipone 'what kind of tree [is it]?'

/sukiku he?/ 'what [is] this?'

/suku ha-no-p-eqwel/ suk anopeqwel 'what will you do?:

what [is] what you will do?'

/sukiku ha s-iy-tepu?/ sukik asitepu? 'what [game] are

they playing?'

but only suku is relative.

/ʔini-k-čamɪn suku hi wič/ ʔinikčamɪn suk iwic 'I don't

know what kind of bird [it is]'

The form sukiku, but never suku, often appears alone.

sukiku 'what [is it]?'

A verb which is perhaps based on suku and sukiku is

sukisuku 'to pay attention to; to make something of'

In connection with suku, the prefix ti- should be mentioned. This form is a relativizing verbal prefix (q.v., 662.2) used with a few verbs in the sense of 'what;'  
its function is parallel in many ways to the independent

relative-interrogative pronouns,

/s-esqen-it ti-k-ʔip/ sesqenit tikip 'he asks me  
what I said'

and may even be used in conjunction with suku 'what.'

/suku ha ti-k-net-in/ suk atiknetin 'what did I do  
to you?'

423 tikaliʔ 'which one; how much, how many'

The form tikaliʔ is used both in relative and inter-  
rogative constructions, in several different senses.

/tikaliʔ heki/ tikal eki 'which one [is] that? what  
is it like?'

/tikaliʔ no-k-kuy/ tikaliʔ nok<sup>h</sup>uy 'which one shall  
I take?'

/tikaliʔ ha k-axmay/ tikal akaxmay 'how much do I owe?'

/tikaliʔ-wuñ/ tikaliwuñ 'which ones [are they]? what  
are they like?'

A relative example of tikaliʔ is

/no-k-saq-kumuʔ tikaliʔ ha-s-xulxul-Vš/ noksaqkumuʔ  
tikal ašxulxulaš 'I will weigh it: I will measure /  
how much / its weight'

Some rather idiomatic example include:

/ʔini tikaliʔ ha p-xox/ ʔinitikal apxox 'don't snore  
so much!: not [so] much / you snore'

/ha kša hi piʔ tikaliʔ/ hakšipiʔ tikaliʔ 'and how are  
you?: and / as for / you / how'

/tikaliʔ ha-l-kum-li/ tikal akumili 'what time is it?:  
how much has it gotten to?'

424 taka? 'where'

The form taka? 'where' is used in both interrogative and relative senses. The following verb is usually in a relative form. Interrogative examples:

/taka? ha-šitaš/ tak ašitaš 'where [is] the poker stick?'

/taka? ha-p-al-sinay ha-k-skinit/ tak apasinay akiskinit  
'where have you put my rope?'

/taka? ha-l-wil tošololow/ tak awil tošololow 'where is  
tošololow (a mountain)?: where / what is / tošololow'

Relative examples include:

/no? ?ini-k-čamīn taka? ku-k-nañ/ 'I don't know where I  
should go'

/s-qulu-wašlik ha? s-kuti moqe taka? ha-k-iy-al-kum-li/  
šquluwašlik ha? skuti moqe tak akiyakumili 'she  
peeks to see where we have gotten to: she peeks /  
so that / she sees / already / where / we get to'

425 taku 'how'

The form taku 'how' is used both interrogatively and relatively, but is far more common as an interrogative.

/taku k-net-us/ 'what am I to do?: how / I act?'

/taku p-ati-kuy/ 'how (i.e. where) are you headed?'

/taku p-net-us ha p-nu-nañ/ 'how are you bringing it?:  
how / you do it / you bring'

The one relative example attested shows a non-relative form of the verb used with taku:

/s-saqicwil-Vn-it ha taku s-nañ/ s<sup>h</sup>aqicwilenit ataku šnañ  
'he signals to me how (i.e. which way) he is going'

426 ʔapštɪʔ 'how much, how many'

The form ʔapštɪʔ is used in both interrogative and relative senses.

/moqe ʔapštɪʔ ha-s-šup/ moqe ʔapštɪʔ aš<sup>h</sup>up 'how old is he?: already / how many / his year(s)'

/ʔapštɪʔ ha-ku/ 'how many people [are there]?'

/no-s-kuti ha kupa ʔapštɪʔ ha-pon/ 'he will look to see how many poles [there are]'

A verbalized form with the suffix -Vč is seen in

/s-iy-ʔapštɪʔ-Vč/ ši<sup>y</sup>apštɪč 'how many are they?'

427 ʔašnɪm 'when'

The form ʔašnɪm 'when' is interrogative only; the corresponding relative notion is expressed by relative verbal prefixes wa- 'if, when' and hini- 'when' (q.v., 662.3 and 662.4) and a particle moq 'when' (q.v., 770.12).

A verb following ʔašnɪm takes the connective particle hi rather than the more common particle ha (cf. 710),

/ʔašnɪm hi p-nañ-waš/ ʔašnɪm ipnañawaš 'when did you go?'

/ʔašnɪm hi s-su-uqwa-šuč ha s-eqwel/ ʔašnɪm iš<sup>h</sup>uqwašuč aseqwel 'when did he begin to do it?'

and the future marker ku-, rather than the commoner no-.

/ʔašnɪm ku-k-tamay/ 'when would I forget it?'

/ʔašnɪm ku-p-nañ/ 'when will you go?'

428 /ti-s-neč/ tišneč 'why'

The form /ti-s-neč/ tišneč is actually a verb phrase (perhaps alternatively analyzed as /ti-s-net-š/) which could be translated literally as 'what is it like?' or

'what does it do?' It is used idiomatically as 'why,' in constructions parallel to those in which the regular monomorphemic relative-interrogative pronouns occur. Interrogative examples are:

/ti-s-neč ha ?ini-p-čam̄n/ tišneč a?nipčam̄n 'why  
don't you know?'

/ti-s-neč ha m̄k ha-p-al-il̄k̄in/ tišneč am̄k apalil̄k̄in  
'why do you live so far away?: why / far away /  
you who dwell'

= P manipa-

429 k̄ani(pa) + Pronoun 'any, whatever'

A form of the particle k̄ani ~ k̄aniya 'no matter what' (q.v., 770.08) may be used with the relative-interrogative pronouns in the basic sense of 'any, whatever.' The particle pa 'just, merely' usually occurs in this construction, except with taka? 'where.' There are too few examples to determine how consistent the occurrence of pa is here.

/k̄ani pa kune?/ k̄anipakune? 'anyone, someone; whoever'

(occurs only in a paradigm, no contextual examples)

/k̄ani pa suku/ k̄anipasuku 'anything, something; whatever'

/k̄ani pa suku k-sus-tak-kuy-š/ k̄anipasuku k̄suštak<sup>h</sup>uyš

'I send something or other, any old thing'

/?ini-s-siyi? ha-?alqapač, k̄ani pa suku/ ?inisi<sup>h</sup>iyi?

a?alqapač, k̄anipasuku 'he doesn't miss any animal

(as a hunter): he does not miss / animal / any'

/k̄ani taka?/ k̄anitaka? 'anywhere, somewhere; wherever'

/k̄ani taka? s-qili-wayan/ k̄anitaka? sqiliwayan 'he

looks around wherever [he wants]'

/kani pa ti-/ kani<sup>1</sup>pati- 'anything, whatever'

/kani pa ti-s-am-net-it/ kani<sup>1</sup>patisamnetit 'they [can]  
do anything to me; they do whatever [they want]  
to me'

In this construction as in others, the relative prefix ti- parallels the relative-interrogative pronouns.

#### 430 Demonstrative Pronouns

Ineseño has a complex system of demonstrative forms, predicated on a three-way distinction of near, intermediate, and distant forms (i.e., this, that, and yonder), with the additional features of initial versus non-initial position in the phrase and inanimate forms versus those of unmarked animacy.

#### 431 Pairs of Demonstratives

Most of the demonstrative pronouns can be presented in pairs according to the features of animacy and initial position in the phrase.

he<sup>?</sup> : heñi 'this,' non-initial in the phrase:

he<sup>?</sup> [-animate], heñi [<sup>1</sup>animate]

ke<sup>?</sup> : keñi 'this,' initial in the phrase:

ke<sup>?</sup> [-animate], keñi [<sup>1</sup>animate]

heči<sup>?</sup> : heča<sup>?</sup> 'this,' non-initial in the phrase:

heči<sup>?</sup> [-animate], heča<sup>?</sup> [<sup>1</sup>animate]

kweki : heki 'that, not far away:' kweki [initial,

-animate], heki [non-initial, <sup>1</sup>animate]

kolo? : lo? 'that, far away:' kolo? [initial, -animate],  
 lo? [non-initial, ±animate]

The pattern here can be shown more clearly in a schematic form.

	'this'		'that'	'yonder'
	+initial	-initial	+initial -	+initial -
-animate	ke?	he? heči?	kweki	kolo?
±animate	keŋi	heŋi heča?	heki	lo?

These demonstrative forms are pluralized with the usual nominal plural suffix -wun', although two of the forms glossed as 'this,' ke? and heča?, are not attested in plural form. The two forms glossed as 'that,' kweki and heki, have an irregular plural in which an unanalyzable element -mu- appears between the demonstrative stem and the plural marker -wun'.

/kweki-mu-wun'/ 'those not far away (initial inanimate)'

/heki-mu-wun'/ 'those not far away (non-initial form)'

The plurals of the other forms are regular.

/keŋi-wun'/ 'these (initial form)'

/he?-wun'/ hewun' 'these (non-initial inanimate form)'

/heŋi-wun'/ 'these (non-initial form)'

/heči?-wun'/ hečiwun' 'these (non-initial inanimate form)'

/kolo?-wun'/ kolowun' 'those yonder (initial inanimate)'

/lo?-wun'/ lowun' 'those yonder (non-initial form)'

#### 432 Unpaired Demonstratives

There are a few other demonstrative forms which do not fit into the pattern outlined above.



A form  $k^hiki$  is said to be equivalent to  $heki$  'that (not far away)' in the dialect of the village of kalawašaq upriver from Santa Ynez (?alaxulapu);  $k^hiki$  may be related to Barbareño  $kiki$  'thing, relative.'

Another demonstrative is the third person free pronominal form  $kay$ ;  $kay$  is animate, but is devoid of demonstrative force. The plural of  $kay$  is  $/kay-wuñ/$   $kayuwuñ$ .

An unanalyzable demonstrative form is  $ka$ , which seems to be beyond the dualities of animacy and initial position, and which is translated variously as 'this,' 'that,' and 'the.' This form  $ka$  occurs only with a following noun.

$/ka\ čiči\ ha-malik-Vš/$   $kačiči\ amalikiš$  'this child

[is] a first-born child'

$/weñi\ ka\ či-nowon/$   $weñi\ kačinowon$  'beyond that hill'

$/k-axik+n-us\ ka\ ?ihiy-?/$   $kaxik+nus\ ka?ihiy$  'I am

equal to the man'

A possible analysis of  $ka$  is that it is composed of the element  $-ki$  seen in  $kweki$ ,  $heki$ , and  $k^hiki$  plus the reduced non-initial  $ha-$  form of the article  $ma-/ha-$  (q.v., 521.3) in a contraction of the form

$/ki\ ha-N/$   $ka-N$

parallel to the regular contraction in such forms as

$/heki\ ha-?eneq/$   $hek\ a?eneq$  'that woman'

#### 433 Demonstrative Morphology

Certain patterns can be observed in the morphology of the demonstrative pronouns. The chart from 431 is presented again for reference.

	'this'		'that'		'yonder'	
	+initial	-initial	+initial	-	+initial	-
-animate	keʔ	heʔ heč'iʔ	kweki		koloʔ	
+animate	ke'ni	he'ni hečaʔ		heki		loʔ

1) The symmetrical pairs keʔ : ke'ni and heʔ : he'ni share an element -ni or -ni which seems to have [±animate] force (i.e., unmarked for animacy), keʔ and heʔ both being [-animate].

2) Initial forms with /k/ are often paralleled by non-initial forms with /h/, as in keʔ : heʔ, ke'ni : he'ni, and kweki : heki. This is similar to the non-initial ha-form of the article ma-/ha- (q.v., 521.3).

3) In the pairs koloʔ : loʔ and kweki : heki there may be a sequence ko- used initially, loʔ and heki both being non-initial. A prefixed ko- plus heki could give rise to kweki, although such a shift is not typical of more familiar areas of Chumash morphology.

4) The sequence -ki is recurrent in kweki : heki, the dialectal form k<sup>h</sup>iki, and perhaps in ka, if the analysis /ki ha-/ ka is valid.

Obvious problems occur in this schematization. First, there are three pairs of terms all glossed 'this,' with no clue as to what the semantic distinctions among them are. The forms heč'iʔ and hečaʔ do not seem to be related to another another in any systematic way. Non-initial heki is glossed 'that (not far away),' while the corresponding initial form kweki is sometimes glossed 'that (not

far away)' and other times 'that one yonder,' where it is said to be synonymous with koloʔ.

The pairs kweki : heki and koloʔ : loʔ are polarized, differing both in animacy and initial position: some of the intersections of animacy and initial position found in the set keʔ : kehi and heʔ : hehi are missing here. The glosses of the terms for 'this,' 'that (not far away),' and 'that (yonder)' are often inconsistent, despite the neat correspondence of the Spanish set ese este aquel to the Ineseno system (e.g. heki 'that (not far away)' is sometimes glossed as ese, sometimes as este).

Finally, the distinction of inanimate versus unmarked animacy is not always clear. In his sketch of Ineseño, ('The Languages of the Coast of California South of San Francisco,' UCPAAE, 2:2, 1904) Kroeber mentioned that keʔ is inanimate, kehi and koloʔ animate. Harrington does not seem to have made explicit reference to this problem, and his forms are sometimes at odds with Kroeber's findings on this point (i.e. koloʔ in inanimate in Harrington's manuscript, while kehi is unmarked for animacy). But it is understandable that such a complex system, elicited from several informants, might be prone to a few inconsistencies.

#### 434 Demonstratives with Nouns

These demonstrative forms may be used pronominally in the sentence,

/sukiku heʔ/ 'what [is] this?'

/s-aq-pey-us hi lo?/ seqpeyus ilo? 'it resembles that  
one (over there)'

/keñi-wuñ ka ha-iy-al-expen-š/ keñiwuñ kayalexpeš  
'these [people] are singing'

or they may be used in apposition with a noun (cf. 582  
on noun apposition).

/heñi ha-ya?/ heñ aya? 'this arrow (non-initial)'

/heki ha-?eneq/ hek a?eneq 'that woman (non-initial)'

/lo?-wuñ ha-huču+? + R/ lowuñ ahučhuču? 'those dogs  
over there (non-initial)'

/kolo? ha-čayaš/ kol ačayaš 'that road over there  
(initial)'

For some demonstratives this construction with an  
appositive noun is very common; for others it is quite  
rare, specifically he? 'this,' kweki 'that (not far away),'  
and kolo? : lo? 'that (over there).' The forms kolo? and  
kweki are often used in a locative sense which might be  
translated 'over there.'

/kolo? ha-l-ati-kuy/ kol alatikuy 'he is heading over  
there: over there [is] what he heads for'

/kweki ka s-iy-!likin/ 'they live over there'

The form ke? 'this [-animate]' is often used in the sense  
of 'thus, this way, like this.'

/ke? s-net-us ha-s-pu/ 'he puts his hands like this:  
this way / he does / his hand(s)'

/ke? s-eqen-i ha-k-?iwı/ ke? seqeni akiwı 'my companion  
goes off this way: this way / goes off / my com-  
panion'

A locative form ?iti? 'here' is attested occasionally in a demonstrative sense

/?iti? ha-k-?ap/ ?ita<sup>1</sup>kap 'my house here'

/?iti? ha-šup/ ?itašup 'this earth, this land'

Ineseño ?iti? 'here' is cognate with Barbareño ?i<sup>1</sup>ti 'this one.' The only other Barbareño cognate to the Ineseño demonstrative system is he? 'this.'

#### 440 Numerals

#### 441 The Numerals

The native numeric system was quaternary, as attested by the numerals up to thirteen, plus the term for sixteen.

- 1 pakas<sup>1</sup>
- 2 ?iškō<sup>1</sup>
- 3 masix
- 4 skumu ~ škumu (the latter rarer)
- 5 yitipakas<sup>1</sup>
- 6 yitiškō<sup>1</sup> ~ yiti?iškō<sup>1</sup> (the latter rarer)
- 7 yitimasix
- 8 malawa
- 9 spa ~ cpa (the latter rarer)
- 10 čiyaw
- 11 ti<sup>1</sup>lu? ~ ti<sup>1</sup>lu? (the latter rarer)
- 12 xayiskumu
- 13 kelpakas<sup>1</sup> (cited by Taylor as ca-elpakas)
- 16 pe<sup>1</sup>ta? ~ pe<sup>1</sup>ta?

## 442 The Quaternary Nature of the System

The most obvious quaternary feature of the Ineseño numeric system is that the terms for five, six, and seven contain those for one, two, and three respectively, plus a formative *yiti-*. Beeler, in his grammar of Barbareño, suggests the influence of Yokuts \**yitis* 'make five,' cited from Newman, 'Yokuts Language of California.' Also, *xayiskumu* 'twelve' contains *skumu* 'four' plus an element *xayi-*, said to mean 'and' here: literally '(eight) and four.'

The term *kelpakaś* 'thirteen' contains *pakaś* 'one' plus an element occurring in Barbareño *keleškóm* 'ten,' literally '(eight) and two.' Thus *kelpakaś* is literally '(twelve) and one.' But *kelpakaś* is of dubious status, quoted only by Taylor ('California Farmer,' XIII, 82, 1860) as *ca-elpakas*; *kelpakaś* is my own reconstruction. Taylor was one of the least reliable recorders of Ineseño, and his corpus, although elicited at Santa Ynez, seems to be a dialect intermediate between Ineseño and Barbareño, or else a mixture of the two. The *kel-* element in *kelpakaś* is purely Barbareño (cf. Barbareño *ke* 'and'), while *pakaś* is Ineseño (cf. Barbareño *paka* 'one').

The term *čiyaw* 'ten' is surely a borrowing from Yokuts. Kroeber, in his 'Yokuts Dialect Survey,' cites forms such as *čieu* and *čiau* as the term for ten in most Yokuts dialects. The pure Chumash forms seen in Ventureño *kaškom* and Barbareño *keleškóm* (literally '(eight) and two') are based on *ʔiškóm* 'two,' further confirmation of

the quaternary nature of the system.

After eliciting the first twelve numerals, Harrington evidently questioned his informant about the terms 'iciyul and paciylul (with no gloss or source indicated), and noted his surprize that the informant had never heard them. These may be two of the missing numerals, or perhaps variants of a single numeral.

The term for sixteen, pe'ta? ~ pe'ta?, was used as a higher unit in counting (cf. English 'dozen, score').

/pe'ta? na pe'ta? ha s-piw'/ 'it costs sixteens and sixteens'

/s-iy-wil-Vš-Vč ha s-iy-wati-wey ha pe'ta?-? + R/

šiwališič asiwatiwey apetpe'ta? 'gambling they lose many sixteens'

Thirty-two is expressed as a multiple of the basic sixteen.

/ʔiškōm ha pe'ta?/ 'thirty-two: two sixteen(s)'

#### 443 Later Adaptations of the Native System

Unfortunately, early recorders of Ineseño did not elicit numbers higher than ten or twelve, and those who attempted this at a later date were given literal translations of the European decimal system. For the teens above sixteen, Henshaw (in 'The Mission Indian Vocabularies of H. W. Henshaw,' ed. Heizer, Anthropological Records, 15:2, 1955) gives na 'and' plus numeral.

/na malawa/ 'eighteen: (ten) and eight'

Multiples of ten were expressed quite literally,

/ʔiškōm ha čiyaw/ 'twenty: two ten(s)'

/masix ha čiyaw/ 'thirty: three ten(s)'

and on the basis of /pakaš' ha p'eta'/? 'one sixteen,' the form /pakaš' ha čiyaw/ 'one ten' is found. An example of a more complex number is

/ʔiškoḿ ha čiyaw na yiti-pakaš'/ 'twenty-five: two ten(s)  
and five'

It should be noted that a complete list of the native Chumash numerals up to thirty-two is attested for Ventureño, recorded sometime before 1823, in 'The Ventureño Confessionario of José Seán, O.F.M. (ed. M. S. Beeler, UCPL 47, 1967). The Ventureño system differs in some respects from what is known of the Ineseño system.

#### 445 Contractions with Numerals

Numerals may be used pronominally in the sentence,

/pakaš' ha s-yux-wowon/ 'one [of them] is tall'

but more commonly they are used in apposition with a noun.

/pakaš' ha-qsi/ 'one day'

/masix ha-s-wop+ʔ + R/ masix haswopwop' 'her three sons'

/yiti-masix ha-šup/ 'seven years'

Numerals, especially the first four, can be used with verbal prefixes as verb stems (cf. 618, 676).

/axi-pakaš'/ 'to do once'

/ni-masix/ 'to divide into three parts [trans.]'

/maq-skumu/ 'to be four-stranded, four-ply'

However, ʔiškoḿ 'two' is replaced by a bound stem -tun, in such compounds, as in

/axi-tun/ 'to do twice'

/wal-tun/ watun 'to be doubled'



Numerals, with the exception of pakas 'one,' may also take the verbal derivative suffix -Vč (q.v., 622).

/ʔiškóm-Vč/ ʔiškomič 'to be two, be a pair'

/masix-Vč/ mašixič 'to be three, be a trio'

/skumu-Vč/ škumuč 'to be four'

A phrase involving such a construction is

/ma-iy-al-yiti-ʔiškóm-Vč ha-ʔeneq/ mayayitiškomič aʔeneq

'the Pleiades: the women who are six together'

#### 450 Quantifiers

There is a small set of quantifiers which are used pronominally. Of these, only yilaʔ 'all' and wahač 'much, many' are used at all commonly in apposition with nouns. As for the other quantifiers kiceʔ 'a little,' mučuʔ 'a little one,' and nox 'a big one,' it is often difficult to make a distinction between them and particles such as ʔihí and nonoʔ, both 'very much.' However, the particles kiceʔ, mučuʔ, and nox occur in more nominally oriented constructions than do the particles. All of these quantifiers occur with verbal prefixes (cf. 618), as in

/s-aputi-nox/ 'much water is running'

/s-puti-wahač/ šputiwahač 'it splits up into many'

#### 451 wahač 'much, many'

The quantifier wahač 'much, many' is used optionally in apposition with a following noun.

/wahač ha s-eqwel/ 'he makes many, a lot'

/wahač ha-step/ 'many fleas; [there are] a lot of fleas'

/s-nu-kum wahač ha-s-pey/ šnukum wahač aspey 'he brings

many flowers'

/s-iy-ʔap ha-tomol, wahač/ siyap atomol, wahač 'boats  
landed, many [of them]'

452 yilaʔ 'all, every'

The quantifier yilaʔ 'all, every' is used optionally  
in apposition with a following noun,

/s-kuti yilaʔ/ 'he sees everything'

/no-k-ikš-in yilaʔ ma-p-aqtı-kat/ 'I will give you  
everything that you need'

/s-iy-ali-noxkoy yilaʔ ha-ku+ʔ + R/ siyalinoxkoy yilaʔ  
akuhkuʔ 'all of the people are kneeling:  
they are kneeling / all / people'

and even with a numeral plus noun.

/yilaʔ skumu ha-čičihiʔ/ 'all four children'

In pronominal constructions yilaʔ may occur with  
person-number markers,

/k-iy-kiʔ k-iy-yilaʔ/ kikiʔ kiyilaʔ 'all of us'

/ʔalap-šawa-wun ha s-iš-yilaʔ/ ʔalapšawawun ašišyilaʔ  
'both of them [are] people from šawa (a village)'

although the person-number markers are not obligatory.

/yilaʔ k-iš-toxom/ 'we both feel cold'

A particle pa 'just, merely' often occurs with yilaʔ,  
in the sense of 'just about everything.'

/ʔal-iškähin pa yilaʔ/ 'he saves everything: [he is]  
one who saves just about everything'

The suffix -pi sometimes occurs with yilaʔ; the force of  
this construction is not clear.

/yila<sup>?</sup>-pi ha-cyi<sup>w</sup>+<sup>?</sup> + R/ yilap acyi<sup>w</sup>yi<sup>w</sup> 'all kinds,  
all sorts (of things)'

453 kice<sup>?</sup> 'a little one, a little bit'

The quantifier kice<sup>?</sup> 'a little one, a little bit' may occur in apposition with a noun,

/s-kuy ha-kice<sup>?</sup> ha-pi<sup>s</sup>/ 'he is holding a little bowl'

but it is nearly always used pronominally.

/s-am-yik-us ha-kice<sup>?</sup>/ 'they give it to the little one  
(i.e. to the baby)'

/tini s-wil ha-kice<sup>?</sup>/ 'there is still a little bit'

The particle pa 'just, merely' is very common with kice<sup>?</sup>, in the sense of 'just a little,'

/ax-kš-it-<sup>?</sup> pa kice<sup>?</sup>/ ?axkšit<sup>?</sup> pakice<sup>?</sup> 'give me just  
a little bit!'

and it has a number of idiomatic uses, including 'slightly'

/pa s-ki-<sup>?</sup>o<sup>?</sup>-Vč pa kice<sup>?</sup>/ paški<sup>?</sup>oč<sup>?</sup> pakice<sup>?</sup> 'it is  
slightly wet; it is just a little bit wet'

'for a little while,'

/no-s-yal-tiši-wil pa kice<sup>?</sup>-waš/ nošyatišiwil pakičewaš  
'he will go out to play for a little while'

and also 'no sooner than.'

/pa kice<sup>?</sup> ha s-nañ ka s-ewel-šaši ha-puluy/ pakice<sup>?</sup> ašnañ  
kašewelšiši apuluy 'she had no sooner gone than she  
turned into a crane: just a little / she goes /  
she makes herself / a crane'

Used preverbally, kice<sup>?</sup> has the force of 'nearly.'

/kice<sup>?</sup> ha ?ini-s-su-kitwon ha-s-tix/ kice<sup>?</sup> a<sup>?</sup>nishukitwon

aštix 'he nearly put his eye out: (by) a little /  
he did not put out / his eye'

/kice<sup>?</sup>-li ha s-ipšel/ kice<sup>!</sup>li ašipšel 'it is nearly  
cooked, nearly done'

The force of -li in this last example is not understood.

454 mu<sup>!</sup>cu<sup>?</sup> 'a little one'

The quantifier mu<sup>!</sup>cu<sup>?</sup> 'a little one' is not attested  
in apposition with a noun.

/ma-mu<sup>!</sup>cu<sup>?</sup>/ 'the smaller, younger (e.g. of two brothers)'

/kune<sup>?</sup> ha-mu<sup>!</sup>cu<sup>?</sup>/ 'who [is] the small(er) one?'

/kay ka mu<sup>!</sup>cu<sup>?</sup>/ 'he [is] the small(er) one'

An idiomatic use of mu<sup>!</sup>cu<sup>?</sup> is in the expression

/mu<sup>!</sup>cu<sup>?</sup> ha-l-yiti/ mu<sup>!</sup>cu<sup>?</sup> ayiti ~ mu<sup>!</sup>c ayiti 'soon, after

a little while: [the interval] that comes [is] small'

which optionally occurs with -li as /mu<sup>!</sup>cu<sup>?</sup>-li ha-l-yiti/

mu<sup>!</sup>culi ayiti 'soon.' A derived form with mu<sup>!</sup>cu<sup>?</sup> is

/ma-k-(is-)wati-mu<sup>!</sup>cu<sup>?</sup>/ 'my little finger, little toe'

455 nox 'a large one, a lot'

The quantifier nox 'a large one, a lot' occurs occa-  
sionally in apposition with a noun,

/k-su-kuta<sup>?</sup> ha-nox ha-xip/ 'I pick up a big rock'

/ma-nox + R<sub>3</sub> ha-štexe<sup>!</sup>/ manoxonox aštexe<sup>!</sup> 'the big river'

but more often it is used pronominally.

/nox heča<sup>?</sup> ha-šup/ nox ečašup 'this world [is] large'

/ke<sup>?</sup> ha-xip hi nox/ 'this rock [is] a large one'

A derived form with nox is

/ma-k-(is-)wati-nox/ 'my thumb, big toe'

## 500 The Noun

Included in the discussion of the noun are the general topics of noun morphology, nominalization, inflection, and the larger domain of the noun phrase. It is convenient to treat nominalization early, since the later sections on inflection and the noun phrase make frequent references to nominalized forms.

## 510 Noun Morphology

The most characteristic features of noun morphology are the much greater morphological opacity of the complex noun as compared to the verb, the presence of certain unanalyzable initial formatives, and the extensive use of reduplication in noun formation.

## 511 The Canonical Shape of the Noun

A great many nouns follow the CVC and CVCVC pattern characteristic of noun and verb stems.

ph <sup>h</sup> aʔ	'chuchupate, plant sp.'	wimaʔ	'red pine'
-tuʔ	'ear'	tukem̄	'mountain lion'
meq	'yucca'	-wačax	'upper arm'
kiȳ	'hook'	k <sup>h</sup> iwis	'stone jar'
tow̄	'smoke'	weweȳ	'sage'
-kam	'wing'	yasis	'poison oak'

But naturally, the pattern of noun stems may be far more varied than CVC and CVCV. Nouns are much more likely than verbs to have a stem-final vowel.

ku	'person'	čili	'sack, bag'
qsi	'sun'	taxama	'skunk'

-se 'bone'	ʔipštɪ 'body louse'
ʔapɪ 'kind of bead'	wonono 'owl sp.'

Very few nouns, however, have a stem-initial vowel; these are all inalienably possessed forms (cf. 572) which are always prefaced with a possessive prefix.

-ahaš 'soul, spirit'
-atɪk 'soul, spirit; heart'
-aqlɪw 'word, voice, language'

The great majority of nouns, even those which are inalienably possessed, show a glottal stop before the vowel.

-ʔoqwoŋ 'head, hair'	ʔeneq 'woman'
-ʔayapɪs 'heart'	ʔaqɪwo 'star'
-ʔičkɪʔ 'man's loincloth'	ʔul 'post, housepole'
-ʔaniš 'paternal uncle'	ʔušuɣ 'seed-beater'

There are many polysyllabic nouns which are obviously morphologically complex, but which are unanalyzable, even where certain elementary segmentations appear possible. In the examples below, possible segmentations are suggested parenthetically, all supposing stems not attested elsewhere.

čewełeɣey 'fungus on rotten wood'
ʔalušpawat 'ashes' (/ʔal-uš-pawat/?)
ʔaničapapaʔ 'sharp-shinned hawk' (/ʔal-, ʔani-/?)
ʔiwawɪluyaš 'grave pole' (/Vš/?)
ʔicpanaxuy 'stick for shinny ball' (/ʔic-pana-xuy/?)
kalqunihaš 'effigy, human figure' (/kal-qunɪx-Vš/?)
šaqliɣɪnɪš 'womb' (/saq-liɣɪn-Vš/?)

Some animal names, mostly of birds, are onomatopoeic, based on the sound the animal is said to make.

takak 'quail,' cries 'takaka kaka'

woy 'hawk sp.,' cries 'woy woy woy'

pokoy 'burrowing owl,' says 'pokoy pokoy'

wonono 'pygmy owl,' says 'wonono'

kloí 'cricket,' sings 'kloí kloí kloí latipa tipa'

Some of these forms are reduplicated.

yokyok 'bird sp.,' goes 'yok yok yok yok'

qewqew 'roadrunner,' goes 'qew qew qew qew'

Other forms suggestive of onomatopoeia are

ciyuqwili? 'meadow lark'

čilikaka 'brown towhee'

pulakak 'red-headed woodpecker'

## 512 Initial Noun Formatives

There are several unanalyzable initial formatives which occur with what might be regarded as uniquely occurring noun stems (cf. 612 on verbal formatives). Without the formative, the remainder of such forms usually shows the CVC and CVCVC shape characteristic of stems, as in /ʔanaq-puw/ 'wildcat' and /ʔaq-wicuy/ 'image, reflection.' A few such uniquely occurring stems are lexically reduplicated, such as /-ičana-kučkuč/ 'eyebrow' and /ʔaya-tulutul/ 'butterfly.' There are a few clear cases of segmentability among these forms.

### 512.1 ʔala- ~ ʔana-

Given the interchange of /l/ and /n/ in the more obscure reaches of Chumash morphology (cf. 275), ʔala- and ʔana- are likely to be variants of a single formative.

Examples with ?ala-:

/?ala-pliš/ 'east'

/?ala-štiwíkš/ 'dark blue soapstone'

/?ala-yewuñ/ ?eleyewuñ 'swordfish'

/-?ala-woyoč/ -?olowoyoč 'thighbone' (cf. /woyon-š/  
woyoč 'to be crooked')

Examples with ?ana-:

/?ana-šiy±/ 'broken fragment of a stone pot'

/?ana-kok/ ?onokok 'lizard sp.'

/?ana-mekeyeye/ ?enemekeyeye 'horned toad'

#### 512.2 ?alaq- ~ ?anaq-

For this formative, the form with /n/ is more common than that with /l/.

/?anaq-čan/ 'old woman'

/?anaq-puw/ 'wildcat'

/?anax-suhuý/ 'wren'

/?alax-woškoloy/ ?oloxwoškoloy 'duck sp.'

#### 512.3 ?aq- ~ ?ax-

This formative suggests the aq-/ax- so common as a verbal formative (q.v., 612.2), but with nouns it shows an initial glottal stop and a lack of any derivational suffix to indicate a verbal origin.

/?aq-wicuy/ 'image, reflection'

/-?aq-won/ -?oqwon 'head, hair'

/-?ax-pilil/ 'root; nerve, sinew; bowstring'

/?ax-pew/ ?expew 'sugarbush, carrizo'

/?aq-meyemey/ ?eqmeyemey 'bunch, bundle'



## 512.4 ?aya-

All of the nouns characterized by this formative are animal names.

- /?aya-tulutul/ 'butterfly'
- /?aya-pililil/ 'cowrie shell'
- /?aya-mušmuš/ 'caterpillar'
- /?aya-sow/ ?oyosow 'bumble bee'

## 512.5 ?ayu-

The nouns characterized by this formative are also animal names.

- /?ayu-wese?/ 'snake sp.'
  - /?ayu-winčacaq/ 'kingfisher; kind of rattle'
  - /?ayu-wašla-loklok/ ?ayuwošloloklok 'coral snake'
- (cf. /i-lokin + R/ iloklokin 'to be striped')

## 512.6 -ic- ~ -ič-

The nouns characterized by this formative are all inalienably possessed, which accounts for the lack of an initial glottal stop in the formative. It is possible, however, that some cases of this formative may actually represent i-epenthesis before initial consonant clusters by phonological rule 286.15. A possible comparative example of this process is Barbareño čtiñ 'dog (i.e. pet)' and Ineseño -ičtiñ 'child,' which is always preceded by person-number prefixes.

- /-ic-puk/ 'pimple, blackhead'
- /-ic-kuyan/ 'bow, weapon'
- /-ic-qwe?/ 'crest, hairpin'

/-ič-kumu<sup>?</sup>/ 'walking-stick, digging stick'

In a few nouns which may contain this same formative, there is an initial glottal stop.

/ʔic-panaxuy/ 'stick for shinny ball'

/-ʔič-ko<sup>?</sup>/ 'underside of thigh'

/-ʔič-pik/ 'glans penis'

#### 512.7 -ičana- ~ -ičana-

This formative occurs with body part terms. It may be composed of -ic- plus ʔana-, as a dual formative.

/-ičana-monomu<sup>?</sup>/ -ičonomonomu<sup>?</sup> 'thigh'

/-ičana-kučkuč/ 'eyebrow'

/-ičana-nik<sup>?</sup>/ -ičaninik<sup>?</sup> 'vulva of animal'

/-ičala-wayan/ 'underside of thigh' (cf. wayan 'to hang')

#### 512.8 Rare Formatives

There are a number of sequences which may be rare or sparsely attested formatives. These include wati-

/wati-qoq/ 'stink bug'

/wati-qš-lopo<sup>?</sup>/ 'large black beetle'

-ʔaqa- ~ -ʔaxa- with some body part terms,

/-ʔaqa-wawa/ 'underside of thigh'

/-ʔaxa-lamu<sup>?</sup>/ 'marrow'

and others, perhaps segmentable.

/wašti-qoliqol/ 'wild rose'

/ʔayux-kuy/ 'north'

/ʔa<sup>?</sup>lu-qayas/ 'bird sp.'

/čaq-wipwip/ 'black willow'

/ʔani-čapapa/ 'sharp-shinned hawk'

## 512.9 Segmentability of the Noun Formatives

The formatives are recurrent sequences, fused with generally CVC and CVCVC stems, sometimes lexically reduplicated. A couple of these forms are clearly segmentable, including /ʔayu-wašla-lok + R/ ʔayuwošloklok 'coral snake,' based on a stem /i-lok<sup>1</sup>in + R/ iloklok<sup>1</sup>in 'to be striped' and a prefix wašla- which refers to motion on the ground (q.v., 674.21), and /ʔanaq-su-uti-pok<sup>1</sup> + R/ ʔanaqsutipokpok<sup>1</sup> 'mole,' based on a stem pok<sup>1</sup> 'to swell,' in reference to the mole's characteristic trail.

The occasional reduplicated plurals of nouns with initial formatives substantiates the proposed segmentation.

/ʔanaq-čan-ʔ + R/ ʔanaqčančan<sup>1</sup> 'old women'

/ʔaya-płlłłł-ʔ + R/ ʔayapłłłłł<sup>1</sup> 'cowrie shells'

/ʔaya-tulutul-ʔ + R/ ʔayatultulutul<sup>1</sup> 'butterflies'

But formative boundaries may be ignored in reduplication;

/ʔaya-kuy-ʔ-ʔ + R/ ʔayʔayakuy<sup>1</sup> 'baskets'

there is an example of an alternative reduplication of /ʔanaq-čan/ 'old woman' as

/ʔanaq-čan-ʔ + R/ ʔanʔanaqčan<sup>1</sup> 'old women'

## 513 Lexically Reduplicated Nouns

A great many nouns are lexically reduplicated, particularly those denoting kinship terms and plant and animal names. As discussed in detail in the phonological section on lexical reduplication (260), there are several patterns of reduplication. One of the initial formatives (e.g. ʔana-, ʔaya-) discussed above (512) may appear with the

reduplicated sequence.

### 513.1 CVC Reduplication

lewlew 'mythological creature'

yokyok 'bird sp.'

/ʔaya-mušmuš/ 'caterpillar'

/-ičana-kučkuč/ 'eyebrow'

### 513.2 Initial CV- Reduplication

-teteʔ 'mother'

-pepeʔ 'older sibling'

-popoč 'paternal grandfather'

/ʔaya-mama/ 'ant sp.'

### 513.3 Final -VC Reduplication

-ʔosos 'heel'

ʔapap 'ball'

štexex 'river'

~~/ʔaq-muyuy/ 'to make a hissing sound'~~

### 513.4 Medial Reduplication

shayayan 'ripe pinon nut'

walalaq 'lichen'

/ʔaya-pililil/ 'cowrie shell'

/ʔana-mekeyeye/ ʔenemekeyeye 'horned toad'

### 513.5 wuluwul Reduplication

wuluwul 'lobster'

qweleqwel 'cottonwood tree'

/ʔaya-tulutul/ 'butterfly'

## 514 Personal Names

Personal names, along with place names (q.v., 515), comprise a special subset of nouns. These proper nouns are distinct from common nouns both morphologically and syntactically: they do not occur with the article *ma-/ha-* (q.v., 540), they do not occur with possessive markers (q.v., 571), and non-initially in the phrase they are introduced by the connective particle *hi* (q.v., 710).

Personal names are unanalyzable, beyond the recurrent endings *-cet* and *-it* which appear to be segmentable in many names. Personal names ending with *-cet* include

kamuliyacet	suluqwaycet
qolpuyalacet	sulwasunaycet

and names with final *-it* include

kwinayit	silinahuwit
kuluwit	qilikutayiwit

Examples of unsegmentable names are

šapakay'	xoph <sup>h</sup> ono
wiyaxamšu	topošoy
sexpeweyol	titi
lawlawinat	yuyu

These names are the names of actual people whom Harrington's informants knew or had heard of. Native Chumash names, as opposed to Christian names, were called

/ma-s-ti ha-s-xintila/ mašti hasxintila 'his Indian'

(lit. gentile, pagan (Span. gentil)) name'

/ma-s-ti ha-s-xintila-waš/ mašti hašxintilawaš

'his former Indian name'

The form *titi* (and probably *yuyu* also) is evidently a nickname, as suggested by the phrase

/pa ʔal-am-aquti-pleʔ ha s-am-ʔip-us titi/ paʔalamaqu-  
tipleʔ asamipus titi 'they nickname him titi:  
just showing affection / they call him / titi'

Names of characters in the mythological texts are almost entirely the names of animals, such as *xuxaw* 'coyote,' *kiwičiʔ* 'raccoon,' *maqutikok* 'woodpecker,' etc. Two non-animal names from the texts, however, are *ponoya*, unanalyzable, and /s-api-qen-waš/ šapiqenewaš, literally 'he is burned up.'

Personal names sometimes violate certain morpheme structure conditions and phonological rules. The recurrent ending *-cet* is, perhaps, a suffix which does not contain one of the apex vowels /i a u/ characteristic of affixes. Low vowel harmony is violated in *ponoya* and in *sexpeweyol*, and in forms with *-cet* such as *qolpuyalacet*. Unusual consonant clusters with initial sonorants occur in the names *wiyaxamšu*, *suluqwaycet*, and *sulwasunaycet*.

### 515 Place Names

Place names vary considerably in morphological make-up. Some place names within Ineseño territory are unanalyzable, such as

ʔokot	teqepš
ʔowotoponuš	ʔomox
ʔayataxič	ʔasaka
šilimaqštuš	homomoy

Other place names are at least partially segmentable, showing either the locative nominalizing suffix -mu<sup>?</sup> (q.v., 523.5),

/tux-mu<sup>?</sup>/ 'a place: now Arroyo Hondo'

/šulumiyaš-mu<sup>?</sup>/ 'a place' (/s-ulu-miy-Vš-mu<sup>?</sup>/?)

/soxtonok-mu<sup>?</sup>/ 'a village' (/s-axta-nok-mu<sup>?</sup>/?)

or the archaic locative prefix mi- (q.v., 552),

/mi-nawan/ 'name of a mountain north of Santa Ynez'

/mi-čhunto<sup>?</sup>po/ 'a place' (cf. topo<sup>?</sup> 'navel')

or a prefixed form of the predicative particle ka (723),

ka-lawašaq<sup>?</sup> 'a village upriver from Santa Ynez'

Some place names are etymologized by the informant, although some of the etymologies seem a little fanciful.

ʔaqic<sup>h</sup>um<sup>?</sup> 'a village, said to mean "a constant sign"

(cf. saqicwił<sup>?</sup> 'to make a sign')

ʔanaxuwi 'a village, said to mean "meadow"

ʔanamaqankay 'a place, said to mean "in the traps"

(cf. aqkay<sup>?</sup> 'to trap')

Other place names are clearly segmentable. Some of these are nominal in form, although not always fully inflected.

/šiš ha-č<sup>?</sup>i<sup>?</sup>/ šišač<sup>?</sup>i<sup>?</sup> 'a village: the woodrat's hole' *La Quemada village*

/ʔal-maxalamiš/ ʔamaxalamiš 'a place: the fiesta'

/ušak-mu<sup>?</sup>/ ʔušakmu<sup>?</sup> 'a place: spilling out place'

/ʔal-ni-apay-mu<sup>?</sup>/ ʔanapamu<sup>?</sup> 'a hill: ascending place'

/ka-s-pax-mu<sup>?</sup>/ 'a place: [the road's] turning place'

/s-xal-mes-mu<sup>?</sup> ha-č<sup>?</sup>il<sup>?</sup>il<sup>?</sup>/ sxelmesmu<sup>?</sup> ač<sup>?</sup>il<sup>?</sup>il<sup>?</sup> 'name of a

deep canyon: the antelope's jumping over place'

/ka-štayit/ 'a place: [where] the willows [are]'

Some place names are verbal in form.

/ka-s-tepet/ kaštepet 'name of a hill, a long hogback:  
it rolls'

/s-puti-wax/ 'a spring: it leaks out'

/s-aq-laíam-š/ šaqlaíamš 'a place at the mouth of a  
canyon: it is tucked in'

/ka-s-aqul-peqen/ kasaqunpeqen 'a village at the mouth  
of a canyon: a long thin object comes to an end'

/mi-s-waskin/ 'a village: where it spreads open'

The manuscript also contains the names of many places  
outside of Ineseño territory. Many of these are not seg-  
mentable in Ineseño,

lompo? 'lompoç'

kumqaq 'Point Conception'

kuyam 'Cuyama'

paltuqaq 'a village north of Santa Barbara'

while other non-Ineseño place names are transparent.

/ka-s-tiq/ kaštiq 'Castaic: [where the eye, face [is]]'  
(cf. tix 'eye, face')

/s-xenen/ 'La Paleta, on the Sisquoc River: the  
shoulder' (cf. -qeneñ 'shoulder')

/ka-sinay-š-mu?/ kašinašmu? 'The Tejon: where it is  
stored, put away'

/mi-c-qanaqañ/ 'Ventura: place of the jaw bone' (cf.  
xanaxañ 'jaw bone')



## 520 Nominalization

There are several common modes of nominalization in Ineseño. The most important distinction to be made among these is between the prefixed nominalizer ma-/ha- and the agentive ?al-, which both occur freely with any verb, and a number of nominal derivative suffixes which occur only with certain verb stems. Included in this latter class are derivatives with the affixes s- (...-waš), which are basically verbal in form. There is also a class of zero derivatives, characterized by the lack of any derivational affix.

## 521 ma-/ha- as a Nominalizing Prefix

The prefix ma-/ha- is a nominal marker, with ma- occurring in phrase-initial position and ha- usually occurring elsewhere. With nouns ma-/ha- functions as an article (q.v., 540); with verbs it has a nominalizing or relativizing force. A verb nominalized with ma-/ha- is equivalent to a noun phrase.

/ma-k-al-su-?inu hi ma-qsi/ makasu?inu imaqsi 'what I  
believe in [is] the sun'

/kuy-? ha-no-p-?uw/ kuý anopuw 'take what you are going  
to eat!'

## 521.1 The Morphology of Nominalizations with ma-/ha-

The marking of person and number in nominalized forms with ma-/ha- differs between third and non-third person subjects. The first and second persons are marked as usual (cf. 411 on prefixed person-number markers).

/ma-k-aqšiyik/ 'what I like'

/ma-p-sinay/ 'what you put away'

The subordinating prefix al- (q.v., 671.2) is optional with first and second person forms.

/ma-k-al-ʔuw-waš/ maka<sup>1</sup>luwuwaš 'what I ate'

/ma-p-iš-al-kuti/ mapišakuti 'what you (dual) see'

Third person subjects with ma-/ha- have a special form characteristic of nominalized and relativized constructions. The usual third person marker s- is missing, although it is replaced by l- in the singular and indefinite numbers. With the dual and plural, al- is obligatory.

singular /ma-l-/

dual /ma-iš-al-/ mašal-

plural /ma-iy-al-/ mayal-

indefinite /ma-l-am-/

#### 521.2 The Force of Nominalized Forms with ma-/ha-

The force of a verb nominalized with ma-/ha- depends on whether the verb is transitive or intransitive. The nominalization of a transitive verb nearly always refers to the object, usually only implied.

/ma-k-iy-eqwel/ 'what we are doing'

/ma-l-am-ʔip-us ha tok/ mala<sup>1</sup>mipus atok 'what they call tok (red milkweed)'

The nominalization of an intransitive verb refers always to the agent, human or non-human;

/ma-l-qil-čičiʔ/ maqincičiʔ 'one who is drowning'

/ma-l-kitwon/ makitwon 'one who, that which emerges'

/ka ha-l-aqwi'y-š heki/ kalaqwiš eki 'that one is worthless: one that is worthless [is] that'

the agent need not necessarily be third person.

/ma-k-iy-al-šoyin/ makiyašoyin 'we who are dark (in complexion), i.e. we Indians'

/ma-k-iy-al-nañ hi ʔašaka/ makiyanañ iʔašaka 'we who are going to ʔašaka (Zaca).

Occasionally the nominalized form of a transitive verb refers to the agent rather than to the object.

/piʔ ka ha-p-al-qunun-pi/ piʔ kapaqunumpi 'you are the one who is doing it: you / you who do it;' instead of 'what you are doing'

/ma-eqwel-Vš ha-l-su-kitwon ha-ʔoʔ/ maʔeqweleš asukitwon aʔoʔ 'a pump: the item that brings out water;' instead of 'what is brought out'

Intransitive verbs nominalized with /ma-l-/ are especially common as nominal forms, often non-concrete.

/ma-l-uqštay/ '(a) light: that which is bright'

/ma-l-axc'acax/ '(the) cold: that which is cold'

/ma-l-yul-wil/ mayuwil '(the) <sup>heat</sup> ~~cold~~: that which is <sup>hot</sup> ~~cold~~'

/ma-l-xal-nowon/ maxonowon 'bird: that which flies'

/ma-l-is-tik-Vn/ malištik<sup>h</sup>in 'the first one: that which goes first, which goes in front'

### 521.3 Reduced Forms of ma-/ha-

When non-initial in the phrase, ma- as either an article or a nominalizer is usually reduced to ha-.

/no-s-iy-kuti ha-iy-al-kuti/ nosikut ayakuti 'they

will see what they see'

/s-xuti-nan<sup>1</sup>-pi-it ha-l-yul-wil/ sxutinampiyit ayuwil

'the heat bothers me: bothers me / what is hot'

This reduction can be confusing in the early stages of analysis, since, along with the regular deletion of pre-consonantal /l/, the resulting form looks like a bare uninflected verb stem (e.g. [ayuwil] above). In a few cases, however, ma- does not undergo reduction to ha- when non-initial, as in

/no-k-su-yul-č̣i ma-k-iy-ax-kat/ noksiyic̣i makiyaxkat

'I will heat up our left-overs (i.e. what we left uneaten)'

Nominalizations with the ha- form of ma-/ha- are often elided with the predicative particle ka (q.v., 723)

/syuxtun ka ha-k-al-aq-šuč/ syuxtun kakalaqšuč 'I am

heading for syuxtun: syuxtun [is] what I head for;

I [am one] who is heading to syuxtun'

and occasionally with pa 'just, merely.'

/iy-<sup>?</sup>uw pa ha-l-wil/ <sup>?</sup>iyuw pawil 'eat (plural) just what there is!'

#### 521.4 Nominalizations with ma-l-am-

There is a more specific pattern of nominalization based on /ma-l-/ plus the indefinite subject marker am-; this pattern is productive, but often involves a semantic specialization which simple relative forms with ma-l- do not.

/ma-l-am-ašin/ 'food: what they eat; what is eaten'

/ma-l-am-elew/ 'downhill slope: where it goes down'

/ma-l-am-tapšun/ 'bog, swamp: where it bogs down'

/ma-l-am-ax-tap/ 'venison: what is put into the mouth'

A few forms with /ma-l-am-/ seem to have causative force.

/ma-l-am-paš/ 'emetic: what makes one vomit'

/ma-l-am-pičeʔ/ 'purgative: what gives one diarrhea'

Nominalizations with /ma-l-am-/ are paralleled by synonymous constructions with the agentive prefix ʔal-.

In free variation are

/ʔal-am-ašin/ ~ /ma-l-am-ašin/ 'food'

/ʔal-am-ax-tap/ ~ /ma-l-am-ax-tap/ 'venison'

But there is no /ma-l-am-/ form of

/ʔal-am-aqša/ 'disease: what makes one sick'

/ʔal-am-ta-pleʔ/ ʔalantepleʔ 'tuberculosis: what gives one tuberculosis'

## 522 Agentive Prefixes

The agentive is another productive mode of nominalization, as common as ma-/ha-.

### 522.1 The Form of Agentive Prefixes

The agentive prefixes are:

singular /ʔal-/

dual /ma-iš-al-/ mašal-

plural /ma-iy-al-/ mayal-

indefinite /ʔal-am-/

Only in the singular and indefinite numbers are agentive and nominalized forms with ma-/ha- fully distinct: the dual and plural agentive prefixes are identical to the

ma-/ha- forms. The indefinite agentive prefix /ʔal-am-/ occurs occasionally, as in

/pa ʔal-am-aquti-pleʔ ha s-am-ʔip-us titi/ paʔalamaqu-  
tipleʔ asamipus titi 'they nickname him titi:  
those who just how him affection call him titi.

But /ʔal-am-/ is largely restricted to the few nominal constructions discussed above (521.4), where it may be in alternation with /ma-l-am-/.

/ʔal-am-ašɪn/ - /ma-l-am-ašɪn/ 'food'

## 522.2 Contrast of Agentive and Nominalized Forms

The agentive prefix ʔal- may sometimes contrast with the nominalizer ma-/ha-. The agentive ʔal- is usually restricted to animate subjects, while ma-/ha- is not. For example, Harrington noted that with an inanimate subject, the suggested agentive form

\*/ʔal-hilaq-Vč/ \*ʔahilaqič '[a knife] that has a handle' was rejected in favor of a nominalized form.

/ma-l-hilaq-Vč/ mahilaqič 'that which has a handle'

But inanimate examples include

/ʔal-apay/ 'sky, heaven; up, above'

/ʔal-al-čimɪn + Rɪ/ ʔalacimɪmɪn 'a narrow-mouthed  
basket: one with pursed lips'

A contrast of agentive and nominalized forms in the singular is common.

/ʔal-xal-nowon/ ʔaxonowon 'bird: flier'

/ma-l-xal-nowon/ maxonowon 'bird: that which flies'

Agentive forms with ʔal- (but not the dual and plural

forms) may cooccur with the article ma-/ha- (q.v., 540).

/ma-ʔal-aqša-Vn/ maʔalaqšan 'the dead man'

/ma-ʔal-aqniḗ + R/ maʔalaqniḗ 'the basket-maker'

/ma-ʔal-mati-naḗ/ maʔamatinaḗ 'coyote: the slinker'

The singular agentive ʔal- may even be pluralized by CVC reduplication, although the usual plural form /ma-iy-al-/ mayal- is more common.

/ʔal-aqša-Vn-ʔ + R/ ʔalʔalaqšan 'the dead'

/ma-iy-al-aqša-Vn/ mayalaqšan 'the dead'

CVC reduplication falls on ʔal- when reduplication has a pluralizing force,

/ʔal-aqša-Vn-ʔ + R/ ʔalʔalaqšan 'the dead'

but on the following syllable when it has an intensive force (cf. 683 on CVC reduplication and prefixes).

/ʔal-aqniḗ + R/ ʔalaqniḗ 'basket-maker'

### 522.3 Analysis of ʔal-

A possible analysis of the agentive prefix ʔal- is to identify it with the subordinating prefix al- (q.v., 671.2) which occurs primarily in relative environments, and which is an obligatory part of the dual and plural forms /ma-iš-al-/ mašal- and /ma-iy-al-/ mayal-. The initial glottal stop of ʔal- would be automatic in vowel-initial derived forms (by phonological rule 286.17), even where a person-number marker precedes in inflected agentive constructions (q.v., 816).

/k-ʔal-aqs-paʔ/ kalaqspaʔ 'I am a (habitual) smoker'

/s-iy-ʔal-wiḗ + R/ siyawiwḗ 'they are hunters'

But to identify these agentive and subordinating prefixes completely would create much ambiguity, since the two could not always be distinguished, even in context, without an overt marking of the initial glottal stop of ?al-. Accordingly, the agentive prefix ?al- will be written uniformly with an initial glottal stop in the underlying form.

#### 522.4 Semantic Specialization of ?al-

The singular agentive prefix ?al- is often subject to semantic specialization, usually with animal names.

/?al-mati-nan'/ ?amatinañ 'coyote: the slinker'

/?al-xal-nowon/ ?axonowon 'bird: the flier'

/?al-uše?-š/ ?alušeš 'badger: the digger'

/?al-šĭ-Vn/ ?alšĭhĭn 'mountain goat: the cliff-climber'

Some forms with ?al- show vowel harmony at work, indicative of the weakening of morpheme boundaries (cf. 290 on morphemization).

/?al-al-koy/ ?ololkoy 'porpoise: one that goes around'

/?al-al-pey/ ?elelpey 'leech: one that sticks on'

A great many unanalyzable animal names have an initial ?al- or ?a-; it is probable that many of these are petrified forms with the agentive ?al-, sometimes showing low vowel harmony.

?almiyi? 'condor'

?ančačač 'minnow'

?anipe? 'cliff-swallow'

?emet? 'ground squirrel'

?aluša 'shellfish sp.'

?olwoy 'shellfish sp.'

Other nouns suggestive of this analysis include



ʔalč<sup>h</sup>um 'shell money' (cf. č<sup>h</sup>umaš 'Santa Cruz islander,'  
 said to specialize in the manufacture of ʔalč<sup>h</sup>um)  
 ʔantap 'member of a secret society'  
 ʔalqap 'mortar'

Agentive ʔal- is sometimes idiomatically petrified in  
 a verbal compound. An example, reminiscent of the fable  
 of the tar baby, based on /su-woqo/ 'to smear with tar,' is  
 /ʔal-su-woqo/ ʔasuwoqo 'to be quarrelsome'

Other verbs suggestive of this analysis are common.

ʔapan<sup>1</sup> 'to be reluctant'  
 ʔalpun 'to be generous'  
 ʔačan<sup>1</sup> 'to be possessed by a spirit while dancing'  
 ʔalištaxan 'to cheer up, take courage'  
 ʔelke<sup>2</sup> 'to be given to much laughter'

As discussed in 290 on morphemization, ʔolxo<sup>2</sup> 'to rob,  
 steal' can be analyzed as containing ʔal-.

### 523 Suffixed Derivative Nominalizers

There are several suffixed derivative markers. Common  
 to all suffixed modes of nominalization is the automatic  
 prefixation of a glottal stop to any initial vowel,  
 by phonological rule 286.17,

/u<sup>1</sup>liš-mu<sup>2</sup>/ ʔu<sup>1</sup>lišmu<sup>2</sup> 'handle'

while there is no glottalization in the underlying verb.

/s-u<sup>1</sup>liš/ šu<sup>1</sup>liš 'he grasps it'

This glottal stop occurs even when the vowel is preceded  
 by possessive person-number markers.

/s-u<sup>1</sup>liš-mu<sup>2</sup>/ šu<sup>1</sup>lišmu<sup>2</sup> 'its handle'

Indeed, with inalienably possessed derivatives, a stem-initial vowel to which glottal stop is prefixed is never word-initial.

/s-aqša-Vn-Vš/ šaqšaniš 'his death'

### 523.1 -Vš 'Resultative'

The most productive suffixed nominalizer is -Vš (sometimes -Vṣ̌ for no clear reason, though sporadic glottalization). Beeler calls -Vš 'resultative' ('Topics in Barbareño Chumash Grammar,' p. 18); it might be translated as 'that which has been V-ed,' 'that which has undergone the process of V-ing.'

/ṣip̣it-Vš/ ṣ̌ip̣itiš 'acorn mush' ('to make acorn mush')

/su-tap-Vš/ šutap̣iš 'something dyed' ('to dye')

/lwex-Vš/ ʔiwexeš 'flour, meal' ('to grind')

/ixṭiʔ-Vš/ ʔixṭiš 'roof, thatch' ('to roof, thatch')

/ti-yep-Vš/ tiyep̣eš 'news, tidings' ('to tell')

/oqotokok-Vš/ ʔoqotokokuš 'toasted meal' ('to toast meal')

Sometimes -Vš does not have a strictly resultative force.

/-ʔiḥiy-Vš/ -ʔiḥiyiš 'length, stature' ('to be long')

/-aqša-Vn-Vš/ -ʔaqšaniš 'death' ('to die')

/ti-mes-Vš/ timešeš 'fastener' ('to fasten shut')

So productive is -Vš that it occurs even with Spanish loans.

/ʔalasal-Vš/ ʔalašališ 'prayer' ('to pray: Span. a rezar')

/pḥilil-Vš/ pḥililaš 'something fried' ('to fry: Span. freir')

### 523.2 ∅ / -Vš 'Inalienably Possessed / Non-possessed'

Many derived nouns show an alternation of zero suffix

for inalienably possessed forms versus -Vš for non-possessed forms (cf. 570 on possession). Initial vowels with inalienably possessed forms take no preceding glottal stop, while non-possessed forms do.

ackaw 'to make a mistake'

-ackaw : /ackaw-Vš/ ?ačkawiš 'error, mistake [±alien]'

woyon 'to be crooked; to braid the hair'

-woyon : /woyon-Vš/ woyonuš 'braid [±alien]'

xalpak 'to tie a baby onto the cradle'

-xalpak : /xalpak-Vš/ xalpakiš 'a baby on the cradle'

isaxpin 'to be rough, bumpy; to have pimples'

-isaxpin : /isaxpin-Vš/ ?išaxpiniš 'pimple [±alien]'

A possible alternative analysis of such inalienably possessed forms (e.g. /ma-k-xalpak/ 'my baby on the cradle') is that they are simply nominalizations with ma-/ha- (q.v., 521). Such an analysis works with first and second person forms, where possessive and nominalized subject markers are identical.

/ma-k-xalpak/ 'my baby on the cradle; what I tie onto the cradle'

But with third person forms, the presence of the regular third person marker s- with such inalienably possessed derivatives is conclusive;

/ma-s-xalpak/ 'her baby on the cradle'

the corresponding nominalized form with ma-/ha- would have l- as the person marker.

/ma-l-xalpak/ maxalpak 'what she ties onto the cradle'

Some derivative nouns with zero suffix may well fall

into this derivative class, with the absence of the non-possessed form in the corpus purely accidental. On the other hand, such cases in which the inalienably possessed form is accidentally not attested would simply be counted as part of the -Vš 'resultative' class.

### 523.3 -ʔ 'Instrumental'

Glottalization of a final segment is a common mode of nominalization, usually with instrumental force.

/aqsik-ʔ/ ʔaqsik<sup>1</sup> 'tie, lacing, handle' ('to tie')

/iqmay-ʔ/ ʔiqmay<sup>1</sup> 'lid, cover' ('to cover up')

/axi-yep-ʔ/ ʔaxiyep<sup>1</sup> 'medicine' ('to cure')

/su-axsil-ʔ/ saxsil<sup>1</sup> 'fishhook' ('to cause to bite')

/waš-tap-ʔ/ waštap<sup>1</sup> 'bracelet' ('to put the hand into')

Examples with non-instrumental force:

/ʔihiy-ʔ/ ʔihiy<sup>1</sup> 'man, male' ('to be long, tall')

/-aqšiw-ʔ/ -ʔaqšiw<sup>1</sup> 'belly, gut' ('to gut, ream out')

/yixsin-ʔ/ yixsin<sup>1</sup> 'harvest, edible seed' ('[harvest] to ripen, come to fruition')

Final glottalization serves as a nominal marker in the plural suffix -wun<sup>1</sup> (q.v., 561), as compared to the plural object marker -wun in verbs (q.v., 412, 631.1).

Some verbs show an alternation of verbal forms with a final /n/ and nominal forms with a final glottal stop, usually with instrumental force.

/haxwi-ʔ/ 'clothes' : /haxwi-n/ 'to dress'

/sukupi-ʔ/ 'kind of shiny beads' : /sukupi-n/ 'to light up [trans.]'

/šuštwo-ʔ/ 'stone for cooking in a basket' :

/šuštwo-n/ 'to heat up the cooking stones'

/iče-ʔ/ ʔičeʔ 'stone with holes for cracking acorns' :

/iče-n/ 'to crack acorns in holes drilled in rock'

#### 523.4 -ʔiʔ 'Instrumental'

This suffix is a highly productive instrumental nominalizer.

/uliš-ʔiʔ/ ʔulišiʔ 'handle' ('to grasp')

/ʔuštap-ʔiʔ/ ʔuštapʔiʔ 'oar' ('to row')

/pʔ-ʔiʔ/ pʔiʔ 'ladle, dipper' ('to dip up, ladle up')

/palu-tap-ʔiʔ/ palutapʔiʔ 'drill, auger' ('to bore a hole')

/su-wayan-ʔiʔ/ suwayaniʔ 'peg for hanging things on'

('to cause to hang')

In a few inexplicable cases, -ʔiʔ is used in conjunction with the resultative -Vš.

/saq-kumuʔ-Vš-ʔiʔ/ šaqkumulašiʔ 'weight, measure' ('to weigh, measure')

/su-yul-čʔ-Vš-ʔiʔ/ šʔyčʔilašiʔ 'container for heating water' ('to heat up')

#### 523.5 -muʔ 'Locative, Resultative'

The suffix -muʔ is a productive nominalizer, usually with locative force, but sometimes with a range of meanings best summed up as resultative (cf. 523.1). Locative examples include

/aqmil-muʔ/ ʔaqmilimuʔ 'drinking spring' ('to drink')

/kep-muʔ/ kepmuʔ 'bathing pool' ('to bathe')

/mes-muʔ/ 'bridge' ('to cross over')

/ixip-mu?/ ?ixipmu? 'the goal (in a game)' ('to beat')

/-kitwon-mu?/ -kitwonumu? 'where something emerges'

/ma-s-kitwon-mu? ha-?o?/ maskitwonumu? a?o? 'the  
mouth of the river: the water's coming out place'

Resultative examples:

/?uw-mu?/ ?uwumu? 'food' ('to eat')

/síp-mu?/ sípmu? 'a load carried on the back' ('to  
carry on the back')

/eqwel-mu?/ ?eqwelumu? 'work, occupation' ('to do')

/-is-?ap-nVš-mu?/ -išapnušmu? 'spouse' ('to marry')

An example of an inflected verb with -mu? is

/ka p-?olxoñ-us-mu?/ ka?olxoñusmu? 'where you rob him'

#### 523.6 -šaš, -štaš 'Resultative'

Although not in complementary distribution, these two nominalizers are quite similar, and may be discussed together. They usually have a resultative force similar to that of -Vš. Examples with -šaš:

/yuxpan-šaš/ yuxpač<sup>h</sup>iš 'sickness, disease' ('to be sick')

/uqti-yiw-šaš/ ?uqtiyiwšaš 'something scarce' ('to be  
scarce')

/ti-moloq-Vn-šaš/ timoloqič<sup>h</sup>šaš 'tale, story' ('to talk  
about old times')

Examples with -štaš:

/aq-pey-štaš/ ?eqpeyšt<sup>i</sup>š 'a match, equal' ('to resemble')

/axn<sup>i</sup>wič-štaš/ ?axn<sup>i</sup>wič<sup>t</sup>šaš 'pneumonia' ('to have pneu-  
monia')

/su-uti-šipiš-štaš/ šutišipištaš 'sorcery' ('to prac-

tice sorcery, witchcraft')

Such cases are clearly nominal, but in some cases the derived form also looks like a verb, at least in translation. This is because nouns may be inflected just as verbs are, in nominal predications (q.v., 815), and some nominalized forms with -šaš and -štaš are attested only in nominal predications.

/tiqšlay-šaš/ tiqšlayšiš 'something slippery' ('to slip'), attested only in

/s-tiqšlay-šaš/ štiqšlayšiš 'it is slippery: it is something slippery'

/uni-exmeš-štaš/ ?unexmeštšiš 'a hopeless matter' ('to lose hope, despair'), attested only in

/s-uni-exmeš-štaš/ šunexmeštšiš 'there is no hope: it is a hopeless matter.'

#### 524 s- (...-waš) as a Nominalizer

Nominalizations with s-, identical in form to the third person singular marker s-, might be literally translated as verb phrases: 'that which V-s.'

/s-pey/ 'flower' ('to bloom')

/s-mopš/ šmopš 'foam, bubble(s)' ('to foam, bubble')

/s-liyo?/ šliyo? 'pool, pond' (liyon 'to be deep')

/s-lo?/ šlo? 'the goal (in a game)' ('to touch the goal in a game')

/-s-iwo/ 'throat, windpipe' ('to sound, make a noise')

A few derived forms which are not based on freely occurring verb stems include

- /s-axta-k<sup>h</sup>it/ 'wind,' perhaps also 'the wind blows'  
 /s-ikmen/ 'waves, surf,' perhaps also 'the surf breaks'  
 /s-xil-kat/ 'island,' with a transparent stem meaning  
 'to remain above water'

True to the inherently verbal nature of such forms, s- may also appear with the past marker -waš. These nominalizations have a general connotation of fragmentation similar to that of the nominal suffix -iwaš 'dead, defunct' (q.v., 551).

- /s-čeq-waš/ ščeqwaš 'shred, fragment' ('to break, tear')  
 /s-čelen-waš/ ščelenewaš 'piece, chunk' ('to tear off')  
 /s-wil-waš/ šwiliwaš 'piece, chunk' ('to exist')  
 /s-ʔaximik-waš/ šaximikwaš 'something bad' ('to be bad')  
 /s-weñi-waš/ šweñiwaš 'half, side' ('beyond, on the  
 other side of')

#### 525 Zero Derivation

Nominal derivatives lacking any derivational affix are fairly rare. As with other modes of nominalization (except the inalienably possessed forms which alternate with non-possessioned equivalents in -Vš, q.v., 523.2), any initial vowel is automatically prefaced with glottal stop. It should be noted that many of these stems end in glottal stop or a glottalized consonant, perhaps felt to have some connection with final glottalization as a mode of nominalization (q.v., 523.3).

- /a<sup>h</sup>ikaš/ ʔa<sup>h</sup>ikaš 'honey' ('to burn in the throat')  
 /a<sup>h</sup>kaš/ ʔa<sup>h</sup>kaš 'trap' ('to trap')



- /ički?/ ?ički? 'man's loincloth' ('to wear a loincloth')  
 /axmišiš/ ?axmišiš 'bullroarer' ('to swing the bull-  
 roarer')  
 /'ci-nowon/ 'hill' ('to be heaped up')  
 /su-yul-wil/ suyuwil 'fire' ('to build a fire: to cause  
 it to be hot')

### 526 Multiple Derivation

The same verb may often be nominalized in more than one way. Such nominalizations are occasionally synonymous.

- /uliš-?i?/ ?uliš<sup>1</sup>i? ~ /uliš-mu?/ ?ulišmu? 'handle'  
 (uliš 'to grasp')

- /su-wayan-?i?/ suwaya<sup>1</sup>ni? ~ /su-wayan-mu?/ suwayanumu?  
 'peg (for hanging things)' ('to cause to hang')

More often they cover different semantic domains. Examples include derivatives of the stems iwo 'to sound,'

- /iwo-Vn-Vš/ ?iwonuš<sup>1</sup> 'song, tune'  
 /-s-iwo/ 'throat, windpipe'  
 /su-iwo-Vn-mu?/ siwonumu? 'musical instrument'

eqwel 'to do, make,'

- /eqwel-Vš/ ?eqweleš<sup>1</sup> 'item, article; something made'  
 /eqwel-mu?/ ?eqwelumu? 'work, trade, occupation'

and ?ihiy 'to be long.'

- /?ihiy-?/ ?ihiy<sup>1</sup> 'man, male'  
 /-?ihiy-Vš/ -?ihiyš<sup>1</sup> 'length, stature'

## 530 Nominal Inflection

Inflection in the noun is not particularly rich, in comparison to the complex inflectional apparatus of the verb. Inflectional affixes of the noun include the article ma-/ha-, some miscellaneous minor nominal affixes, optional markers of pluralization, and a set of person-number markers to denote possession, where inalienably possessed, alienably possessed, and non-possessioned forms are all found.

## 540 ma-/ha- as an Article

The prefix ma-/ha- is a nominal marker, with ma- in phrase-initial position and usually ha- elsewhere. With verbs ma-/ha- has a nominalizing force (q.v., 521, 662.1); with nouns it serves largely to mark nouns as such, where it is restricted to common nouns. As an article, ma-/ha- is devoid of any connotation of definiteness or of previous occurrence in the discourse.

## 541 ma-/ha- with Common Nouns

The domain of ma-/ha- is restricted to common nouns; it does not occur with proper nouns: place names (q.v., 515), personal names (q.v., 514), and the names of animals as characters in stories. A good example of this distinction is found in the story of puluy 'Crane-woman.' While Crane-woman is still a human being, her name is used with the connective particle hi (q.v., 710) which introduces proper nouns non-initial in the phrase.

/ka s-aqnip hi puluy/ kasaqnip ipuluy 'Crane-woman  
replies...'

When she has become a crane, the article is used with the common noun 'crane,' with ma- reduced to ha- non-initially.

/ka s-eqwel-šaši ha-puluy/ kašeqwelšiš apuluy 'she turns herself into a crane'

#### 542 Reduced Forms of ma-/ha-

When initial in the phrase, common nouns are nearly always prefixed with ma-, especially in citation forms.

/ma-qaq/ 'the raven, a raven'

/ma-k-popoč/ 'my paternal grandfather'

/ma-ʔihiy-ʔ hi s-kum-li/ maʔihiy' iskumili 'the man arrives'

When non-initial in the phrase, ma- is almost always reduced to ha-. An illustrative example here is two alternative word orderings of a single sentence, first with ma- when the noun is initial,

/ma-qsi ka s-su-yul-wil/ maqsi kas<sup>h</sup>uyuwil 'the sun warms it up'

and then, in the more usual word order, with ma- reduced to ha- when the noun follows the verb.

/s-su-yul-wil ha-qsi/ s<sup>h</sup>uyuwil aqsi 'the sun warms it'

But ma- does occasionally appear non-initially, as in

/s-ilakš ma-sipit-vš/ šilakš mašipitiš 'the mush is thin, watery'

It seems likely that this construction with non-initial ma- is no more emphatic than the reduced form with ha-. It may be more a matter of failure to observe the usual complementation of ma- and ha-: the reduction

of ma- to ha- is not a phonological process (cf. initial versus non-initial pairs of demonstrative pronouns, e.g. ke? : he? 'this, inanimate,' q.v., 431). After a phrase-final noun with ha-, Harrington's informant sometimes volunteered an echo form with the full ma- form of the article.

/s-ni-apay ha-qsi, ma-qsi/ šnapay aqsi, maqsi 'the sun comes up: comes up / the sun'

#### 543 Nominal Constructions without ma-/ha-

There are a few constructions in which common nouns are not introduced by the article ma-/ha-.

##### 543.1 Nouns used in a vocative sense do not take ma-/ha-.

/k-tete?/ '(my) mother!'

/toño?/ 'scorekeeper!'

/no-k-iy-nu-na?-in, k-tata?/ nokinunalin, ktata? 'we'll take you with us, (my) uncle'

543.2 The article ma-/ha- does not occur when a noun is preceded by certain particles, usually in nominal predications (q.v., 814), such as ?ini 'negative, moqe 'already,' and tini 'still.'

/?ini wic'/ '[it is] not a bird'

/?ini aqliw'/ ?ini?aqliw' '[it is] not a word (in Ineseño)'

/moqe ?eneq/ '[she is] a woman already'

/tini ku/ '[he is] still a human being (in a myth)'

Constructions with particles with final /a/ are ambiguous in this respect. These particles, ka 'predicative' and

na 'and,' may perhaps be elided with the ha- form of the article, as can be seen unambiguously in nominalized forms with ha-.

/ka ha-k-al-nañ hi no?/ kakanan' ino? 'I am going'

/na ha-l-?ikimin/ nalikimin 'and the new one'

In the absence of conclusive evidence that the article occurs with these particles, they will be analyzed as preceding bare noun stems without the article.

/ka k-eqwel-mu?/ kakeqwelumu? '[it is] my work, trade'

/tip na ?o?/ 'salt and water'

543.3 Occasionally a noun in phrase-initial position is not introduced by ma-, although all of these cases are paralleled by examples in which ma- does occur.

/šow ha s-?uw/ šow ašuw 'she eats šow (pespibata)'

/?o? ha-k-al-uni-yiw/ 'water [is] what I'm looking for'

/?oxtokow-? hi s-axš-vey nañi/ ?oxtokow' išexšwey nañi  
'the frost melts too'

/čoyini ha-qsi hi s-kum-li/ čoyin aqsi iskumili 'he  
comes another day'

The form čoyini '(an) other one' is especially common without ma-/ha- in initial position.

543.4 A few nouns used in a locative or directional sense do not take ma-/ha-; when non-initial in the phrase, these forms are introduced by the connective particle hi.

/k-ali-yiw-us hi muhuw/ 'I face south, face the beach'

/s-ali-yiw-us hi milimol/ 'he faces north, the mountains'

/s-al-pul + R hi miluk/ salpulpul imiluk 'he skirts

the corner'

Harrington's notes specifically state that the form \*/ma-muhuw/ 'the beach, south' is unacceptable. However, other nouns used in a locative sense do take ma-/ha-.

/s-uqma-wil ha-čayaš/ 'he suffered [on] the trail'

/s-iš-ilik'in ha-mi-pal-lomol/ šišlik'in amipolomol

'the two of them live [in] the mountains'

543.5 In noun-noun predications (q.v., 813), and in particle-noun predications (q.v., 814), the noun as second member of the predication is often introduced by the connective particle hi (q.v., 710) rather than by the article ma-/ha-.

/kay hi s-kiyi? hi no?/ kay iskiyi? ino? 'I am his  
(a dog's) master: he / his master / I'

/suku hi wič suk iwic 'what kind of bird [is it]'

/moloq + R hi aqliw/ molmoloq i'aqliw 'they are old  
words: old (lit. long ago) / word'

/hawlini hi ?ihiy-?/ hawlin i'ihiy 'anyway [he is] a man'

Rarely, the article ma-/ha- may cooccur with hi.

/ma-k-al-su-?inu hi ma-qsi/ makasu?inu himaqsi 'what  
I believe in [is] the sun'

543.6 In a few cases, for no apparent reason, a common noun may be introduced by the connective particle hi where the non-initial ha- form of the article is expected.

/ma-s-pu hi kuŋ/ 'the rabbit's paw'

/ka s-?ip hi woč/ kašip iwot 'the chief said...'

/ma-k-pil-kuy-? hi šonuš/ makpilkuý išonuš 'my bowl'

[made of] sycamore wood'

544 Extensions of ha-

The reduced ha- form of ma- as an article and nominalizing prefix has spread into non-nominal environments. This extension of ha- gave rise to what must be analyzed synchronically as a separate particle ha, on a par with the older connective particle hi. This process is discussed in greater detail in section 711 on the origin of the connective particles.

550 Minor Nominal Affixes

There are a few minor nominal affixes which do not fit neatly into the major inflectional categories of the article, number, and possession.

551 -iwaš 'dead, defunct'

The suffix -iwaš is highly productive in the general semantic domain of 'dead, defunct, worn-out, useless, what used to be...' It is related in some fashion to the past tense marker -waš for verbs. Forms with -iwaš may have a depreciatory force.

/ma-k-ʔepsuʔ-iwaš/ ma<sup>1</sup>kepš<sup>1</sup>uʔiwaš 'my worn-out basket-hat'

/ma-aqliw<sup>1</sup>-iwaš/ ma<sup>2</sup>aqliw<sup>1</sup>iwaš 'a language that no one speaks any more; an extinct language'

/ma-s-ʔaqša-iwaš/ ma<sup>1</sup>ša<sup>1</sup>qšahiwaš 'his former lover'

/ʔaʔ-iwaš/ 'a dead crow'

/ʔap-Vn-Vš-iwaš/ ʔap<sup>h</sup>aniš<sup>1</sup>iwaš 'an abandoned village'

More idiomatic examples of -iwaš include

/-ʔoqwoŋ-iwaš/ 'skull: defunct head'

/-ʔamiŋ-iwaš/ 'corpse: dead body'

Used with a possessed noun, -iwaš may refer to the possessor as being defunct, rather than the possessed noun.

/ʔapštiʔ ha-s-šup-iwaš/ ʔapštiʔ aš<sup>h</sup>upiwaš 'how old was he (a dead man)?: how many / his former year'

/ma-s-wop-iwaš hi s-mal-pleʔ/ mašwopiwaš ismelp<sup>ʔ</sup> 'his (the dead man's) son got no share of inheritance'

/no-k-iy-ti-Vn-us ha-s-ti-iwaš ha-s-nono/ nokitiŋus aštihiwaš ašnono 'we will name him for his late maternal grandfather: we will name him / the former name / [of] his maternal grandfather'

In speaking of deceased kin, -iwaš may occur,

/ma-s-nono-iwaš/ mašnonohiwaš 'his late maternal grandfather'

but much more commonly a verbal form /-Vč-waš/ is used.

/ma-s-nono-Vč-waš/ mašnonočwaš 'his late maternal grandfather'

/ma-s-ček-Vč-waš/ maščekičwaš 'her late niece, nephew (said by a woman of her brother's child)'

The form with /-Vč-waš/, literally translated as 'the one who was (e.g. my maternal grandfather)' may be a euphemism for -iwaš in speaking of the dead.

Nominalized forms may occur with -iwaš,

/ʔal-am-aqša-iwaš/ ʔalamaqšahiwaš 'a disease which has passed'

/ma-k-naŋ-muʔ-iwaš/ maknaŋumuʔiwaš 'where I went: my former going place'



as may pronominal forms.

- /ʔapštɪʔ-iwaš/ 'how many were there?: former how many'  
 /masix-iwaš ha-l-wil-waš hi ʔitiʔ/ mašixiwaš awiliwaš etiʔ  
 'there were three here: former three / what was /  
 here'

### 552 mi- 'locative'

The prefix mi- is a non-productive locative marker, occurring primarily in place names.

- /mi-čhumaš/ 'Santa Cruz Island' (čhumaš 'islander')  
 /mi-c-qanaqaŋ/ 'Ventura: place of the jaw bone' (cf.  
 xanaxaŋ 'jaw bone')  
 /mi-stumukuŋ/ 'a place: mistletoe place'  
 /mi-s-takil-wax/ mištakiwax 'name of a dripping rock'  
 (/takil-wax/ takiwax 'to strain through')  
 /mi-pal-lomol/ mipolomol 'mountain range' ('to be piled')

An irregular ablaut form, based on -lomol 'to be piled' is milimol 'mountain (range), especially to the north'

The prefix mi- occurs in a few forms which function as prepositions (q.v., 760) or as locative phrases.

- /mi-šup/ 'down; under; on(to) the ground' (šup 'earth')  
 /mi-koj/ 'outside (of)' (cf. /mi-pal-koj/ mipolkoj  
 'in back (of)')  
 /mi-pal-koj/ mipolkoj 'in back (of)' (cf. pal- in  
 /mi-pal-lomol/ mipolomol 'mountain range')  
 /mi-sxamin/ 'in the sea, ocean' (sxamin 'ocean')  
 /mi-ʔulam/ mułam 'in, at the arroyo' (ʔulam 'arroyo')

In a few other forms, mi- may be segmentable.

- minawan 'a mountain north of Santa Ynez'  
 micuquc' 'smokehole'  
 mitipin' 'door'  
 mištoyo 'rainbow' (cf. taya- 'of rain' 674.16)

553 ʔalap- 'inhabitant of...'

The prefix ʔalap- is not, strictly speaking, an inflectional affix, but it is highly productive in combination with place names to denote an inhabitant of that place.

/ʔalap-mi-c-qanaqaŋ/ 'a Ventureño'

/ʔalap-ka-swaʔ/ 'a Barbareño'

/ʔalap-ʔalaxulapu/ ʔalapalaxulapu 'a person from  
 ʔalaxulapu (Santa Ynez)'

/ʔalap-kalawašaḡ/ 'a person from the village of  
 kalawašaḡ, upriver from Santa Ynez'

/ʔalap-s-xenen/ 'a person from sxenen, on the Sisquoc  
 River: La Paleta, the shoulder'

A probable etymology of ʔalap- is the agentive prefix ʔal- (q.v., 522) plus ʔap 'house,' with the literal meaning of 'one whose home is...' As for the glottalization which might be expected in /ʔal-ʔap-/ \*ʔalap-, the Ventureño cognate of Ineseño ʔalap- is ʔatap-; Ventureño /t/ is the regular correspondence to Ineseño /l/, as in Ventureño [aqtipaṭik] versus Ineseño [aqtipaḷik], both from /aqtipal-hik/ 'to choke' with sporadic glottalization of the /l/. The Ineseño form ʔalap- has evidently lost its glottalization.

## 560 Number

Number is not an obligatory category in the noun phrase, but when marked explicitly, it is shown either by a plural suffix -wun' or by CVC reduplication. There are a couple of irregular plurals which do not fit this pattern. Number marked in the noun is only singular versus non-singular: the distinction of dual versus plural occurs only in the prefixed system of nominalizations and agentives (q.v., 521 and 522) and of pronominal subject and possessive markers (q.v., 411). Thus, a noun marked as plural, or more strictly speaking, as non-singular, may be in agreement with a verb marked with a dual subject.

/kay-wun' s-iš-akti-na?/ kayuwun' šišaktina? 'the two of them are coming: they / two are coming'

/ma-?eneq-? + R hi s-iš-sili-kuti-wun/ ma?eneqneq  
isis<sup>h</sup>ilikutiwun 'the two women want to see them:  
the women / two want to see them'

## 561 -wun' 'plural'

The pluralizing suffix -wun' is related to the plural object marker -wun in verbs, with final glottalization as a sign of its nominal status (cf. 523.3 on final glottalization as a mode of nominalization). The suffix -wun' is not as common a plural marker as CVC reduplication.

/coyini-wun'/ 'others, other people'

/išon'-Vš-wun'/ ?išonušwun' 'twins'

/ma-k-ičtīn'-wun'/ makičtīn'iwun' 'my children'

/?alap-šawa-wun'/ 'people from šawa (a village)'

With pronominal forms, however, plurals with -wun' are more common than reduplicated plurals.

/tikali<sup>?</sup>-wun'/ tikaliwun' 'which ones'

/heki<sup>?</sup>-wun'/ 'those (not far away)' (non-initial form)

/kolo<sup>?</sup>-wun'/ kolowun' 'those over there' (initial form)

## 562 CVC Reduplication as a Plural Marker

The commonest form of pluralization is initial CVC reduplication, accompanied by final glottalization. The exact phonological details of this process are discussed with the phonological rule 286.36 governing CVC reduplication.

/ku-<sup>?</sup> + R/ kuhku<sup>?</sup> 'people'

/po<sup>?</sup>n-<sup>?</sup> + R/ ponpo<sup>?</sup>n 'trees, sticks'

/cyi<sup>?</sup>w-<sup>?</sup> + R/ cyi<sup>?</sup>wcyi<sup>?</sup>w ~ cyi<sup>?</sup>wyi<sup>?</sup>w 'kinds, sorts'

/ma-k-<sup>?</sup>aniš-<sup>?</sup> + R/ ma<sup>?</sup>kaniš<sup>?</sup> 'my paternal uncles'

/ma-s-ha-ti-net-<sup>?</sup> + R/ ma<sup>?</sup>shatshatinet<sup>?</sup> ~ ma<sup>?</sup>shatsatinet<sup>?</sup>

'its joints, junctures'

When CVC reduplication occurs with the suffix -iwaš (q.v., 551), final glottalization falls on the noun stem rather than on -iwaš.

/ma-k-hik-<sup>?</sup> + R/ ma<sup>?</sup>khikhikiwaš 'the things that used to be mine'

/ma-s-kawayu-<sup>?</sup>-iwaš + R/ ma<sup>?</sup>škawawayu<sup>?</sup>iwaš 'the horses (Span. caballo) that were his'

In many cases CVC reduplication has a collective rather than plural force; examples are usually based on [-count] nouns.

- /xas-ʔ + R/ xasxas' 'beach' (xas 'sand')
- /tip-ʔ + R/ tiptip' 'salt flat' (tip 'salt')
- /šulul-ʔ + R/ šulšulul' 'bed of shale' (šulul 'shale')
- /šup-ʔ + R/ šupšup' 'dust' (šup 'earth, land')
- /xip-ʔ + R/ xipxip' 'gravel' (xip 'rock, stone')

### 563 Contrast of -wun' and CVC Reduplication

It is possible that -wun', like the third person singular object marker -us (q.v., 631.1), occurs only with a limited set of lexical items. Some nouns are pluralized only with -wun', others only with CVC reduplication. This may be due largely to the sheer accident of what is and what is not attested in the corpus, since there are a few examples of nouns for which both forms of pluralization are attested.

- /čoyini-wun'/ ~ /čoyini-ʔ + R/ čoyčoyiniʔ 'others'
- /ʔalqapač-wun'/ ~ /ʔalqapač-ʔ + R/ ʔalʔalqapač 'animals'
- /ma-k-ičtɨn-wun'/ makičtɨnɨwun' ~
- /ma-k-ičtɨn-ʔ + R/ makičkičtɨn' 'my children'

There is one example of simultaneous CVC reduplication and suffixation of -wun'.

- /ma-čoyini-wun-ʔ + R/ mačoyčoyiniwun' 'the others'

One set of nouns which is not pluralized by CVC reduplication is lexically reduplicated CVC nouns (e.g. lewlew 'mythological creature'), although there are no examples of such forms pluralized with -wun' either. Nouns lexically reduplicated on other patterns (cf. 513) may take CVC reduplication.

- /ʔaya-tulutul-ʔ + R/ ʔayatultulutul 'butterflies'  
 /ma-s-pepeʔ-ʔ + R/ maspehpepeʔ 'his older brothers'  
 /mucucuʔ-ʔ + R/ mucmucucuʔ 'very small beads'

#### 564 Irregular Patterns of Pluralization

A couple of irregular plurals are attested in the corpus, with no evidence that these patterns might be more general.

The plural of čičiʔ 'child' shows h-infixation (q.v., 278): čičihiʔ 'children.' This process occurs in a few other forms, but not with plural force; an example is -muw- in /s-muw-Vč/ šmuwič 'coast dweller' with h-infixation as muhuw 'beach; the south.'

The plurals of two of the demonstrative pronouns kweki and heki 'that (not far away),' initial and non-initial forms, show an element -mu- in addition to the usual -wun which pluralizes demonstrative forms.

- /kweki-mu-wun/ 'those (not far away)' (initial form)  
 /heki-mu-wun/ 'those (not far away)' (non-initial form)

#### 565 Environments in Which Number is Unmarked

Number in the noun is quite often left unmarked, especially in certain environments.

Number is rarely marked after numerals,

- /ʔiškoŋ ha-taʔ/ 'two oak trees'  
 /s-kot masix ha-s-xolox/ 'three of his ribs are broken'  
 /yiti-masix ha-šup/ 'seven years'

although it may be marked.

- /s-iy-ʔopxon masix ha-s-wop-ʔ + R/ siyopxon masix

aswopwop' 'her three sons are orphaned: they are  
orphaned / three / her sons'

Even rarer is the overt marking of number with pairs  
of body parts, both human and animal,

/s-iwal-k'it + R ha-s-šepšle?/ siwalk'itk'it aš'hepšle?

'his lips are chapped: it is chapped / his lip'

/s-lu-wahač ha-s-hap ha-wi/ šluwahač aš'hap awi 'the deer  
has many-pronged horns: it grows into many / its  
horn / deer'

and with multiple body parts.

/k-unčhuš ha-k-sa/ 'my teeth ache: I have an ache /  
my tooth'

/s-ti-lokin ha-s-sixway' / štilokin aš'hixway' 'he cuts his  
nails: he cuts off / his nail'

Often, number is not marked in the noun when the verb  
is marked for a plural subject or object,

/s-iy-axi-kum ha-ku/ 'the people are dancing: they  
dance / person'

/no-s-tak-ti?-wun ha-qolol/ noštaktiwun aqolol 'it will  
kill mice: it will kill them / mouse'

and plurality may not even be overtly expressed in the verb.

/s-ipšel ha-?ixpaniš/ šipšel a?ixpaniš 'the acorns are  
ripe: it is ripe, done / acorn'

This aspect of number marking is more fully covered in  
section 822 on number agreement between noun and verb.

With dual and plural possessive markers, nouns unmarked  
for number are ambiguous: number could apply to the person-  
number marker only, with the noun singular, or number could

apply to both in the sense of 'respectively.'

/ma-s-iš-ʔap/ mašišap 'the house of the two of them;  
their (dual) two houses'

/ma-s-iy-tomol/ masitomol 'their boat; their boats'

#### 570 Possession

Possession is an important category in the noun phrase; after the article ma-/ha- it is the most common nominal inflection. In a Chumash discourse, many more nouns appear in a possessed form than would in a corresponding passage of some Indo-European language. Nouns are either inalienably possessed, alienably possessed, or non-possessed; there are devices to make non-possessed forms possessed and vice versa.

#### 571 Possessive Markers

Possessive markers with the noun are identical to subject markers with the verb (cf. 411 on prefixed pronominal forms), except that the indefinite subject marker am- does not occur as a possessive marker. The system of possessive person-number markers is:

	singular	dual	plural
first	k-	k-iš-	k-iy-
second	p-	p-iš-	p-iy-
third	s-	s-iš-	s-iy-

#### 572 Inalienable Possession

A great many nouns are inalienably possessed, including many derived nouns. Inalienably possessed nouns cover a



broad semantic domain, naturally centering on the physical body and the family. Many inalienably possessed nouns show some morphological sign of their inalienable status.

#### 572.1 The Semantic Domain of Inalienable Possession

All terms for body parts are inalienably possessed (e.g. -noxš 'nose,' -pu 'arm, hand'), as are bodily products (e.g. -molol 'phlegm,' -oxšol 'urine') and less tangible extensions of the person (e.g. -aqliw' 'voice; word, language,' -ahaš 'soul, spirit,' -ti 'name'). Terms for plant and animal body parts (e.g. -hap 'horn,' -qap 'leaf, feather') and products (e.g. -tumun 'egg,' -pɪl 'pitch') are inalienably possessed, as are many of the terms for what might be considered the analogues to body parts in inanimate objects (e.g. -tik 'tip,' -tɪpiq' 'base').

All kinship terms are inalienably possessed (e.g. -tik' 'mother,' -pepe? 'older sibling'), as are terms which denote long-standing relationships (e.g. -kalukš 'clan,' -kiyi? 'master (of an animal),' -qo? 'pet, dog,' and even -šik 'head louse'). Harrington noted that informants using native terms in a Spanish sentence use both the Spanish and Ineseño possessive markers with inalienable forms, such as

/mi k-?unu?/ mi kunu? 'my ?unu?: grandchild through son'

/su s-kalukš/ su škalukš 'his clan, totem symbol'

The terms for many cultural items and personal effects are inalienably possessed (e.g. -?ax 'bow,' -su-wayan 'earring(s),' -oxmolon 'personal supply of pespibata,

coyote tobacco').

Derived terms for some abstract qualities (e.g. /-ʔihiy-Vš/ -ʔihiyiš 'length, stature,' /-xulxul-Vš/ -xulxulaš 'weight') and some states or activities (e.g. /-aqša-Vn-Vš/ -ʔaqšaniš 'death,' -kalaš 'breath, breathing') are inalienable.

## 572.2 Signs of Inalienable Possession

Beyond the semantic pattern discussed above, nouns may show some phonological or morphological sign of inalienable possession.

Any noun which begins with an initial vowel not preceded by glottal stop is inalienable; this set includes a handful of monomorphemic forms,

-ahaš 'soul, spirit'

-atik 'soul, spirit'

-aqliw 'voice; word, language' (but cf. [ʔaqliw] as a non-possessed form in the sense 'word')

derived forms with zero derivation,

-ackaw 'mistake, error' ('to err, make a mistake')

-isaxpin 'pimple' ('to be rough, bumpy; to have pimples')

and forms with the prefixes is- (q.v., 576) and ič- (q.v., 577).

/-is-ʔeneq/ -iseneq 'sister' (ʔeneq 'woman')

/-iči-ku/ 'neighbor' (ku 'person')

Any possessed noun which is paired with a non-possessed form in -Vš (e.g., -ickuyan : /ickuyan-Vš/ ʔičkuyanš 'bow, weapon,' q.v., 573) is inalienably possessed. Nouns

denoting body parts and kinship terms, even if they are attested only once, are certain to be inalienably possessed, since more common body part and kinship terms may be attested dozens of times, always in a possessed form. With other nouns, however, the only evidence that a given form is inalienably possessed is that it is never attested without a possessive marker. Here again the analysis is determined by the accident of what is attested in the corpus.

There are a few textual examples of what is likely to be an inalienably possessed noun used without possessive markers. One is *-tík* 'mother,' attested twice in succession as */ha-tík-ʔ + R/ hatíktík* 'the mothers' rather than the expected */ma-s-iy-tík-ʔ + R/ masitíktík* 'their mothers,' in

*/yilaʔ ha-tík-ʔ + R pakaš ha-iy-al-neč-pi/ yilaʔ atíktík  
pakaš ayanečpi* 'all the mothers did the same thing:  
all / mothers / one / what they do'

Another is *-ʔaxulís* 'blood,' very likely to be inalienable because it is a body part term, in

*/s-miš ha-ʔaxulís/ šmiš aʔaxulís* '[the horned toad]  
weeps blood'

### 572.3 Inalienably Possessed Nouns in Verbal Compounds

Inalienably possessed nouns used with verbal prefixes in verbal compounds (q.v., 618.1) are nearly always prefixed with some form of the possessive marker occurring between the verbal prefix and the noun stem. This possessive marker may be the usual third person *s-*,

*/k-aqulu-s-tuʔ-Vč/ kaquluštuč* 'I scratch my ear (-tuʔ)'

/s-wi-s-noxš-it/ šwišnoxšit 'he hit me on the nose  
(-noxš)'

or it may be an affricate form c-/č-. This is usually an unanalyzable formative (q.v., 612.3), but in this construction is probably related to the third person marker c- in Ventureño and Obispeño, which might once have occurred in this form in Ineseño.

/s-iy-ali-nax-č-ʔapam/ šiyalinaxčapam 'they are kneeling'  
(cf. -ʔapam 'knee')

/s-aqul-c-ʔelew/ saqucelew 'it sticks out its tongue  
(-ʔelew)'

Inalienably possessed nouns not preceded by possessive markers in verbal compounds include any noun used with tip- 'to have much N, a large N,'

/tip-tem/ 'to have big feet' (-tem 'sole of the foot')  
and a few others.

/uti-ʔišaq/ 'to fall and hit one's hip (-ʔišaq)'

/uxma-tiq-š/ 'to wash the face' (cf. -tix 'eye, face')

### 573 Non-possessed Forms with -Vš

A suffix -Vš (also occurring as a resultative derivative suffix, q.v., 523.1) marks non-possessed forms of many inalienably possessed nouns. This suffix is accompanied by an initial glottal stop when the inalienable form has an initial vowel, as discussed in 523.

-ickuyan : /ickuyan-Vš/ ʔičkuyanš 'bow, weapon [+alien]'

-malik : /malik-Vš/ malikiš 'first-born child [+alien]'

-šik : /šik-Vš/ šikaš 'head-louse [+alien]'

The non-possessed form may show some semantic differentiation from the inalienably possessed form.

-ahaš 'soul, spirit' : /ahaš-Vš/ ʔahašiš 'ghost'  
 -ičtīn 'child' : /ičtīn-Vš/ ʔičtīnīš 'child, doll'

A common mode of nominalization (q.v., 523.2) is a zero suffix for an inalienably possessed form and -Vš for a non-possessed form.

uqčīk 'to spit'

-uqčīk : /uqčīk-Vš/ ʔuqčīkiš 'spit, spittle [ɿalien]'

axtin 'to fast, refrain from eating certain foods'

-axtin : /axtin-Vš/ ʔaxtinaš 'what one may not eat'

woyon 'to twist, be crooked; to braid the hair'

-woyon : /woyon-Vš/ woyonuš 'braid [ɿalien]'

/su-pey/ 'to cause to stick'

-su-pey : /su-pey-Vš/ šupeyeš 'woman's hairpin [ɿalien]'

#### 574 Alienably Possessed Forms

Except for those nouns which are explicitly marked as non-possessed with the -Vš suffix in the  $\emptyset$  / -Vš alternation, practically any noun may optionally be possessed. Naturally, terms for items of material culture are more likely to take possessive markers than are terms denoting animals, plants, or other aspects of nature.

Possessive markers usually occur when there is no other specific reference to person in the sentence,

/s-pil-kow-Vn ha-k-ʔawaq/ spilkowon akawaq 'my jug spills'  
 or when there is a shift of reference.

/takaʔ ha-p-al-sinay ha-k-skinīt/ takapasinay akiskinīt

'where have you put my rope?'

Possessive markers are more likely to be omitted when personal reference has already been established by the verb.

/k-ulu-apšik ha-ʔawaq/ kulapšik aʔawaq 'I put it into the jug (i.e. my jug)'

When the possessor of a noun is the same referent as the subject of the verb, the marking of possession in the noun may have a connotation of self-interest. Harrington noted this point specifically with the following examples:

/no-k-eqwel ha-ʔap/ 'I will build (lit. make) a house'

/no-k-eqwel ha-k-ʔap/ nokeqwel akap 'I will build myself a house: I make / my house'

A noun which is usually possessed (e.g. ʔap 'house') may appear without possessive markers in contrastive constructions such as

/keŋi ha-ʔap hi noʔ ka k-ʔap/ keŋ aʔap inoʔ kakap 'this house is my house: this / house / I / my house'

### 575 Inalienably Possessed Forms Used Alienably

Inalienably possessed forms with the third person marker s- are often used in a non-possessed sense: where there is no possessor specified, and where there is no logical need for a possessor. An example, based on inalienable -se 'bone,' is /s-se/ s<sup>h</sup>e, which may mean either 'his, its bone(s)' or simply 'a bone, some bones,' as in

/s-is-tiʔ ha-s-se/ šišt<sup>h</sup>iʔ as<sup>h</sup>e 'he finds some bones'

Similar examples are numerous.

/s-pil/ 'its (a pine tree's) pitch; pitch' (cf. su-pil

'to smear with pitch')

/s-tumun/ štumun 'its [own] egg; an egg' (cf. /ma-s-iy-

tumun-mu<sup>?</sup>/ masitumunumu<sup>?</sup> 'their nesting ground')

/s-hap/ shap 'its horn; a horn' (cf. /s-iy-hap/ sihap

'their horns')

/ma-nox ha-s-tix/ manox aštix 'the morning star; the

big eye: the big one / its eye'

Such inalienably possessed forms with s- used in a non-possessed sense often pose a serious problem in segmentation. Lacking differently inflected forms (such as those cited in the examples above), it is difficult to determine whether nouns in the general semantic domain of inalienable possession have the possessive s- or simply an initial consonant cluster with /s/ (or /š/). Cases which are probably segmentable into s- plus inalienably possessed noun stem include

skuy 'beak (of a bird)'

spukuy 'burned stump'

sqoqom 'gravepole'

šlîw 'peel, rind (of fruit)'

skukuy 'cap of acorn'

swaxom 'honeycomb'

spuk 'pinecone'

shol 'bark' (/s-hol,s-sol/?)

#### 576 Prefixed is- versus Phonetic /C-s-C/ CisC

One area of alienable versus inalienable possession fraught with ambiguity centers around the phonetic sequence [-is-], which has two opposite interpretations.

First, some inherently alienably possessed nouns (i.e., nouns which seldom if ever appear with possessive markers) are rendered inalienable by a prefix is- 'inalienably

possessed,' usually with some semantic shift. Unambiguous examples include

- /-is-ʔeneq/ -is<sup>1</sup>eneq 'sister' (ʔeneq 'woman, female')  
 /-is-hiy-ʔ/ -ish<sup>h</sup>iy 'husband' (/ʔihiy-ʔ/ ʔihiy 'man, male,' reduplicated as /ʔihiy-ʔ + R/ ʔihiyhiy 'men')  
 /-is-ku/ 'one's own people' (ku 'person')  
 /-is-ʔal-aqša-Vn/ -išalaqšan 'late relative' (/ʔal-aqša-Vn/ ʔalaqšan 'dead person')  
 /-is-xip/ 'testicle' (xip 'rock, stone')

In three forms, all inalienably possessed, is- is apparently optional.

- /-(is-)wati-mučuʔ/ 'little finger, little toe' (mučuʔ 'a small one')  
 /-(is-)wati-nox/ -(iš)watinox 'thumb, big toe' (nox 'a big one')  
 /-(is-)mal-peqen-waš/ -(iš)melpewəwəš 'youngest child' (peqen 'to come to an end')

Second, the inalienably possessed forms with s- used in a non-possessed sense (discussed in 575 above) may occur with possessive markers. By the phonological rule of i-epenthesis (286.15), /i/ is epenthesized between possessive markers and any consonant cluster with initial /s/ or /š/, as in

- /ma-k-štiwal/ makištiwal 'my carrying net'

So, here is another phonetic sequence [-is-], essentially denoting alienable possession. Unambiguous examples, paralleling those given in 575, include

- /ma-s-iy-s-hap/ masiyishap 'their horn scraper (for use



in the sweat-house)' (cf. /s-iy-hap/ sihap 'their  
[own] horns')

/ma-k-s-tumun/ makištumun 'my egg (I have it, but did  
not lay it)' (cf. /s-tumun/ štumun 'its egg')

/ma-k-s-qap/ makisqap 'my plume, feather (not of my own  
body)' (cf. /s-qap/ 'its leaf, feather')

/ma-s-s-se/ masis<sup>he</sup> 'his bone(s) (not of his own body)'  
(cf. /s-se/ s<sup>he</sup> 'his, its bone(s)')

An alternative analysis is that this second use of [-is-] does not involve i-epenthesis, but rather a second prefix is-, with the meaning 'alienably possessed,' although it always occurs with possessive markers. This solution is obviously less desirable, since there would then be two prefixes is-, with opposite meanings. But it should be pointed out that for Barbareño, Beeler analyzes is- as a marker of alienable possession ('Topics in Barbareño Chumash Grammar,' p. 19). Since two of the Barbareño examples quoted by Beeler are not inalienably possessed, and thus would not have the possessive marker s-, i-epenthesis fails to explain the Barbareño prefix. The two examples are:

/k-iy-is-ku/ 'our guest, one who is not a permanent,  
regular member of our household' (ku 'person')

/k-iy-is-wot'/ 'our Lord, the Christian God' (wot' 'chief')

The form /-is-wot'/ occurs in Ineseño with the same meaning, although in Ineseño it could be interpreted as the is- of inalienable possession. Ineseño /-is-ku/ 'neighbor' is clearly the is- of inalienable possession. The most likely explanation of these facts is that one of these languages,

Ineseño or Barbareño, has reversed the meaning of a single prefix *is-*. Work with the other Chumashan languages may help solve this problem.

### 577 *ič-* Possible Marker of Inalienable Possession

There is another prefix associated with possession, *-ič-*, which may be a marker of inalienable possession. In Barbareño, examples of *-ič-* are more transparent, showing an alternation of *-ič-* ~ *-iči-* in the sense of 'associative' (Beeler, p. 11) in

*/-ič-ku/* 'a retainer, bodyguard' (ku 'person')

*/-iči-kawayu/* 'a fellow horse' (Span. caballo 'horse')

In both languages this prefix shows a partial identity with a verbal prefix *ič-* ~ *iči* with associative meaning, as in Barbareño */p-e-ʔič-xopoy-wun/* 'don't play with them!' and Ineseño (cf. 675.12).

*/iči-ti-Vn/* *ičitin* 'to gave the same name as' (ti 'name')

*/ʔič-ku-Vn/* *ʔičkun* 'to defend, side with' (ku 'person')

Unambiguous examples of *ič-* with nouns in Ineseño do not necessarily have an associative meaning, but are clearly inalienably possessed.

*/-iči-ku/* 'neighbor'

*/-ʔič-axi/* 'enemy' (*/axi-Vn/* *axin* 'to fight')

*/-ič-mi-pal-koj/* *-ičmipolkoj* 'neighbor' (*/mi-pal-koj/*  
*mipolkoj* 'in back of')

Probable examples of *ič-* in Ineseño are:

*/-ʔič-kow/* 'buttocks' (cf. *s-kow* 'excrecence, bulge on tree trunk; pinecone')

/-ʔiç<sup>h</sup>uw/ 'bait' (for \*/-ʔiç-ʔuw/ ʔiçuw? cf. ʔuw 'to eat')

Serious problems here are that initial glottal stop is not uniformly present (e.g. in /-içi-ku/), that most examples are not segmentable (e.g. -içtɪn 'child,' -ʔiçpik 'glans penis'), and that many of the examples are open to interpretation as cases of i-epenthesis by rule 286.15.

The only clear case of i-epenthesis can be seen in

/haku čantɪk/ 'hello, friend!'

/ma-k-čantɪk/ makičantɪk 'my friend'

while many other examples do not appear non-possessed, and hence are ambiguous.

/-ičana-kučkuč/ 'eyebrow' (/ -ʔiç-ʔana-kučkuč/?)

/-içis/ 'younger sibling'

/-içpuk/ 'pimple, blackhead'

#### 580 The Noun Phrase

Two nouns may be conjoined in a nominal construction, either possessive or loosely appositive. Nouns also appear in constructions with pronominal forms.

#### 581 Possessive Constructions

In possessive constructions, the possessed noun is prefixed with person-number markers in agreement with the possessor noun (cf. 820 on number agreement), which follows the possessed noun. If the possessor noun is a common noun, it is prefixed with the reduced ha- form of the article ma-/ha- (q.v., 542).

/ma-s-kalukš ha-slow/ maškalukš aslow 'the eagle clan,  
the clan of the eagle: his clan / eagle'

/ma-s-iš-hawa<sup>?</sup> ha s-oxkón/ mašiš<sup>h</sup>awa<sup>?</sup> asoxkón 'the aunt  
of the two thunders (i.e. the rainbow): their (dual)  
maternal aunt / thunder'

/ma-s-iy-aqláw<sup>!</sup> ha-<sup>?</sup>alap-ka-swa<sup>?</sup>/ 'the language of the  
Barbareños: their language / Santa Barbara people'

When the possessor noun is a proper noun, it lacks the  
article ma-/ha-, but is prefaced with the connective  
particle hi (q.v., 710).

/ma-s-<sup>?</sup>ap hi pawlu/ mašap ipawlu 'Pablo's house'

/ma-s-qupšlet<sup>!</sup> hi xuxaw<sup>!</sup>/ mašqupšlet<sup>!</sup> ixuxaw<sup>!</sup> 'Indian paint-  
brush: Coyote's anus: his anus / Coyote'

/ma-s-ti-moloq-Vn-šaš hi puluy/ maštímoloqič<sup>h</sup>aš ipuluy  
'the myth of Crane-woman: her story / Crane'

A possessive construction may involve two layers of  
possessivization, as in

/s-qacucun-Vč ha-s-tík ha-s-teleq<sup>!</sup> ha-tukém<sup>!</sup>/ šqačučunič  
aštík ašteleq<sup>!</sup> atukém<sup>!</sup> 'the tip of the lion's tail  
has a tassel on it: is be-tassled / its tip / its  
tail / lion'

The possessor noun may be deleted from possessive  
constructions, leaving only the possessed noun with its  
possessive person-number prefixes.

/ma-s-koko<sup>?</sup>/ 'his father'

/ma-s-iš-<sup>?</sup>ap/ mašiš<sup>!</sup>ap 'the house of the two of them;  
their two houses'

/ma-s-iy-štiwał<sup>!</sup>/ masiyištiwał<sup>!</sup> 'their carrying-net(s)'

With personal pronouns as possessors, deletion is obligatory,

/ma-k-<sup>?</sup>ap hi no<sup>?</sup>/ -> /ma-k-<sup>?</sup>ap/ mašap 'my house'

/ma-k-iy-swanaŋ hi k-iy-kiʔ/ → /ma-k-iy-swanaŋ/  
 makiyiswanaŋ 'our custom'

unless the possessor noun has been transposed to precede the possessed noun, in an emphatic construction (q.v., 812) involving the predicative particle ka.

/ma-k-ʔap hi noʔ/ → /noʔ ka k-ʔap/ noʔ kaʔap 'it is  
 my house: I / my house'

/ma-k-iy-swanaŋ hi k-iy-kiʔ/ → /k-iy-kiʔ ka k-iy-swanaŋ/  
 kikiʔ kakiyiswanaŋ 'it is our custom: we / our  
 custom'

Third person examples of this emphatic construction, with nouns rather than pronouns as possessors, are:

/ma-s-šoxš ha-wawaŋ/ → /wawaŋ hi s-šoxš/ wawaŋ iš<sup>h</sup>oxš  
 'it is goose down: goose / its down'

/ma-s-iy-swanaŋ ma-iy-al-aqi-mow-Vn + R/ → /ma-iy-al-  
 aqi-mow-Vn + R ha-s-iy-swanaŋ/ mayalaqlaqimowon  
 asiyiswanaŋ 'it is the custom of the stylish ones:  
 the stylish ones / their custom'

582 *Appositive*  
~~Vocative~~ Constructions

Very commonly two nouns are conjoined in a loose appositive construction. The second noun, which takes the ha- form of the article ma-/ha-, acts as a further specification of the first noun.

/ma-čoyini ha-ʔeneq/ mačoyin aʔeneq 'another woman'

/ma-k-ičis ha-ʔihiy-ʔ/ makičis aʔihiy 'my younger  
 brother: my younger sibling / man, male'

/ma-qsi ha-k-iš-tataʔ/ 'our (dual) uncle the sun:

the sun / our (dual) uncle' (in a myth)

/ma-ʔanaq-čan ha-ʔalap-ka-swaʔ/ 'the old Barbareño

woman: the old woman / Santa Barbara person'

/ni-šot-Vš ha-wi/ nišotuš awi 'a skinned deer: something  
skinned (ni-šot 'to skin') / deer'

A vocative appositive is attested in one myth;

/k-ali-š-xey xuxaw/ '(my) cousin Coyote!'

the vocative form takes no article ma-/ha-.

Often when two nouns are conjoined, the second noun denotes the material composition of the first,

/ma-k-pil-kuy-ʔ ha-šonuš/ makpilkuý ašonuš 'my bowl

[made of] sycamore [wood]'

/ʔas ha-štapan/ 'a mat [made of] tule'

/ma-s-su-wayan ha čip<sup>hi</sup>ʔ/ mas uwayan ačip<sup>hi</sup>ʔ 'her  
earring(s) [of] čip<sup>hi</sup>ʔ (a kind of long bead)'

/iwex-Vš ha-swey/ ʔiwexeš aswey 'meal [made of] tarweed  
[seeds]'

or else the contents rather than composition.

/č<sup>i</sup>li ha-papas/ 'a sack [of] potatoes (Span. papas)'

/ʔepsuʔ ha-ilep-Vš/ ʔepsuʔ aʔilepeš 'an ʔepsuʔ (a basket-  
hat used as a measure of volume) [of] chia'

Intransitive verbs nominalized with ma-/ha- or agentive ʔal- commonly occur with nouns in this appositive sense, in either order, translated as noun plus adjective. Examples with ma-/ha- might alternatively be analyzed as relative clauses (q.v., 874).

/ma-huču ha-l-šoyin/ mahuču ašoyin 'a black dog: a dog  
that is black ~ a dog / a black one'

/ti-yep-Vš ha-l-ʔikimin/ tiyepəš aʔikimin 'news: tidings  
that are new ~ tidings / a new one'

/ma-l-yul-č̣i ha-ʔoʔ/ mayič̣ aʔoʔ 'hot water: water that  
is hot ~ what is hot / water'

but examples with the agentive prefix ʔal- are clearly  
appositive.

/kawayu ha-ʔal-aqi-mow-Vn / kawayu aʔalaqimowon 'a wild  
horse: a horse / a wild one'

/ma-ʔihiy-ʔ ha-ʔal-yuxpan/ maʔihiỵ aʔayuxpan 'a sick  
man: a man / a sick one'

### 583 Noun Constructions with Pronominal Forms

All of the forms which may be used pronominally in  
the sentence, other than personal pronouns, may also be  
conjoined with nouns in an appositive fashion. The pro-  
nominal form is initial in such constructions, which  
include demonstratives (q.v., 430),

/keñi ha-yaʔ/ keñ ayaʔ 'this arrow: this one / arrow'  
(phrase-initial form)

/heki ha-ʔihiy-ʔ/ heḳ aʔihiỵ 'that man (not far away):  
that one / man' (non-initial form)

/koloʔ ha-wašla-lomol/ kol awošlalomol 'yonder hill:  
that one over there / hill' (initial form)

numerals (q.v., 440),

/pakaš ha-ʔaqiwo/ 'one star'

/masix ha-s-wop-ʔ + R/ masix aswopwop 'her three sons:  
three / her sons'

quantifiers (q.v., 450),

/yila<sup>?</sup> ha-ku-<sup>?</sup> + R/ yila<sup>?</sup> akuhku<sup>?</sup> 'all of the people:  
all / people'

/wahač<sup>1</sup> ha-step/ 'many fleas'

and relative-interrogative pronouns (q.v., 420).

/<sup>?</sup>apštī<sup>?</sup> ha-qsi/ 'how many days'

/tikali<sup>?</sup> ha-ku/ tikal aku 'which person'

/suku<sup>1</sup> ha-pon<sup>1</sup>/ suk<sup>1</sup> apon<sup>1</sup> 'what tree, what kind of tree'

An example of multiple pronominal forms in the same noun phrase is:

/yila<sup>?</sup> skumu ha-čičihi<sup>?</sup>/ 'all four children'



## 600 The Verb

Included in the discussion of the verb are the major topics of verb morphology, derivation, and inflection. Inflection in the verb is far more complex than in the noun; there are at least a hundred and fifty inflectional affixes, of which all but a handful are prefixed.

## 610 Verb Stem Morphology

The basic shape of the verb stem is CVC and CVCVC, often augmented by reduplication and various formatives. While most stems occur freely with or without prefixes other than the obligatory markers of person and number (q.v., 650), there are many bound stems which occur only with prefixes, and also many uniquely-occurring stems which are found only with a particular prefix. Nouns, numerals, and quantifiers often act as stems in constructions with verbal prefixes, and there are traces of a pattern of stem compounding.

## 611 The Canonical Shape of the Verb

A large number of verbs follow the CVC and CVCVC pattern characteristic of noun and verb stems.

čeq	'to tear, split'	kalaš	'to breathe'
pey	'to stick to'	siph <sup>h</sup> ol	'to claim'
-kat	'to remain'	hik <sup>i</sup> n	'to be early'
šon	'to be bitter'	tuhuy	'to rain'
čho?	'to stop, quit'	-kumu?	'to measure'
?ip	'to say, think'	?oyon	'to help'

But verb stems may be considerably more varied than

CVC and CVCVC. Verb stems very commonly show an initial vowel, not preceded by glottal stop, while in nouns this pattern is restricted to a handful of forms.

elew	'to go down'	ipxey	'to add to'
ixut	'to burn [intrans.]'	ulkuw	'to be night'
awin	'to boil [trans.]'	ikiniy	'to moan, groan'
uše?	'to dig'	ikš	'to give to'

With the exception of ikš 'to give to,' which may be analyzable as -kš- (cf. /k-ax-kš-in/ 'I give it to you'), there are no vowel-initial monosyllabic stems. Relatively few verbs begin with an initial glottal stop, whereas among noun stems this is the rule.

?es	'to weave'	?uwen	'to make use of'
?uw	'to eat'	?oq <sup>h</sup> o	'to be thin, lean'

Very few verb stems end with a final vowel, although many nouns do. There are only two vowel-final monosyllabic verb stems:

čho	'to be good; to do well, evenly (in compounds)'
-čī	'to be sharp'

Longer forms with a final vowel include

kuti	'to see'	halala	'to quarrel'
tiwese	'to be stingy'	tiyaxaxa	'to straddle'

Even stems with a final glottal stop are less common in the verb than in the noun, although examples are numerous.

pī?	'to dip up'	tiwe?	'to scrape'
-tī?	'to meet, come across'	uše?	'to dig'
ple?	'to perish'	-kumu?	'to measure'

## 612 Verb Formatives

More elaborately than in the noun, the basic CVC and CVCVC shape of the verb stem may be embroidered to produce more complex forms: by suffixed formatives -Vn and -Vč, by a number of prefixed formatives, and by lexical reduplication (q.v., 613).

## 612.1 Formatives -Vn and -Vč

The verb stem may be augmented with two very common formatives -Vn and -Vč, which also occur as highly productive derivative suffixes (q.v., 621 and 622). These two formatives frequently occur with the same stem, linked with a distinction of transitivity versus intransitivity (to be discussed in 614), but at present the function of -Vn and -Vč purely as verbal augments is the topic under discussion. Many CVCVC stems ending in /n/ or /č/ might be segmented as CVC plus -Vn or -Vč, often with -in and -ič rather than with vowels harmonic with the stem vowel.

nowon	'to stand'	maxač	'to be blind'
peqen	'to end'	wawač	'to be difficult'
šoyin	'to be dark, black'	-tiwič	'to witness'
ko'min	'to be smooth'	kuwič	'to pluck'

With -Vn and -Vč as augments, the suffix vowel is more likely to be identical with the stem vowel than is the case with -Vn and -Vč as derivative suffixes (cf. the phonological rule of suffix vowel specification, 286.12). More rarely, the vowel of the augment varies with the same stem, linked idiosyncratically with different prefixes, as in

-kow- 'to tip,' in

/pil-kow-Vn/ pilkowon 'to spill, tip over'

/xil-kow-Vn/ xilkowin '[boat] to capsize'

Longer sequences may be segmented as CVCVC plus augment.

melewén 'to be level'                      mayawič 'to be dizzy'

-kiyimin 'to turn over'                      niwaxič 'to resent'

The examples so far show -Vn and -Vč augments occurring with stems which do not themselves occur as free forms, but sometimes free stems are augmented as well. Usually there is no apparent difference in meaning.

poš<sup>h</sup>on ~ /poš<sup>h</sup>on-Vn/ poš<sup>h</sup>onin 'to sense, be aware of'

čamín ~ /čamín-Vč/ čaminič 'to know'

tošon ~ /tošon-Vč/ tošonič 'to be mildewed'

Sometimes there is semantic differentiation, which with -Vč might be described as an intransitive or undirected form of the action of the basic stem (cf. the intransitive force of -Vč as a derivative suffix, 622).

/saxtun-Vč/ šaxtunič 'to be paid' (saxtun 'to pay')

/axi-kum-Vč/ axikumič 'to frisk about' ('to dance')

/su-kuy-Vč/ šukuyič 'to take a shot' (/su-kuy/ 'to shoot')

/tamáy-Vč + R/ tamtamáyič 'to be forgetful' ('to forget')

A more elaborate example, showing both -Vn and -Vč augments, is based on the stem piw' 'to cost.'

/piw'-Vč/ piweč 'to be expensive'

/su-piw'-Vn/ supiwén 'to sell at high cost'

## 612.2 The Formative aq-/ax- (and aqs-/axs-)

There is a ubiquitous formative aq-/ax-, more rarely aqs-/axs-, which is surely segmentable at the deepest levels of Chumash morphology, although synchronically it is fused with the stem as an essentially monomorphemic item. Phonological evidence for the segmentability of aq-/ax- is that this formative gives rise to many medial consonant clusters, such as /qk/ and /xc'/, which do not otherwise occur within morpheme boundaries. When the formative is segmented off, the remaining sequence is likely to be of a CVC or CVCVC shape. Examples of aq-/ax- fused with CVC stems,

aq'cil	'to be crowded'	axm'is	'to gnaw'
aq'kam	'to get stuck'	axyum	'to be stingy'
eqwel	'to do, make'	oxšol	'to urinate'

with CVCVC stems,

ax'ca'cax	'[weather] to be cold'
exweyep	'to change'
oqpolon	'to form into a ball, cake'

and with stems augmented with -Vn and -Vč.

aq'ca'lin	'to feel a twinge of pain'
exteteč	'to be satisfied'
oxyoyon	'to be crazy'

Examples of aqs-/axs- include:

axsman	'to delay'	aqswuken	'to touch, grab'
aqspa'	'to smoke (tobacco)'	oqspololon	'to slap-yell'

In most cases aq-/ax- is unanalyzable, cooccurring with a uniquely-occurring bound stem, but in many cases the formative aq-/ax- might be identified with the produc-

tive prefix aq-/ax- 'with the mouth' (q.v., 674.03) when it occurs in verbs having to do with eating, speaking, and sound in general. Examples with CVC stems,

axpa <sup>1</sup>	'to talk loudly'	axm <sup>1</sup> s	'to gnaw'
aqmil	'to drink'	expen	'to sing'
oxk <sup>1</sup> on	'to thunder'	oxto <sup>1</sup> y	'to suckle'

with stems augmented with -Vn and -Vč,

aqwič <sup>1</sup> n	'to shout'
oxloč <sup>1</sup> on	'to kiss'
axč <sup>1</sup> l <sup>1</sup> l <sup>1</sup> ič	'to hum, buzz'

and with CVCVC stems.

aqp <sup>1</sup> ip <sup>1</sup> k	'to grit the teeth'
axna <sup>1</sup> kaw	'to eat all up'
eqmelew	'to lick, lap up'

Uniquely-occurring stems with aqs-/axs- sometimes cover the same semantic field.

aqšmul	'to speak, make a sound'
aqsyu <sup>1</sup> ten	'to whistle'
oqspololon	'to slap-yell'

### 612.3 Sibilant Formatives

Occasionally an unanalyzable sibilant formative -c-, -ps-, or -ks-, sometimes with the palatal sibilant as -č-, -pš-, and -kš-, immediately precede *stems* following any prefix with which the stem may occur. The presence of the formative is inexplicable; it does not seem to be triggered either by the prefix or the stem, since the same prefix with other stems and the same stem

with other prefixes usually lack the formative.

/palu-c-pux/ 'to spit, impale'

/aqulu-c-pen/ 'to strip bark off of a tree'

/ni-ps-woyon/ 'to twist [trans.]'

/pana-ks-patín/ 'to fall with a thud'

Sometimes the formative -ps- is found with uniquely-occurring stems; -ps- is fused with the stem, but as part of a tri-consonantal initial cluster which is surely not monomorphemic. Such stems may occur without prefixes,

pskúy 'to break off [intrans.]' (cf. skúy (/s-kúy/?)

'bird's beak')

pskí1 '[flower] to fade'

psnekey 'to bulge out, be bent back'

or with them.

/wala-psnokoy/ wolopsnokoy 'to turn a somersault'

(cf. psnekey 'to be bent back, to bulge out')

/qil-pštín/ 'to open the eyes'

/wala-pškal/ 'to sprain a joint' (cf. uškal (/uš-kal/?)

'to be strong')

An unanalyzable example which may show -ks- in a parallel construction is qulkšnini 'to snarl, show the teeth.'

Possibly another rarer sibilant formative -qs- can be seen in the noun watiqšlopo? 'large black beetle' (cf. the formative wati- in watiqoq 'stink bug').

With inalienably possessed body part terms used as stems in verbal compounds (cf. 572.3 and 618.1), -c- or -č- sometimes occur instead of the regular third person possessive marker s-.

/aqulu-c-pax/ 'to peel skin off' (-pax 'skin')

/aqul-c-ʔelew/ aqučelew 'to stick out the tongue (-ʔelew)'

/nax-č-ʔapam/ naxčapam 'to kneel' (-ʔapam 'knee')

This usage suggests that the third person marker c- found in Ventureño and Obispeño may once have occurred in Ineseño, was later changed to s-, but was preserved in a few relic forms such as these. This c- then perhaps is not to be identified with the sibilant formative -c- in such forms as /palu-c-pux/ or /aqulu-c-pen/.

#### 612.4 Rare Formatives

There are a number of sequences, occurring with only a few stems, which appear to be formatives. Some of them may even be associated with a fairly constant meaning.

Two of these forms show the same /q ~ x/ alternation seen in the formatives aq-/ax- and aqs-/axs-; these are uq-/ux-

uqčik 'to spit'

uxniwin 'to hurry'

uxnik 'to escape from'

uxmomon 'to do shoddily'

and iq-/ix-, possibly segmentable as a prefix dealing with covering.

iqmay 'to cover' (cf. -may 'to cover, overwhelm')

ixtiʔ 'to roof, thatch' (cf. -tiʔ 'to meet, come across')

The formative ʔac- may be segmentable in

ʔactum = ʔactik 'to taper to a point' (cf. -tik 'tip')

The formative as- occurs mostly in verbs of sound,

asmimín 'to buzz, hum'

asxílilín 'to clatter'

astimín 'to buzz, hum'

askalan 'to be ajar, agape'

aswílilín 'to resound'

astipil 'to be thick'



and ip- seems to have something to do with light or heat.

ipyototon 'to boil'                    ipčičix 'to give off sparks'  
 ?ipčiyiwīn 'to glisten'            iplīwīwīn 'to sparkle'

Still rarer examples of possible verbal formatives include:

/yaq-won/ yoqwon 'to howl'  
 /wač-xomīn/ wočxomīn 'to carry in one's arms'  
 /?ani-k<sup>h</sup>ok<sup>h</sup>o?/ 'to hop on one leg' (/?al-ni-/?)  
 /?ayaq-štušen/ '[benumbed limb] to tingle' (/?al-yaq-/?)

### 613 Lexically Reduplicated Verbs

The morphology of the verb stem is characterized by a great deal of lexical reduplication, often in conjunction with formatives such as -Vn and -Vč or aq-/ax-, as discussed above (612). There are several patterns of lexical reduplication (q.v., 260).

#### 613.1 CVC Reduplication

muxmux 'to crumble'  
 yityit 'to deceive'  
 /aq-lamlam/ 'to chew'  
 /aq-loyloy/ oqloyloy 'to chew something tough'

#### 613.2 Initial CV- Reduplication

Unambiguous examples of initial CV- reduplication:

lalaq 'to be fat, thick'  
 -susu 'to squat'  
 xexew 'to be hoarse'  
 /ax-čacax/ '[weather] to be cold'  
 /aq-pīpīk/ 'to grit the teeth'

Many other potential examples of initial CV- reduplication are open to an alternative analysis as C<sub>1</sub>VC<sub>1</sub> stems with the -Vn or -Vč augment.

- wawač 'to be difficult'  
 -sisin 'to be badly formed'  
 /as-mimín/ 'to buzz, hum'  
 /ax-teteč/ exteteč 'to be satisfied'

### 613.3 Final -VC Reduplication

- makak 'to stutter'  
 ketet 'to be flat'  
 ʔowow 'to be white'  
 /aqs-muyuy/ 'to make a kissing sound'

### 613.4 Medial Reduplication

Most examples of medial reduplication are open to interpretation as inherent CVC sequences plus the -Vn or -Vč augment, in which the final consonant of the CVC sequence is reduplicated.

- phototon 'to fall apart'  
 tululun 'to fish with a pole'  
 /aqs-pololon/ oqspololon 'to slap-yell'  
 /ip-liwíwín/ 'to sparkle'  
 /aq-č̣ḷḷḷč̣/ 'to hum, buzz'

Relatively few cases of medial reduplication are not open to the interpretation above.

- halala 'to quarrel'  
 tiyaxaxa 'to straddle'  
 /aq-mululuk/ 'to whirr, hum'

613.5 wuluwul Reduplication

There is only one example of a lexically reduplicated wuluwul verb stem:

mayama<sup>1</sup> 'to be multi-colored'

## 613.6 Bisyllabic Reduplication

Bisyllabic reduplication is limited to CVCVC verb stems,

yuluyuluk 'to be angry'

khawakhawak 'to be light (in weight)'

perhaps based on CVC stems plus -Vn augment.

yepeyepen '[earth] to shake'

wuluwulun 'to shake, wiggle'

## 614 Final Alternation of /n/ and /č/

Many verbs show a stem-final alternation of /n/ and /č/, which ideally corresponds to a distinction between transitive forms with final /n/ and intransitive forms with final /č/. The /č/ of the intransitive form can be analyzed as the final /n/ of the transitive form plus a suffix -š (q.v., 631.4), which has an intransitive or passive force, as well as denoting multiple objects or sustained or customary action. A sequence of /n+š/ regularly becomes /č/ in such an environment, by the operation of phonological rule 286.33. Examples of -š following final consonants other than /n/:

/s-ušak/ šušak 'he spills it' :

/s-ušak-š/ sušakš 'it is spilled'

/k-uč-q<sup>h</sup>al/ 'I open it' :

/s-uč-q<sup>h</sup>al-š/ šučq<sup>h</sup>alš 'it is open, opened'

The basic form with final /n/ is usually transitive, although there are many exceptions (e.g. kitwon 'to come out, emerge,' nowon 'to stand,' -tun 'to be two'). The form with /n/ occurs either with an overt object noun or pronominal suffix, with an object implied, or with causative constructions. The form with final /č/ never occurs with suffixed objects, since the suffix -š belongs to the same suffix position class as pronoun objects, whether the -š denotes intransitivity, multiple objects, or sustained or customary action. It is often difficult to make a sharp distinction among these various senses of -š; both the notions of intransitivity and of multiple objects tend to take on the connotation of sustained or customary action. Examples illustrating the sense of intransitivity and of sustained action involve the stems /uš-qen/ 'to use up,'

/s-iy-uš-qen ha-ʔuw-muʔ/ šiyušqen aʔuwumuʔ 'they use up [all of] the food'

/s-uš-qen-š ha-ʔuw-muʔ/ šušqeč aʔuwumuʔ 'the food is all used up, all gone'

expen 'to sing,'

/s-iy-expen-us/ 'they are singing to him, for him'

/s-expen-š/ šexpeč 'she is singing'

and ʔayaqštušen '[benumbed limb] to tingle.'

/no-k-su-ʔayaqštušen-in ha-p-ʔił/ nokšuʔayaqštušenin aʔił

'I will make your leg tingle, prickle: I will cause to tingle to you / your leg'

/s-ʔaqayštušen-š ha-k-ʔił/ šayaqštušeč aʔił 'my leg tingles, is asleep'

Examples illustrating the sense of multiple objects and of sustained action include the stem *exen* 'to eat up,'

/s-exen-it ha-k-<sup>?</sup>uw-mu<sup>?</sup>/ *sexenit akuwumu<sup>?</sup>* 'he eats up my food from me: he eats up from me / my food'

/s-exen-š heči<sup>?</sup> ha-k-qo<sup>?</sup>/ *šexeč eč aq<sup>h</sup>o<sup>?</sup>* 'this dog of mine eats things up: he eats much / this / my dog' and *ičen* 'to crack an acorn in a hole drilled in a rock.'

/k-ičen/ 'I crack an acorn open'

/k-ičen-š/ *kičeč* 'I crack many acorns open'

With basically intransitive stems with final /n/, -š is rare, occurring only in the sense of sustained action.

/naqal-tun-š/ *naqatuč* 'to be two abreast' (-tun 'to be two together')

/s-al-kiyimin-š + R ha-<sup>?</sup>o<sup>?</sup>/ *šalšalkiyimič a<sup>?</sup>o<sup>?</sup>* 'the waves (lit. water) are breaking' (-kiyimin 'to turn over')

But an intransitive stem in a transitive compound may be made intransitive by -š, as with the stem *sokin* 'to be dented, caved in' in the compounds

/xal-sokin/ *xosokin* 'to make into a bundle'

/xal-sokin-š/ *xošokič* 'to be in a bundle'

The form with -š is often obligatory in certain compounds, usually in verbs (not necessarily transitive) which nearly always show final /n/.

/yul-kitwon-š/ *yulkitwoč* 'to go out into the sun'  
(*kitwon* 'to emerge')

/ma-niwon-š/ *maniwoč* 'to be in mourning' (*niwon* 'to abandon, let go of')

/su-ax-woyon-š/ *šoxwoyoč* 'to throw crookedly: to cause

to go crookedly rapidly' (woyon 'to be crooked')

An example of semantic differentiation between forms with and without -š is based on -tun 'to be two together.'

/tal-tun/ tatun 'to grasp, hold two together'

/tal-tun-š/ tatuč 'to take a double handful' (but cf.

/tal-tun-Vš/ tatunaš 'a double handful')

Nominal derivatives of verbs which frequently show the alternation of /n/ and /č/ are usually based on the underlying form with /n/, especially derivatives with the resultative suffix -Vš.

/isaxin-Vš/ ?išaxinaš 'something roasted in coals'

(isaxin(-š) 'to roast in coals')

But the form with -š may occur in some derivatives.

/aqi-mow-Vn-š-?i?/ ?aqimowoči? 'design; finery' (/aqi-

mow-Vn/ aqimowon 'to be fine, elegant')

/s-iy-aqu-smon-š-mu?-iwaš/ šiyaqušmočmu?iwaš 'where they

used to gather, their former gathering place'

(aqu-smon 'to gather together')

The final alternation of /n/ and /č/ is supported by two highly productive verbal derivative suffixes -Vn and -Vč (q.v., 621 and 622), which occur with much the same pattern of transitivity versus intransitivity. But the suffix -Vč is not liable to analysis as -Vn-š, since the pattern of vowel specification in the suffixes (cf. phonological rule 286.12), as determined partially by stem-final vowels, is not parallel between -Vn and -Vč.

## 615 Bound Stems

There are many bound stems which never occur without some verbal prefix, other than obligatory person-number markers. Some of the most common verb stems are bound, occurring with a large number of prefixes, as a glance under these headings in the dictionary would show. Some of the commoner bound stems include:

-apay 'to be up, above'	-siq 'to do firmly, tightly'
-k <sup>h</sup> it 'to come near'	-smon 'to join, gather'
-kumu? 'to measure'	-tun 'to be two'
-c <sup>h</sup> 'to be sharp'	-kom 'to stroke, caress'
-ti? 'to meet, find'	-kiyimin 'to turn over'
-may 'to cover'	-lomol 'to be piled up'

A sample of the items in the prefix system of a bound stem such as -tun 'to be two, involve two' includes:

/ali-tun-Vn/ alitunin	'to be in the middle of'
/axi-tun/	'to do twice'
/lu-tun/	'to split, fork into two'
/maq-tun/	'[rope, line] to be doubled'
/tal-tun/ tatun	'to grasp two together'
/wal-tun/ watun	'to be doubled'
/wi-tun-Vn/ witunin	'to cut in two, cut in half'

Two bound stems have free reduplicated forms which require no prefix.

/s-c <sup>h</sup> + R/ sc <sup>h</sup> c <sup>h</sup>	'it is sharp' (-c <sup>h</sup> 'to be sharp')
/s-pen + R ha-k-?apam/ spenpen akapam	'my knee is skinned' (-pen 'to peel, strip off')

## 616 Uniquely-Occurring Stems

A large number of sequences with the canonical shapes CVC and CVCVC typical of stems (cf. 611) occur only with what appears to be a segmentable prefix. Some of these uniquely-occurring bound stems have been presented already in section 612.2 on aq-/ax- as a formative, as in

aqkam 'to get stuck'

axmay 'to owe'

exweyep 'to change'

Here, aq-/ax- may sometimes be identified with a productive prefix aq-/ax- 'with the mouth' with verbs denoting eating, speaking, and making noises.

axmís 'to gnaw'

aqwícín 'to shout'

But aq-/ax- and the uniquely-occurring stem cannot be given distinct separate meanings. This situation obtains elsewhere with uniquely-occurring stems and the prefixes with which they occur. Examples are common in which the prefix is either unanalyzable (perhaps a rare formative, q.v., 612.4) or else does not carry its usual meaning.

/aqu-tayín/ 'to be generous'

/aqu-nimak/ 'to hide oneself'

/ali-kum/ 'to be mistaken'

/aqtí-kač/ 'to be annoying'

/maquti-pípín/ 'to play a children's circle game'

/max-č<sup>h</sup>uyuy/ 'to slide down a bank'

/uni-híyín/ 'to moan, groan'

/uti-plíwíwín/ 'to flounder (as in soft mud)'



Examples are equally common in which the prefix can be identified with a productive segmentable prefix. A few examples include the prefixes aqni- 'of mental activity,'

/aqni-suwewen/ 'to think of'

/axni-sukutaŋ/ 'to pity, have pity on'

/axni-šēn/ 'to be ashamed'

maq- 'of a line, rope, or clothlike object,'

/maq-tuk/ 'to lead by the hand'

/max-luken/ 'to pull entirely out, pull out by the root'

/max-walač/ 'to be thin, gauzy'

uti- 'of sudden, inceptive action,'

/uti-kukš/ 'to stumble'

/uti-aqkalan/ utaqkalan 'to catch with a hook, barb'

(/aq-kalan/?)

/uti-axsīn + R/ utaxtaxsīn 'to give a start, be frightened' (/ax-sīn/?)

and yul- 'of, with heat.'

/yul-mon/ yulumon 'to be warm'

/yul-plučen/ '[burned skin] to slough off'

/yul-ixsililin/ 'to soften with heat [intrans.]'

(/ix-sililin/?)

Many apparent uniquely-occurring bound stems may be simply bound or even free stems which are accidentally attested only with a single prefixed form in the corpus. But most genuine cases of uniquely-occurring bound stems are no doubt stems originally intensified (e.g. /uti-aqkalan/ utaqkalan 'to catch with a hook') or made more specific with a classificatory prefix (e.g. /axni-sukutaŋ/

to have pity,' /yul-plučen/ 'to slough off'). Such compounds must have come to be used as formulaic units, which eventually became fused. A comparative example sheds some light on this process. Ineseño /tal-memen/ telmemen 'to touch' is composed of the prefix tal- 'of grasping, holding' and the uniquely-occurring stem -memen. This same stem can also be seen in Ventureño /si-qil-meme/ 'to shade the eyes with the hand,' where qil- in both languages refers to the eyes or to vision. Thus the stem -memen seems to carry the meaning 'to touch' in its own right, restricted in Ineseño to occurrence with a single prefix with much the same semantic force.

#### 617 Unattested Stems

There are many cases of stems attested only indirectly through derivative forms, or through comparative evidence. One clear synchronic example involves two derivatives

/hin-mu<sup>?</sup>/ hinimu<sup>?</sup> 'tool, instrument'

/hin-Vš/ hineš 'to use (lit. to be a thing which is used)' which point to a stem hin 'to use.' This stem is not attested in Ineseño, but can be seen in Ventureño hin 'to take hold of.'

Other forms, monomorphemic in Ineseño, can be seen on comparative grounds to be derivatives of stems no longer in use.

ʔanuč 'to bleed: /ʔan-Vč/' (cf. V. -ʔan 'blood')

pošhon 'to sense, be aware of: /poš-Vn/' (cf. V. -poš  
'heart, soul')

maxakiš 'cloth: /maxak-Vš/' (cf. V. maxak 'to strip bark off of a tree')

Still other forms, for which no comparative evidence is available, are strongly suggestive of derivative origin. For example, the verb ?ayaqštušen '[benumbed limb] to tingle' looks very much like a noun; it may be a derivative with the verbalizing suffix -Vn, from an older nominal stem \*?ayaqštuš perhaps meaning 'something tingly, prickly.' Harrington commented specifically on one apparently derived form, ?aqnipaš 'taste, savor,' noting that he tried in vain to elicit an underlying verb \*aqnip or \*aqnipaš meaning 'to taste, savor.'

#### 618 Nominal Elements as Verb Stems

Nominal elements, including not only noun stems but also pronominal forms such as numerals and quantifiers, may occur with verbal prefixes in verbal compounds. Certain prefixes occur frequently in such constructions, where the verbal force of the compound is supplied by the prefix (cf. 676 on verbal force prefixes).

##### 618.1 Nouns as Verb Stems

Any noun may occur with verbal force prefixes as a verb stem, but such nouns are commonly inalienably possessed body part terms (q.v., 572.1). Inalienably possessed nouns in such compounds are usually preceded by a possessive marker, either the regular third person marker s- or more rarely an affricated form c- (cf. 572.3 and 612.3). Among the prefixes which occur frequently with noun stems are

aqni- 'to resemble N, to look like N,'

/s-aqni-<sup>?</sup>axu<sup>1</sup>is/ 'it looks like blood (-<sup>?</sup>axu<sup>1</sup>is)'

/s-aqni-šup/ ša<sup>1</sup>qnišup 'it looks like (i.e. is the same color as) the earth (šup)'

su- 'to apply N, to do as N does,' causative with verbs,

/su-woqo/ 'to smear with tar (woqo)'

/su-pil/ 'to smear with pitch (-p<sup>1</sup>l)'

/su-xuxaw<sup>1</sup>/ 'to play dead: to do as Coyote (xuxaw<sup>1</sup>) does'

tip- 'to have much N, a large N,' usually a body part,

/tip-te<sup>1</sup>m/ 'to have big feet, broad feet' (-te<sup>1</sup>m 'sole')

/tip-s-se/ tipis<sup>he</sup> 'to be bony' (-se 'bone')

/tip-aql<sup>1</sup>w/ 'to be talkative' (-aql<sup>1</sup>w 'voice, word')

uti- 'to bump N, fall on N' with body part terms, refers to sudden or inceptive action with verbs,

/uti-<sup>?</sup>išaq<sup>1</sup>/ 'to fall on one's hip bone (-<sup>?</sup>išaq<sup>1</sup>)'

/uti-č-<sup>?</sup>apam<sup>1</sup>/ utič<sup>1</sup>apam<sup>1</sup> 'to fall on one's knees (-<sup>?</sup>apam<sup>1</sup>)'

and wi- 'to hit N, hit on the N' with body part terms, refers to beating or pounding with verbs.

/wi-s-noxš/ wiš<sup>1</sup>noxš 'to hit on the nose'

/wi-s-<sup>?</sup>il<sup>1</sup>wi<sup>1</sup>n/ wiš<sup>1</sup>il<sup>1</sup>wi<sup>1</sup>n 'to hit in the shin'

There are many sporadic cases of noun stems in verbal compounds, in which a given verbal prefix may occur with only a single noun, usually a body part term.

/<sup>?</sup>uq-s-tu<sup>?</sup>/ <sup>?</sup>uqštu<sup>?</sup> 'to be deaf' (-tu<sup>?</sup> 'ear')

/ux-s-sa/ uxš<sup>ha</sup> 'to loose a tooth (-sa)'

/tal-s-noxš/ talš<sup>1</sup>noxš 'to grasp by the nose (-noxš)'

/taš<sup>1</sup>li-pu/ '[arm] to be fully flexed' (-pu 'arm')

/uxma-ti<sup>1</sup>q-š/ 'to wash the face (-ti<sup>1</sup>x)'

/ʔac-tik/ 'to taper, come to a point' (-tik 'tip')

/ʔoqšo-ʔoʔ/ 'to be thirsty' (ʔoʔ 'water')

### 618.2 Numerals as Verb Stems

Verbal prefixes are common with numerals, usually one, two, and three, although in paradigmatic elicitations higher numbers occur too. A bound stem -tun 'to be two, involve two' replaces ʔiškoḿ 'two' in such constructions.

The prefixes involved are:

axi- 'to do so-and-so many times'

aqulu- 'to hold so-and-so many long thin objects'

lu- 'to grow into, branch into so-and-so many parts'

ni- 'to divide into so-and-so many parts [trans.]'

maq- 'to be so-and-so many strands together'

naq- 'to be so-and-so many abreast'

quti- 'to split up into so-and-so many parts [intrans.]'

tal- 'to hold, grasp so-and-so many together'

wal- 'to be so-and-so many in line'

waš- 'to be so-and-so many thicknesses'

A few examples with actual numerals include:

/axi-pakaš/ 'to do once'

/ni-tun/ 'to divide in two, cut in half [trans.]'

/waš-masix/ wasmasix 'to be triple-ply'

/wal-skumu/ 'to be four in line'

### 618.3 Quantifiers as Verb Stems

The quantifiers wahač 'much, many,' yilaʔ 'all,' nox 'a big one,' and mučuʔ 'a small one,' all occur with verbal prefixes. Examples are rather sporadic; there is

no systematic pattern like that with noun stems and numerals, although two of the compounds with wahač 'much, many' parallel numeral compounds.

/lu-wahač/ 'to grow, branch into many'

/quti-wahač/ 'to split up, branch into many'

/nu-wahač/ '[many] to do, be...'

/s-wašti-yila?/ šwaštiyila? 'water spreads all over'

/s-aputi-nox/ 'much water is flowing'

/s-taya-nox-Vn/ štoyonoxin 'it raining hard'

/axi-muču?/ 'to diminish, [moon] to wane'

/yuq-muču?/ 'to be thin, slender'

There are a few examples of a quantifier used directly as a verb stem, prefixed only with person-number markers (cf. 815 on nouns conjugated as verbs).

/hini-s-kice?/ 'when she was small, a little one...'

/no-s-wahač ha-p-?alčhum/ nošwahač a'palč<sup>h</sup>um 'you will have much money: will be much / your money'

#### 619 Stem Compounding

There are traces of a pattern of verb stem compounding, although it is certainly no longer productive.

/ni'muy-muxmux/ ni'mumuxmux 'to rub to powder between the palms:' ni'muy 'to rub between the palms' plus muxmux 'to crumble'

/wɪl-siniwe?/ 'to kill by shooting:' wɪl 'to shoot plus siniwe? 'to kill' (perhaps /si-ni-we?/)

/šuč-aqmil/ 'to begin to drink:' -šuč 'to begin' (usually a bound stem) plus aqmil 'to drink'

Much the same pattern may relate the verbal stem itaq 'to hear' and the prefix itax- 'of hearing, report,' in such compounds as

/itax-mik-Vn/ itaxmikiñ 'to be heard far away (mik)'

/itax-sin/ 'to confirm (a report)' (-sin 'to do ably')

It is possible that the same relationship underlies a few other pairs of verb stems and verbal prefixes, none as transparent as itaq and itax-.

aktik 'to come for, to come to get' (unless this is to be analyzed as /akti-hik/ :

akti- 'to come and..., motion toward speaker/hearer'

/s-akti-kuti/ 'he comes to see'

kinat 'to die along with,' attested once in /s-kinat-us/ 'he dies along with her' :

kina- 'of death, dying'

/s-iy-kina-qen/ sikineqen 'they die off'

uxnik 'to escape from, run away from' :

uxni- 'of discontinuity, interruption'

/k-su-uxni-niwon/ ksuxniniwon 'I make him stop what he is doing'

## 620 Derivation

An extremely productive pattern of verbal derivation involves the suffixes -Vn and -Vč, which are also common verbal augments (q.v., 612.1). These verbal derivatives largely parallel the pattern of transitivity versus intransitivity seen in the final alternation of /n/ and /č/ in many verbs (q.v., 614). The vowels of -Vn and -Vč are

filled in by the suffix vowel specification rule 286.12. These suffixes sometimes have the effect of aspirating or glottalizing a stem-final consonant (cf. phonological rules 286.24 and 286.32). The derivative in -Vn and -Vč may be accompanied by a prefix is-. In a few verbs, -l seems to have some derivational force.

#### 621 -Vn as a Process Verbalizer

Verbs derived from nouns by -Vn do not correspond precisely to the transitive usage of many verbs with final /n/, although many of the derived verbs actually are transitive. The parallel is that derivatives in -Vn are active process verbs, with various partially overlapping senses:

'to make N,'

/pat-Vn/ patun 'to build a nest (-pat)'

/čiwis-Vn/ čiwisun 'to make a rattle (čiwis)'

/su-pey-Vn/ supeyin 'to make a hairpin (/ -su-pey/)'

'to endow with N,'

/ʔił-Vn/ ʔiłin 'to put legs (-ʔił) on (e.g. a potrest)'

/hilaq-Vn/ hilaqin 'to put a handle (-hilaq) on a knife'

'to use N,'

/ʔayip-Vn/ ʔayipen 'to poison' (ʔayip 'poison')

/ʔiw-Vn/ iwın 'to cut, slice' (-ʔiw 'knife')

/pil-kuy-ʔ-Vn/ pilkuyen 'to put into a wooden bowl  
(/pil-kuy-ʔ/ pilkuý)'

'to do, be what is characteristic of N,'

/yol-Vn/ yolın 'to be blue' (yol 'bluebird')

/smomoy-Vn/ smomoyin 'it is foggy' (smomoy 'fog')



/ʔihɨy-ʔ-Vn/ ʔihɨyɨn 'to be manly' (/ʔihɨy-ʔ/ ʔihɨy  
'man, male')

/shamala-Vn/ shamalan 'to speak Ineseño' (shamala 'an  
Ineseño, the Ineseño tribe')

and 'to be, become N.'

/woť-Vn/ woťin 'to be a chief (woť)'

/kseň-Vn/ kseňun 'to be a kseň (ceremonial official)'

/ʔalqapač-Vn/ ʔalqapačun 'to turn into an animal  
(ʔalqapač),' used in mythical texts

The -Vn suffix appears in verbal derivatives of a  
couple of particles.

/mɨk-Vn/ mɨkɨn 'to go far away' (mɨk 'far away')

/ti-moloq-Vn/ timoloqin 'to talk of old times' (moloq  
'long ago')

In a couple of derivatives with initial /s/ in a consonant  
cluster, no person-number marker appears.

/smomoy-Vn/ smomoyin 'it is foggy' (smomoy 'fog')

/sxamɨn-Vn/ sxamɨnun 'the sea (sxamɨn) is high, rough'

## 622 -Vč as a Stative Verbalizer

Verbs derived with -Vč correspond to the intransitive  
usage of verbs with final /č/. Many of the derived verbs  
are stative or passive; those which are active are still  
intransitive. The range of meanings of -Vč includes:

'to be characterized by N,'

/toť-Vč/ toťoč 'to be smoky' (toť 'smoke')

/ʔoʔ-Vč/ ʔoč 'to be wet, watery' (ʔoʔ 'water')

/nuy-Vč/ nuyič 'to be grimy, dirty' (nuy 'grime, dirt')

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- /ʔiškóm-Vč/ ʔiškómič 'to be two (ʔiškóm), a pair'  
 'to own, possess, be related to N,'
- /qoʔ-Vč/ qoč 'to have a pet (-qoʔ)'  
 /tomol-Vč/ tomolič 'to own a boat (tomol)'  
 /tal-hík-ʔ-Vč/ talíkič 'to be married, have a wife  
 (/ -tal-hík-ʔ/ -talík)'  
 /ma-k-popoč-Vč-waş/ makpopočičwaš 'my late paternal  
 grandfather (-popoč), the one who was my paternal  
 grandfather'
- 'to put on, wear, bear N,'
- /cux-Vč/ čuxič 'to put on, wear a headdress (cux)'  
 /ickuyan-Vč/ ičkuyanič 'to be armed' (-ickuyan 'bow,  
 weapon)'  
 /sapatu-Vč/ šapatuč 'to put on, wear shoes (Span.  
 zapato)'
- 'to use N,'
- /tiwalulay-Vč/ tiwalulayič 'to play the flute (tiwalulay)'  
 /čup<sup>h</sup>at-Vč/ čup<sup>h</sup>atič 'to use a head-strap (čup<sup>h</sup>at)'  
 /pa-Vč/ pahač 'to walk with a staff, walking-stick (-pa)'  
 and 'to be affected by N.'
- /ʔiko-Vč/ ʔikoč 'to have pain in the small of the back  
 (-ʔiko)'  
 /momoy-Vč/ momoyič 'to be drunk, intoxicated with  
 Jimson weed (momoy)'  
 /lewlew-Vč/ lewlewuč 'to be possessed by lewlew (in a  
 dream)' (lewlew 'mythological creature')

The -Vč suffix appears not only with noun stems, but  
 with numerals,

/ʔiškóm-Vč/ ʔiškómič 'to be two (ʔiškóm), a pair'

/masix-Vč/ mašixič 'to be three (masix), a trio'

/ma-iy-al-yiti-ʔiškóm-Vč ha-ʔeneq/ mayayitiškómič aʔeneq

'the Pleiades: the women who are six together'

and with a quantifier and a particle.

/wahač-Vč/ wahačič 'to be many (wahač), numerous'

/ʔinu-Vč/ ʔinuč 'to be true' (ʔinu 'true, truly')

A common equivalent to the verbalized form with -Vč (at least in the sense of 'to have N') is wil 'to exist' plus a possessed form of the noun.

/s-kam-Vč/ škamič = /s-wil ha-s-kam/ 'it has wings (-kam);

it is winged : there exist its wings'

/k-su-wayan-Vč/ kšuwanič = /s-wil ha-k-su-wayan/

'I have earrings (/ -su-wayan/); I am ear-ringed :  
there exist my earrings'

### 623 Sporadic Aspiration and Glottalization with -Vn and -Vč

The derivative suffixes -Vn and -Vč sometimes have the effect of aspirating or glottalizing a stem-final consonant which is plain in the underlying nominal form.

Sporadic aspiration (cf. phonological rule 286.32) applies only to stem-final /p/ and /k/, and is fairly rare.

/ʔap-Vn/ ʔaphan 'to build a house (ʔap)'

/liyik-Vč/ liyik<sup>h</sup>ič 'to be in the middle (liyik)'

Sporadic glottalization (cf. phonological rule 286.24), in the context of the -Vn and -Vč derivatives, may apply to any stem-final obstruent.

/atik-Vn/ atik<sup>h</sup>in 'to bear, endure' (-atik 'soul, spirit')

/masix-Vč/ mašixič 'to be three (masix), a trio'

/ʔal-xit-Vč/ ʔalxitič 'gooseneck clam: one with a penis (-xit)'

#### 624 is- with -Vn and -Vč Derivatives

Derivatives with -Vn and -Vč are sometimes prefixed with is-, with no apparent difference in meaning from forms derived simply with -Vn or -Vč.

/(is-)matak-Vn/ matakun ~ ismatakun 'to be muddy'

/is-minawan-Vč/ išminawanuč 'to face, head toward minawan (a mountain north of Santa Ynez)'

/is-milimol-Vč/ išmilimolič 'to face north, head north (toward the mountains: milimol)'

/is-siyiw-Vč/ iš<sup>h</sup>iyiwīč 'to wear a -siyw (man's hairpin stick)'

A few such forms are ambiguous:

[sispeyun] 'he gathers flowers (/s-pey/)'

[sisqapun] 'he decorates it with plumes (/s-qap/)'

[šištikhin] 'he goes ahead; he is first' (/s-tik/ štik 'its tip, point')

The /i/ of the verbal form might be analyzed as is- plus the stem, or as a regular epenthetic /i/ arising between person-number prefixes and consonant clusters with initial /s/ or /š/, based on the form with prefixed s- (cf. the i-epenthesis rule 286.15).

There are a few verbs in the lexicon with the form is-...-Vn/č, for which no underlying noun is attested.

ismeyepun 'to joke with, tease, flirt' (/is-meyep-Vn/?)

išmekewuč 'to wear bangs: /iš-mekew-Vč/' (cf. Ventureño  
-išmekew 'eyebrow')

iš<sup>h</sup>okič 'to wear any sort of hair ornament' (/is-sok-Vč,  
is-hik-Vč/? cf. Barbareño iš<sup>h</sup>ok 'to wear bangs')

#### 625 Derived Parallels to the Alternation of /n/ and /č/

Many nouns have derived forms in both -Vn and -Vč which parallel the final alternation of /n/ and /č/ in verbs (q.v., 614), linked with transitivity versus intransitivity and with sustained or customary action. Examples in which the alternation is linked with transitivity include derivatives of -tī 'name,'

/tī-Vn/ tīn 'to name, to give a name to'

/k-iy-tī-Vn-us xwan/ kitīnus xwan 'we name him Juan'

/tī-Vč/ tīč 'to be named, to have as a name'

/s-tī-Vč xwan/ štīč xwan 'he is named Juan'

and of -<sup>?</sup>axpilīl 'nerve, sinew; root; bowstring.'

/s-<sup>?</sup>axpilīl-Vn-us ha-s-<sup>?</sup>ax/ šaxpilīlenus ašax 'he backs

his bow with sinew: he sinews / his bow'

/s-<sup>?</sup>axpilīl-Vč/ šaxpilīleč '[a bow] is sinew-backed'

Examples in which the alternation of -Vn and -Vč may be linked with sustained or customary action are not so clear; both of the derived forms here are stative, and there is no indication that they differ in meaning. Examples are based on derivatives of cweq 'grass, herb,'

/s-cweq-Vn/ sicwequn = /s-cweq-Vč/ šičwequč 'it is  
grassy, weedy'

and of šup 'land, earth, soil.'

/s-šup-Vn/ šhup<sup>h</sup>un = /s-šup-Vč/ šhup<sup>h</sup>uč 'it (e.g. grain to be winnowed) has dirt in it'

As with many verbs which show the alternation of final /n/ and /č/, some derived verbs show the occurrence of one derivative suffix or the other to be determined idiosyncratically for each compound of prefix and derivative. An example involves derivatives of liy<sup>h</sup>ik 'middle.'

/liy<sup>h</sup>ik-Vč/ liy<sup>h</sup>ik<sup>h</sup>ič 'to be in the middle'

/ax-liy<sup>h</sup>ik-Vn/ axliy<sup>h</sup>ik<sup>h</sup>in 'to be in between, be half-full'

/tal-s-liy<sup>h</sup>ik-Vn/ tašliy<sup>h</sup>ik<sup>h</sup>in 'to grasp by the middle'

As suggested in the discussion of the final alternation of /n/ and /č/ (in 614), an alternative analysis of these suffixes -Vn and -Vč might be that the -Vč form is a combination of -Vn plus -š, denoting intransitivity, multiple objects, or sustained action. It should be noted that the vowels of both derivative suffixes agree for any given noun stem (e.g. [šup<sup>h</sup>un] and [šup<sup>h</sup>uč], [ʔaxpil<sup>h</sup>in] and [ʔaxpil<sup>h</sup>ič]), although the same stem vowel may take different suffix vowels (e.g. /šup-Vč/ šup<sup>h</sup>uč : /cux-Vč/ čuxič). The two derivative suffixes -Vn and -Vč have different patterns of vowel specification (by phonological rule 286.12), as partially determined by stem-final vowels; there are a few cases in which the vowels of the derivative suffixes differ with the same stem, as with mata<sup>h</sup>k 'mud, clay.'

/mata<sup>h</sup>k-Vn/ mata<sup>h</sup>kun = /mata<sup>h</sup>k-Vč/ mata<sup>h</sup>k<sup>h</sup>ič 'to be muddy'

Altogether, it is simpler to regard -Vn and -Vč as two distinct derivative suffixes which parallel an inflectional distinction between zero suffix and -š (q.v., 631.4).

## 626 An Archaic Derivative Suffix -l

An archaic verbal suffix -l can be seen in a few verbs, where -l seems to function either as a derivative suffix or as a final formative. Derivative examples are:

/wɪ-l/ 'to hunt, shoot' (wɪ 'deer')

/su-tɪ-l/ sɪtɪl 'to mention by name (-tɪ)'

and in an etymology suggested by Beeler,

/aq-mi-l/ 'to drink' (aq- 'with the mouth;' mi 'water'  
in the island dialects)

As a final formative, -l is in alternation with various other consonants.

/ikhɪ-l/ ~ /ikhɪ-t/ 'to bring' (cf. -kɪt 'to come near')

/uti-axpɪ-l/ utaxpɪl ~ /uti-axpɪʔ/ utaxpɪʔ 'to light  
a fire'

/uʃ-p<sup>he</sup>-l/ = /su-waʃ-p<sup>he</sup>-n/ ʃuweʃp<sup>he</sup>n 'to uncover' (cf.  
-pen 'to strip, peel')

## 627 Multiple Derivation

There are numerous examples of multiple derivation, in which a verb is nominalized, and the resulting nominal form is re-verbalized. Examples are based on the stems

/waʃ-tap/ 'to put the hand, arm into,'

/waʃ-tap-ʔ/ waʃtap 'bracelet'

/waʃ-tap-ʔ-Vč/ waʃtapɪč 'to wear a bracelet'

/aqu-puy-š/ aqupuš 'to pour into a cup,'

/aqu-puy-š-Vš/ ʔaqupušaš 'cup'

/aqu-puy-š-Vš-Vn/ ʔaqupušašin 'to use as a cup'

and /qal-ni-al-tɪʔ/ qanatɪʔ 'to put on a belt.'

/qal-ni-al-ti'-Vš/ qanatiš' 'belt'

/qal-ni-al-ti'-Vš-Vn/ qanatiš'in 'to use as a belt'

Less often, a noun is verbalized and then re-nominalized, as with qoy' 'olivella shell,'

/uš-qoy'-Vn/ ušqoy'in 'to gather shell-fish'

/uš-qoy'-Vn-Vš/ 'ušqoy'inaš 'gathered shell-fish'

/uš-qoy'-Vč-ʔiʔ/ 'ušqoy'ičiʔ 'tool for prying up abalone'

and ʔap 'house.'

/ʔap-Vn/ ʔaphan 'to build a house'

/ʔap-Vn-Vš/ ʔaphaniš 'village; tribe, nation'

An example of tertiary derivation is based on wi' 'deer.'

/wi'-l/ 'to hunt, shoot'

/-wi'-l-Vš/ -wi'līš 'a wound'

/wi'-l-Vš-Vč/ wi'līšič 'to be wounded'

### 630 Inflectional Suffixes

Inflection by suffixation is comparatively light; there are at least a hundred and fifty inflectional prefixes, but only a handful of suffixes. Suffixes mark pronoun objects, imperatives and questions, and a few other spatial and temporal notions. Suffixes fall into a well-defined set of position classes.

### 631 Object Suffixes

There is a class of mutually exclusive object suffixes, marking personal pronoun objects as well as such categories as 'reflexive,' 'reciprocal,' and 'plural object.'



## 631.1 Personal Object Suffixes

The suffixes marking object pronouns have been presented already in the section on pronouns (cf. 412), but special uses of the object pronouns deserve mention. The pronominal object suffixes are:

	singular	non-singular
first	-it	{-iyuw}
second	-in	
third	-us ~ ∅	(-us)-wun

Several grammatical relationships between verb and noun phrase in the sentence are expressed by the object pronouns, including:

direct object or patient,

/s-tal-memen-it/ štelmemenit 'he touches me'

/s-am-nu-wew-us/ 'they ambushed him'

indirect object or goal,

/s-am-ikš-in/ šamikšin 'they give it to you'

/s-aq-šuč-it ha-xus/ šaqšučit axus 'the bear heads for me'

benefactive,

/iškīhīn-it-ʔ hečiʔ/ ʔiškīhīnit ečiʔ 'keep this for me!'

/s-axta-wala-ašay-it/ saxtawalašayit 'he dries it for me'

ablative or source,

/s-iy-exen-it ha-k-ʔuw-muʔ/ siyexenit akuwumuʔ 'they  
ate up my food [from me]'

/s-am-axīkīn-us ha-s-ʔalčhum/ samaxīkīnus ašalčhum

'they begged money from him'

experiencer with an impersonal verb (q.v., 825),

/s-yiw-iyuw/ 'we, you (plural) have good luck: it is  
good to us'

/s-aq-<sup>?</sup>uw-š-it ha-k-tu<sup>?</sup>/ ša<sup>?</sup>qušit aktu<sup>?</sup> 'my ear itches:  
it itches to me / my ear'

and the subject of a verb embedded in a causative construction with su- 'causative.'

/su-aqmil-it-<sup>?</sup>/ saqmilit<sup>?</sup> 'give me a drink!: cause me  
to drink!'

/s-su-saq-sumu<sup>?</sup>-iyuw/ s<sup>h</sup>usaqsumuliyuw 'he has us taste  
it, he causes us to taste it'

A common idiomatic construction occurs in which the possessive marker of an object noun is repeated as an object pronoun, perhaps with benefactive force.

/no-k-ti-lokin-in ha-p-šuš/ 'I will cut your hair (for  
you)'

/s-am-su-xil-yoxon-iyuw ha-k-iy-kep<sup>?</sup>-mu<sup>?</sup>/ samsuxiyoxon-  
iyuw akikepmu<sup>?</sup> 'they rolled up our bathing pool  
(oñ us)'

The English gloss captures the flavor on this construction in the example:

/s-aqway<sup>?</sup>-it ha-k-<sup>?</sup>ił/ saqwayit ak<sup>?</sup>ił 'it hit me in the  
leg: it hit me / my leg'

Most verbs do not explicitly mark a third person singular object, while some take -us. A third person singular object marked by -us is usually not the direct object, but stands in one of the other relationships to the verb sketched above. This suffix -us appears even when the noun for which it stands also occurs in the phrase.

/k-aqni-wil-us heki ha-ʔihiy-ʔ/ kaqniwilus ek aʔihiy

'I am thinking about (him) that man'

/s-mal-aq-pey-us ha-s-kokoʔ/ smel<sup>e</sup>apeyus askokoʔ 'he

inherited it from his father: he inherits from him /  
his father'

/s-am-axikin-us hi kulilaw/ 'they offer it to the

kulilaw (a mythological creature): they offer to him  
/ kulilaw'

The third person plural object marker -wun, unlike the singular -us, most often marks a direct object. Verbs which take -us in the singular take it in the plural too, so that -us-wun is the regular plural object marker for such verbs.

/k-ʔip-us-wun ha s-iy-nan/ kipuswun asinan 'I tell them  
to go: I tell them / they go'

/s-aq-pey-us-wun heki-mu-wun/ seqpeyuswun ekimuwun 'he  
resembles those people: he resembles them / those'

### 631.2 Reflexive Markers -šaši ~ -šiy

Both -šaši and -šiy are reflexive markers: -šaši is very common and -šiy is quite rare. In a couple of forms they occur together as -šašiy, as in

/s-šuyuwac-šašiy/ šhuyuwac<sup>h</sup>šiy 'it is formidable'

It is possible that this is the full underlying form of the reflexive, although Harrington noted on the same page that he listened carefully and was unable to hear a final glottalized /y/ in any other occurrence of -šaši. The two forms -šaši and -šiy were explicitly said to be synonymous

in the examples

/k-axsil-šaši/ kaxšilšaši = /k-axsil-šiy/ ka šilšiy

Other examples of reflexive constructions include:

/k-su-uni-ni-apay-šiy/ kšuninapayšiy 'I saved myself,  
extricated myself'

/k-uštewe?-šaši/ kuštewešiši 'I prick myself'

/ka s-iš-eqwel-šaši ha-ʔaqiwo/ kašišeqwelšiši aʔaqiwo  
'they (dual) turn [themselves] into stars'

The reflexive is generally used in a strictly literal sense, but in some expressions it is idiomatic.

/s-ackaw-šaši/ šačkawšiši 'he has an accident' (ackaw  
'to err, make a mistake')

/s-šuyuwáč-šaši/ š<sup>h</sup>uyuwáč<sup>h</sup>iši 'it is formidable, respect-  
table' (šuyuwáč 'to be fond of')

/s-aqpala-s-aqša-Vn-šaši/. šaqpalašaqšač<sup>h</sup>iši 'he is tired  
all over, stiff with rheumatism' (aqša 'to die, be  
ill')

### 631.3 -nVš 'reciprocal, plural object'

The basic sense of -nVš is probably reciprocal, with a looser semantic extension to include plural objects. Most occurrences of -nVš are reciprocal, or may be interpreted as reciprocal in some idiomatic sense. The notion of plural object is less common, partially equivalent to two other plural object markers -wun and -š. Some clearly reciprocal examples:

/p-iš-su-uni-watmay-nVš/ piš<sup>h</sup>uniwatmaniš 'you two missed  
each other (in passing)'

/k-iy-ʔič-axi-Vč-nVš/ kiʔičaxičnaš 'we are enemies of  
one another'

/s-iy-ulu-aq-pey-nVš/ šiʔuleqpeneš 'they follow one  
another'

Some cases in which -nVš denotes a plural object include:

/s-wiṗ-nVš/ šwiṗniš 'he beats them with a stick'

/s-axta-wala-ašay-nVš/ šaxtawalašaniš 'he is drying them  
by the fire'

/no-k-xolkoy-nVš/ nokxolkonuš 'I will build several  
acorn granaries'

This last example was explicitly said by the informant to  
denote a plural object: 'because it is many.'

Many cases of -nVš are highly idiomatic, although with  
some semantic connection to reciprocity and plural object.

/ti-aq-pey-nVš/ teqpeš 'to be stickery; [disease] to  
be contagious' (/ti-aq-pey/ teqpey 'to stick to')

/su-tiyik-nVš/ šutiyikniš 'to be pregnant' (/su-tiyik/  
'to put inside')

/ux-puy-nVš/ uxpunaš 'to drizzle, sprinkle' (/ux-puy/  
'to spray')

/is-ʔap-nVš/ išapnuš 'to marry, get married' (ʔap 'house,'  
cf. Span. casar 'to marry')

631.4 -š 'multiple object; sustained action; intransitive'

The suffix -š is a highly productive one, often posing  
serious problems in the segmentation of sparsely attested  
forms (i.e. does the stem have a final consonant cluster  
or consonant plus -š, final glottal stop or -š, final /č/

or /t/ or /n/ plus -š?). The role of -š in the stem-final alternation of /n/ and /č/ in certain verbs is discussed in detail in 614. The suffix -š has three distinct uses.

1) The suffix -š may denote a multiple object, or a mass of [-count] material; here it is roughly equivalent to -wun and -nVš (q.v., 631.1 and 631.3).

/k-iku-č<sup>h</sup>o-š/ 'I press much (e.g. much meal) down'

/s-uš-phat'-š/ šušphatš 'he is rummaging around mixing things up'

/k-su-axsil-š/ kšaxšilš 'I fish; cause many to bite'

/s-su-kep'-š/ š<sup>h</sup>ukepš 'he baptizes (lit. bathes) many'

In this sense, -š may refer to a human object, but -wun is more common with a human referent.

2) Customary, habitual, or continual action may be denoted by -š.

/s-ʔal-aq<sup>h</sup>inaʔ-š/ šalaq<sup>h</sup>inaš 'he is grateful'

/s-ixut-š ha-qsi/ šixutš aqsi 'the sun is hot'

/s-al-kiyimin-š + R ha-ʔoʔ/ ša šalkiyimič aʔoʔ 'the waves (lit. water) are breaking (lit. turning over)'

3) The suffix -š may have a passive or intransitive force, nearly always with a third person ~~object~~, *subject*.

/s-uč-q<sup>h</sup>al-š/ šučq<sup>h</sup>alš 'it is open, opened'

/s-xalam-š/ šxalamš 'it is wrapped up'

/s-axi-qen-š/ šaxiqeč 'it is all worn away'

/k-exweyep-š/ 'I am different (lit. changed)'

Equivalent to the passivizing force of -š is a construction in which a nominal derivative with the resultative suffix -Vš is inflected with person-number markers like a verb.

/ka s-su-tap-Vš/ kaš<sup>h</sup>utapíš 'it is dyed: it is something dyed' (/su-tap/ 'to dye')

### 631.5 Verbs Requiring Object Suffixes

There are many verbs which require some suffix from this set of object marking suffixes, and which do not appear in a simple unsuffixed form. Some of these take only personal objects, such as ikš- 'to give to;'

/s-ikš-it/ šikšit 'he give it to me'

many of the verbs in this class are impersonal verbs (q.v., ), such as yiw- 'to have good luck.'

/s-yiw-iyuw/ 'we have good luck'

Others of the verbs requiring object suffixes take either personal objects or the -š suffix (cf. 614 on the final alternation of /n/ and /č/), such as ti-kik 'to comb'

/k-ti-kik-in/ 'I comb your hair: I comb you'

/k-ti-kik-š/ 'I comb [my hair]'

and sunon 'to obey.'

/k-sunon-us/ 'I obey him'

/k-sunon-š/ kšunoč 'I am obedient'

An unusual example is based on pu 'the sound of blowing, puffing,' which appears alternatively as

/s-aq-pu-š/ šaqpuš = /s-aq-pu-nVš/ šaqpunaš pu

'he makes a puffing sound'

### 632 Other Suffixes

Suffixes other than the object suffixes mark temporal, locational-directional, and imperative categories. This is a rather miscellaneous set of affixes.

## 632.1 -waš 'past marker'

The main use of -waš is as a past tense marker.

/s-wil-waš/ šwiliwaš 'there used to be some'

/k-łlłkłn-waš/ kłlłkłnłwaš 'I sat; I was seated'

/ʔal-axi-pen-š-waš/ ʔalaxipečwaš 'one who was a carpenter'

/ma-l-maniš-waš/ mamanišwaš 'one that was lost'

In narratives, and in almost any discourse, an overt marking of the past tense is not required. With adverbs implying past time, -waš almost never occurs.

/s-yul-wil hi ka-s-tapin/ syuwil ikaštapin 'it was (lit. is) hot yesterday'

With verbs referring to negative states and actions, -waš may not be glossed as past, but may have a depreciatory force like that of the nominal suffix -iwaš 'dead, defunct' (q.v., 551).

/s-aqwıy-š-waš/ šaqwišwaš 'it is worthless, no-good'

/s-lu-sisin-waš/ šlušišiniwaš 'it is all grown awry'

/s-ʔaximik-waš ha-k-haxwi-ʔ/ šaximikwaš ak<sup>h</sup>axwiʔ 'my clothes are in bad shape: is bad / my clothing'

With this depreciatory force, -waš may even cooccur with the future marker no-.

/no-s-ʔaximik-waš/ nošaximikwaš 'it will be bad'

## 632.2 -pi 'locativizer; respectively; immediately'

The suffix -pi is highly productive, usually with a locative force, but with other senses as well.

1) As a locativizing suffix, -pi indicates that the action of a generally intransitive verb is directed toward a par-



ticular object. The usual gloss of -pi is with a prepositional phrase determined by the verb, although sometimes in translation it appears to have merely a transitive force, due to the vagaries of English on this point. With no object noun expressed, -pi implies an indefinite third person object.

/s-<sup>h</sup>likin-pi/ 'he sits on it' (<sup>h</sup>likin 'to sit')

/s-yux-s<sup>h</sup>ul-pi ha-kawayu/ 'the horse kicks him' (/yux-s<sup>h</sup>ul/ 'to kick backward (e.g. like a frog)')

/k-tix-Vn-pi hi muhuw/ ktix<sup>h</sup>np<sup>i</sup> imuhuw 'I am facing south'  
(-tix 'eye, face' plus -Vn derivative suffix)

/ku-s-kalaš-pi-in ha-sipit-Vš/ kuškalašpiyin ašipitiš  
'the mush will breathe on you (i.e. emit steam)'

A couple of transitive verbs with -pi illustrate its locative usage very clearly: mexwe<sup>?</sup> 'to grind, whet,'

/k-mexwe<sup>?</sup>-š ha-k-<sup>?</sup>iw/ kmexweš a<sup>?</sup>iw 'I whet my knife'

/k-mexwe<sup>?</sup>-š-pi ha-l-<sup>?</sup>ci + R ha-xip/ kmexwešpi a<sup>?</sup>ci<sup>?</sup> axip  
'I whet it on a rough (lit. sharp) stone'

and /su-ti-aq-pey/ suteq<sup>?</sup>pey 'to cause to stick to.'

/no-k-su-ti-aq-pey heči<sup>?</sup> ha-po<sup>?</sup>n/ noksuteq<sup>?</sup>pey eč apo<sup>?</sup>n

'I will stick this board on (i.e. cause it to stick)'

/no-k-su-ti-aq-pey-pi heči<sup>?</sup> ha-po<sup>?</sup>n ha-lamesa/ noksuteq<sup>?</sup>pey-pi eč apo<sup>?</sup>n alamesa 'I will nail (lit. stick) this board onto the table (Span. la mesa)'

The suffix -pi is used freely with the relativizing prefix ma-/ha- (q.v., 521 and 662.1), in a locative relative construction roughly equivalent to locative nominalizations with the derivative suffix -mu<sup>?</sup> (q.v., 523.5).

/ma-k-nañ-pi/ maknanpi 'where I go'

/ma-k-nañ-mu?/ maknañumu? 'where I go: my going place'

The relative construction with ma-/ha-...-pi marks first and second person as usual,

/s-aq-šuč-it ha-k-al-nowon-pi/ šaqšučit akanowonpi 'he heads (lit. heads for me) for where I am standing'

/p-su-uti-kumu? ha-no-p-sinay-pi/ psutikumu? anopsinaypi 'you measure where you are going to put it'

while third person subjects take the special markers characteristic of nominalized-relativized forms with ma-/ha- (q.v., 521.1).

/ma-l-qot'in-pi ha-?o?/ maqot'inpi a?o? 'waterfall: where the water comes down'

/s-lu-kumel ha-l-wil-pi ha-l-am-ašin/ šlukumel awilp alamašin 'he goes straight to where the food is'

/ma-iy-al-nañ-pi, nañi ku-k-nañ/ mayananpi, nañi kuknañ 'where they are going, I will go too'

/k-yuq-tun-us-wun ha-iš-al-halala-pi/ kyuqtunuewun ašahalalapi 'I got myself into their (dual) quarrel: I intrude on them / where they (dual) are quarreling'

In this locative relative construction -pi is word-final, as distinct from its position preceding object markers as a simple locative suffix. Note the relative position of -pi and the second person singular object marker -in in the following examples:

/ku-s-kalaš-pi-in/ kuškalašpiyin 'it will breathe on you'

/ma-k-?ip-in-pi/ maqipinpi 'where I am talking to you'

2) In a construction parallel to its Barbareño cognate, -pi may mean 'immediately, right away.'

/ka k-akti-na?-pi/ kakaktinapi 'I come right away'

/ka s-exen-pi/ kasexenpi 'he ate it right up'

/s-nañ-pi hi mi-koy/ šnanp imikoy 'he goes right outside'

/k-aqta-qen-pi ha-?eneq/ keqteqenpi a?eneq 'I passed  
right by the woman (on the road)'

3) In a few cases, -pi seems to have the force of 'respectively' or 'each one individually;' the clearest example is:

/ka s-iy-eqwel-pi + R ha-tomol/ kasiyeqyeqwelp atomol  
'they each build a boat'

Other examples include the compound

/kumel-pi/ 'to separate, sort out; to be sorted out'

and the idiom

/pakas' ha-iy-al-neč-pi/ pakas' ayanečpi 'they are alike;  
they are each like one: one [is] what they are each  
like'

4) Sometimes -pi is unanalyzable. With a few verbs, -pi seems to have an idiomatic force.

/k-čamɪn-pi/ 'I am used to it' (čamɪn 'to know')

/s-niwon-pi ha-s-tix/ šniwonpi aštix 'she looks at him  
shifty-eyed' (niwon 'to leave, abandon, let go of')

/s-suyen-pi-in/ shuyenpiyin '[a garment, ornament] looks  
good on you' (suyen 'to be good-looking')

With other verbs, -pi seems to be fused with the stem as an unanalyzable unit.

axcumpi 'to be tight' (/ax-cum-pi/?)

axunušpi 'to be afraid of' (/axu-nuš-pi/?)

Occasionally -pi occurs with non-verbal forms as well.

yila? = /yila?-pi/ yilapi 'all, everything'

/ka-hawala-pi/ 'that's all there is' (hawala 'only')

### 632.3 -li 'directional'

The suffix -li indicates that an action is spatially directed toward a certain goal, although this goal need not be overtly expressed by a following noun.

/s-iy-mes-li hi mi-č<sup>h</sup>umaš/ simesl imič<sup>h</sup>umaš 'they cross over to Santa Cruz Island' (mes 'to cross over')

/taka? ha-k-iy-al-kum-li/ tak akiyakumili 'where have we gotten to?: where / we who arrive' (kum 'to arrive')

/k-a<sup>l</sup>am-li/ ka<sup>l</sup>amili 'I wade along (e.g. the creek)'

/m<sup>i</sup>k ha s-kek-li/ '[a diver] comes up far away (from where he went down)' (kek 'to come through a surface')

This suffix -li is not especially common; it is likely that its use is largely optional except perhaps in certain compounds, particularly with kum 'to arrive.' An example of the optional use of -li is the pair of sentences:

/no-k-mes(-li) hi mi-č<sup>h</sup>umaš/ nokmes imič<sup>h</sup>umaš - nokmesli imič<sup>h</sup>umaš 'I will cross over to Santa Cruz Island'

Examples of -li obligatory in a compound include:

/itax-kum-li/ itaxkumili '[sound] to carry far'

/su-uxšti-kum-li/ šuxštikumili 'to throw, carry far away'

In many compounds -li may be used idiomatically.

/s-uni-kum-li ha-k-atik/ sunikumili akatik 'I am satisfied: is satisfied / my heart'

/s-tik-waš-li ha-šup/ štikwašli ašup 'it is the last day

of the year: it comes to its tip (end)? / the year'  
 /s-lox'-li/ šloxli 'it is springtime' (lox' 'to surpass')  
 /no-k-eyep-li/ 'I will take this road all the way there,  
 will stay on this road' (eyep 'to take a road')

632.4 -iy ~ -ini ~ -es 'repetitive'

These three suffixes -iy, -ini, and -es are mutually exclusive markers of repeated action, glossed either 'again (and again)' or 'some more,' although only -iy occurs in this second sense. Other semantic distinctions among them are unknown. Of the three, -ini is restricted to a few idiomatic expressions.

/s-kot'-ini ha-šup/ 'the year comes to an end: it breaks again / the year'

/s-yiti'-ini ha-šup/ syitini ašup 'the new year begins: it comes again / the year'

The form -es is rarely attested, but seems to occur in any sort of construction.

/s-sinay-es/ šinayes 'he puts it away again'

/s-uqma-ni-koyi-es/ suqmanikoyes 'he goes back outside'

By far the most common of the three repetitive forms is -iy.

/s-su-nip-waš-iy/ š<sup>h</sup>inipwašiy 'he moved it again'

/s-ni-koyi-iy/ šnikoyihiy 'he comes back again'

/k-yik-us-wun-iy/ 'I give it to them again; I give them some more'

The form -iy is often used in what seems a redundant fashion, where the notion of repetition is already implicit

/k-is-ti?-iy ha-čoyini/ kišt<sup>h</sup>iliy ačoyini 'I find another one: I find again / another one'

or even explicit.

/s-kimiy-iy/ 'he does it again: he repeats again'

Two conjoined verbs in context may both take -iy.

/ka s-nañ-iy hi s-yal-wíl-iy/ kañnañiy isyawíliy 'he goes hunting again: he goes again / he goes hunting again'

### 632.5 -ʔay 'repetitive imperative'

The suffix -ʔay is an imperative version of the repetitive suffixes discussed above (632.4), denoting 'again (and again)' or 'some more.'

/yik-us-ʔay/ yikuśay 'give him some more! give it to him again!'

/axi-kum-ʔay/ ʔaxikumay 'dance some more!'

/yiti-ʔay/ yitay 'come again!'

/su-yul-čì-ʔay/ siyìčìlay 'heat it up again!'

### 632.6 -ʔ 'imperative'

The imperative marker (cf. 690 on imperative constructions) consists of glottalization of a final consonantal segment

/nowon-ʔ/ nowon̚ 'stand up!'

/axi-kum-ʔ/ ʔaxikum̚ 'dance!'

or a final glottal stop superimposed on /l/ when the verb ends in a vowel or glottal stop. The /l/ can be identified with the epenthetic /l/ which often arises between adjacent vowels within word boundaries (cf. 286.09 on l-epenthesis).

/kuti-ʔ/ kutil̚ 'look!'

/akti-naʔ-ʔ/ ʔaktinal̚ 'come!'

The second person marker *p-* is absent in this construction, but dual and plural imperative forms are marked by *iš-* and *iy-* as usual.

/iš-tap-ʔ/ ʔištap̄ 'come in (dual)!'

/iy-qil-hik-ʔ/ ʔiqilik̄ 'look out (plural)! take care!'

When suffixes follow the stem, the glottalization marking the imperative falls on the last of them.

/kuyam-pi-ʔ/ kuyampī 'sit on it! sit right down!'

/ulu-aq-pey-it-ʔ/ ʔuleqpeyit̄ 'follow me!'

/yik-us-wun-ʔ/ yikuswun̄ 'give it to them! give them more!'

The third person singular object marker *-us* has a special imperative form *-uŵ*, although */-us-ʔ/ -uŝ* is also attested as an imperative form.

/yik-uŵ/ 'give it to him!'

/saqn̄p-uŵ/ 'answer him!'

632.7 -ê 'yes-or-no question marker'

The *-ê* marking yes-or-no questions may be an independent particle, since it is one of the very few affixes with a low vowel other than */a/* and it is the last element in the verb complex. It might possibly be identified with the interjection *he* 'yes.'

/p-toxom̄-ê/ 'are you cold?'

/s-xulxul-ê/ 'is it heavy?'

/p-ali-č<sup>h</sup>o-waš-ê/ 'were you pleased?'

/ʔini-p-aqni-č<sup>h</sup>o-ê/ ʔinipaqnič<sup>h</sup>ohê 'didn't you like it?'

This form occurs with nouns and particles as well,

/sukiku heki, x̄ip-ê/ 'what [is] that? [is it] a rock?'

/sukú hi poň-ê/ suk' ipoňê 'what kind of wood [is it]?'  
 /kîpi'-ê/ 'now?'

/ʔinu-ê/ ʔinuhê '[is it] true?'

and it frequently follows the first member of a pair of verbs or nouns conjoined with nakú 'or.'

/sukúku ha-l-qotín, ʔeneq-ê nakú ʔiháy-ʔ/ sukúku haqotín  
 ʔeneqê nakú ʔiháy 'what was born, girl or boy?'

/no-s-kuti s-ipšel-ê nakú s-taqaš/ noskuti šipsělê nakú  
 štaqaš 'he will see [if] it is ripe or [if] it is  
 still green (lit. raw)'

### 633 Suffix Position Classes

Inflectional verbal suffixes fall into six well-defined position classes; the members of each are mutually exclusive. Moving away from the verb stem, they are:

- 1) locativizer: -pi
- 2) object markers: -it 'me,' -in 'you (sg.),' -us '3rd sg.,'  
 -iyuw 'us, you (non-sg.),' (-us)-wun 'them,' -šaši ~  
 -šiy 'reflexive,' -nVš 'reciprocal, plural object,'  
 -š 'multiple object; sustained action; intransitive'
- 3) past marker: -waš
- 4) directional: -li
- 5) repetitive: -iy ~ -ini ~ -es
- 6) mode of statement: -ʔ 'imperative,' -ʔay 'repetitive  
 imperative,' -ê 'yes-or-no question'

If derivational suffixes were to be included here with the inflectional suffixes, then -Vn and -Vč would comprise the class closest to the stem, since they precede any of the



inflectional suffixes.

/s-tix-Vn-pi/ štixinpi 'he faces [toward] it'

/no-k-hilaq'-Vn-us ha-k-ʔiw/ nok<sup>h</sup>ilaqinus ak<sup>h</sup>w 'I will  
put a handle on my knife'

/s-ʔatišwin-Vč-waš ha-ʔanaxiʔ/ šatišwiničwaš aʔanaxiʔ  
'the old man had a charmstone, magic power'

The members of each class of suffixes are mutually exclusive, with the single exception of /-us-wun/ 'them,' the marker of a plural object with verbs which take the third person singular object marker -us. There are some restrictions between members of various classes. The locativizer -pi does not occur with the directional -li, nor with the object markers -us and -š. The imperative markers -ʔ and -ʔay do not occur with the past marker -waš, nor with the repetitive suffixes -iy ~ -ini ~ -es.

The relative ordering of the first four position classes is well established on the basis of numerous examples, a few of which include:

1 + 2 /s-xal-kum-pi-it/ sxalkumpiyit 'it flew into me'

1 + 3 /k-šlikin-pi-waš/ 'I sat down on it'

2 + 3 /s-ikš-it-waš/ šikšitwaš 'he gave it to me'

2 + 4 /s-iwa-kh<sup>h</sup>il-it-li/ 'he goes to get it for me'

3 + 4 /s-kum-waš-li/ škumuwašli 'he arrived (there)'

The relative ordering between the object markers and the past marker, all common suffixes, and the last classes are also well established.

1 + 5 /s-tal-wil-pi-iy/ štaliwilpiy 'he ties more on'

1 + 6 /kuyam-pi-ʔ/ kuyampił 'sit down on it!'

2 + 5 /s-kuti-iyuw-iy/ skutiyiyuwiy 'he sees us again'

2 + 6 /ikš-it-ʔ/ ʔikšit 'give it to me!'

3 + 5 /s-su-nip-waš-iy/ šh̄n̄ipwašiy 'he moved it again'

3 + 6 /p-toxom-waš-ê/ ptoxomowašê 'were you cold?'

The relative ordering of the last three classes is more tentative. There are only a few examples of 4 and 6.

/iwa-kh̄l-it-li-ʔ/ ʔiwakh̄litli 'go get it for me!'

/i-kh̄l-li-ʔay/ ʔikh̄lilay 'go get more!'

There are no examples of 4 and 5, -li plus a repetitive marker, nor of 5 and 6, although intuition suggests that a form such as

\*/s-ikh̄l-iy-ê/ 'has he brought more?'

would surely have been acceptable.

#### 640 Introduction to Verbal Prefixes

Verbal prefixes fall into three main classes of inner, outer, and personal prefixes. Inner prefixes fall between the person-number marking prefixes and the verb stem; outer prefixes precede the person-number markers. This division of prefixes into 'inner' and 'outer' classes is purely morphological; it is not to be confused with the phonological notion of 'close' and 'remote' morpheme boundaries (q.v., 282) and the prefixes characterized by such boundaries. The boundary between close and remote prefixes falls somewhere after person-number markers. Thus, a prefix which is classified as remote on phonological grounds is often an inner prefix on morphological grounds, occurring between the verb stem and person-number marking prefixes. All

close prefixes are inner prefixes.

Outer prefixes tend to have syntactic functions, relating the verb to the larger discourse in which it occurs. Inner prefixes have more grammatical functions, marking temporal, local, instrumental, classificatory, and related notions. The outer prefixes occur freely with any verb, with a constant meaning. Inner prefixes, of which there are well over a hundred, range from the freely productive to the rare and unanalyzable. Even with the most productive of these, there is a great deal of idiomatcity in which the compound meaning of a prefix and verb stem has little or no apparent relation to the independent meanings of the separate morphemes.

Many of the prefixes, both inner and outer, are sparsely attested in the corpus. With outer prefixes, this leads to uncertainty as to whether a given form is a prefix or an independent particle. With inner prefixes, it gives rise to doubt as to whether a supposed prefix may be composed of smaller sequences (e.g. is *niwal-* perhaps /*ni-wal-*/ or even /*ni-iwal-*/?) or based on chance resemblances and faulty segmentation. With both inner and outer prefixes, despite numerous examples of multiple prefixes, it is impossible to set up precise prefix position classes. This is partly because many prefixes are not attested in combination with others, and partly because presumably mutually exclusive prefixes do not always occupy the same position classes.

## 650 Personal Prefixes

The set of person-number markers of the verb's subject is identical to the possessive markers which occur with the noun (q.v., 412 and 571). Third person subject markers for nominalized and relativized verbs are also given in the chart below, since these involve a deviation from the more regular non-relative pattern.

	singular	dual	plural	indefinite
first	k-	k-iš-	k-iy-	
second	p-	p-iš-	p-iy-	
third	s-	s-iš-	s-iy-	s-am-
third relative	ma-l-	ma-iš-al-	ma-iy-al-	ma-l-am-

The indefinite subject marker am- is glossed either with an indefinite 'they' or with a passive.

/s-am-sinay/ 'they store it; it is stored'

/s-am-ʔip-us a-tok/ samipus atok 'they call it tok (red milkweed); it is called tok'

An overt nominal subject is rare with a verb which has the indefinite subject marker am-; when a subject noun does occur it is plural.

/s-am-nan ha-ʔihiy-ʔ-ʔ + R/ samnan aʔihiyhijy 'the men go'

The third person marker s- is absent in nominal or relative forms introduced by ma-/ha- (q.v., 521 and 662.1). It is replaced by l- in the singular and indefinite numbers, while the dual and plural have no overt third person marker at all, but obligatorily take the subordinating prefix al- (q.v. 671.2).

/ma-l-axunušpi/ 'one who is afraid'

/s-sus-kuti-it ha-l-tiyik/ s<sup>h</sup>uskutiyit atiyik 'he shows  
me what is inside'

/kay-wuñ ka ha-iy-al-expen-š/ kayuwuñ kayalexpeč 'they  
are singing: they [it is] who sing'

But the third person marker s- may occur with ma-/ha- when some other outer prefix intervenes between ma-/ha- and the person marker.

/ma-ʔini-s-š<sup>h</sup>o/ maʔnišš<sup>h</sup>o 'that which is not good'

The second person marker p- is absent in imperative forms with final glottalization (cf. 790 on the imperative),

/nowon-ʔ/ nowoñ 'stand up!'

/yiti-ʔ/ yitiñ 'come!'

in which the dual and plural markers iš- and iy- occur word-initially.

/iš-tap-ʔ/ ʔištaḅ 'come in (dual)!'

/iy-ɪlikin-ʔ/ ʔiyɪlikin 'sit down (plural)!'

## 660 Outer Prefixes

Outer prefixes precede person-number markers in the string of verbal prefixes, in the furthest position classes from the verb stem. It is difficult to draw a sharp line between the more remote outer prefixes and the independent particles which precede the fully inflected verb, particularly because Harrington wrote much of the verb phrase as a single unit. In several cases, a form which had been tentatively analyzed as an outer prefix was seen conclusively to be a particle when some sentence occurred in which a

non-verbal element appeared between the particle and verb. Thus, for example, *ʔiyapa* 'even if' could be a prefix in

*/ʔiyapa s-ti-yep-it/ ʔiyapaštiyepit* 'even if he tells me'  
but it is obviously a particle in

*/ʔiyapa ha-poš no-k-yik-us/ ʔiyap apoš nokyikus* 'even if  
I am going to give him pinon nuts'

It may well be that the limit of the inflected verb is elastic. For example, *moqe* 'already' and *tini* 'still' usually behave as particles, but they are preceded by verbal prefixes in constructions such as:

*/wa-moqe-s-tuhuy/ wamoqeštuhuy* 'while it is still raining'

*/ma-tini-s-ʔoʔ-Vč ha-shol/ maʔinišoč ashol* 'fresh bark:  
that which is still fresh (lit. wet) / bark'

The outer prefixes fall into the classes of purely grammatical markers, relativizing prefixes, and what might be loosely called sentential prefixes. It is the members of this last class, the sentential prefixes, which are prone to confusion with particles. As much as can be surmised about the relative ordering of the outer prefixes is sketched in a final section.

#### 661 Grammatical Prefixes

The inventory of grammatical prefixes includes the negative marker *ʔini-* and four tense markers: two future prefixes and two prefixes which seem to have the force of past intention. For comparison, note that the past marker *-waš* is a suffix.

## 661.1 ?ini- 'negative'

The negative marker is ?ini-;

/?ini-k-čam̩n/ 'I don't know'

/?ini-s-hik-it ha-yasis/ ?inis<sup>h</sup>ikit ayasis 'poison oak  
does not affect me'

it undergoes an irregular contraction to [-?ni-] when preceded by other outer prefixes or certain particles.

/no-?ini-s-nañ/ no<sup>ñ</sup>nišnañ 'he will not go'

/moqe<sup>h</sup> ?ini-s-yul-wil/ moqe<sup>h</sup>nisyuwil 'it is no longer  
hot: already / it is not hot'

/ha<sup>h</sup> ?ini-s-wax ha-<sup>h</sup>o<sup>h</sup>/ ha<sup>h</sup>niswax a<sup>h</sup>o<sup>h</sup> 'so that water  
doesn't leak out'

The combination of ?ini- with wil 'to exist' undergoes an irregular contraction from /?ini-s-wil/ to [?insil] ~ [?inisil]: 'no, nothing; there is not.'

/?ini-s-wil ha-k-al-kuti/ ?insil akakuti 'I am not looking  
at anything: does not exist / what I look at'

/p-toxo<sup>h</sup>m-e - ?ini-s-wil/ ptoxo<sup>h</sup>m-e - ?insil 'are you cold?'  
'no!'

A few verbs occur only with the negative ?ini-,

/?ini-s-qutmay/ 'he is shrewd, cunning, bold'

/?ini-k-su-axšič/ ?iniksaxšič 'I am cursed' (axšič 'to  
be afraid')

and there are three negative forms all glossed as 'it is too much, excessive.'

/?ini-s-axta-kumel-us/

/?ini-s-axu-kumu<sup>h</sup>/ (cf. -kumu<sup>h</sup> 'to measure')

/?ini-s-tiku-memen/ ?iništikumemen

In a construction in which ?ini- behaves more like a particle than a verbal particle (cf. 721 on ?ini as a bound particle), it may precede non-verbal forms.

- /?ini pi? ka p-hik/ ?inipi? kap<sup>h</sup>ik 'it is not yours:  
not / you / you own it'  
/?ini kič hi k-iy-ki?/ ?inikič ikiki? '[he is] not  
like us'

### 661.2 no- 'future'

Of the two future markers no- and ku- (q.v., 661.3), no- is by far the most common.

- /no-k-nan'/ 'I will go'  
/no-?ini-k-kimiy/ no?nik<sup>h</sup>imiy 'I will not do it again'  
/suku ha-no-p-eqwel/ 'what will you make?'

With the first person non-singular, no- may have a hortative force.

- /no-k-iš-alpat/ 'let's (dual) run!'  
/no-k-iy-tepu?/ nokitepu? 'let's gamble!'

### 661.3 ku- 'future'

The future markers no- and ku- do not seem to show any semantic or distributional differences, beyond the fact that only ku- occurs after ?ašnim 'when.'

- /?ašnim ku-k-tamay/ 'when would I forget it?'

But ku- is relatively rare.

- /wa-s-hi<sup>h</sup>kin ku-k-su-ipšel/ was<sup>h</sup>ik<sup>h</sup>in kukšipšel 'tomorrow  
(lit. when it is morning) I will cook it'  
/?ini-k-čamin taka? ku-k-nan'/ 'I don't know where I  
will go'



/ku-s-tixwan-in/ kuštixwanin 'it will scratch you'

Both no- and ku- can be seen in the same sentence in

/pi<sup>?</sup>-kš ku-p-<sup>?</sup>ip, <sup>?</sup>apšt<sup>?</sup> ha no-k-eqwel/ pikš kup<sup>?</sup>ip,

<sup>?</sup>apšt<sup>?</sup> anokeqwel 'you will say, how many shall I  
make?: you / you will say / how many / I will make'

#### 661.4 <sup>?</sup>ana- '(past) intention'

The prefix <sup>?</sup>ana- is always translated 'was/were going to' in its few occurrences; it seems to denote an action intended but not completed. It is glossed as if equivalent to <sup>?</sup>inina- (q.v., 661.5). Since <sup>?</sup>ana- may cooccur with the past marker -waš, it may not be inherently past in force.

/<sup>?</sup>tini <sup>?</sup>ana-p-kuy/ 'you were still going to get it (but  
did not): still / you were going to get it'

/<sup>?</sup>ana-k-uxma-yep-š-waš hi<sup>?</sup> moqe s-tapin/ <sup>?</sup>anakuxmeyepšwaš  
hi<sup>?</sup> moqe štapin 'I was going to do some washing,  
but it's late already: but / already / it is late'

/<sup>?</sup>ana-<sup>?</sup>ini-k-nañ-waš hi<sup>?</sup> k-uxni-ni-<sup>?</sup>koyi/ <sup>?</sup>ana<sup>?</sup>niknañawaš  
hi<sup>?</sup> kuxnini<sup>?</sup>koyi 'I was not going to go, but I changed  
my mind'

#### 661.5 <sup>?</sup>inina- '(past) intention'

The form <sup>?</sup>inina- is attested only a couple of times (on the same page with examples of <sup>?</sup>ana-), glossed as if it were equivalent to <sup>?</sup>ana-.

/<sup>?</sup>inina-p-kuy/ 'you were going to take it'

This form looks as if it might contain a contracted form of <sup>?</sup>ana- with <sup>?</sup>ini, devoid of negative force. An example of <sup>?</sup>inina- cooccurring with the negative <sup>?</sup>ini- is:

/ʔinina-ʔini-p-kuy-waš/ ʔininaʔnipkuyuwaš 'you were not  
going to take it'

## 662 Relativizing Prefixes

There is a small class of relativizing prefixes, which bear no morphological relation to the semantically corresponding relative-interrogative pronouns (q.v., 420). Of these, the nominalizing-relativizing prefix ma-/ha- is by far the most common.

### 662.1 ma-/ha- 'nominalizer, relativizer: who, what'

The nominal marker ma-/ha- is an article with nouns (q.v., 540) and a marker of relativized or nominalized verb forms (q.v., 521 and 870), which abound in Ineseño. The form ma- occurs in phrase-initial position, while ha- usually occurs elsewhere (cf. 521.3 for more detail).

With first and second person subjects, the subordinating prefix al- (q.v., 671.2) is optional with ma-/ha-.

/ma-k-eqwel no-k-sinay/ 'I will put it on what I am  
making: what I make / I will put it on'

/ma-k-al-ʔuw-waš/ makaʔuwuwaš 'what I ate'

With third person subjects, there is a special set of person-number markers (as discussed under ma-/ha- as a nominalizing prefix in 521, and in 650 on person-number markers in the verb).

singular	/ma-l-/
dual	/ma-iš-al-/ mašal-
plural	/ma-iy-al-/ mayal-
indefinite	/ma-l-am-/

## Examples:

/ma-l-yul-č<sup>1</sup>i ha-ʔoʔ/ mayič<sup>1</sup> aʔoʔ 'hot water: that which  
is hot / water'

/s-am-su-to<sup>1</sup>w ha-l-axunušpi/ 'they ritually smoke one  
who is afraid'

/suku ha-iš-al-qunun-pi/ suk<sup>1</sup> aša<sup>1</sup>qunumpi 'what are they  
(dual) doing? what [is] what they two do?'

/ma-l-am-hikw<sup>1</sup>n/ '[a load] that they put down'

However, ma-/ha- may occur with the usual non-relative  
third person subject marker s- when other outer prefixes  
intervene between ma-/ha- and s-.

/ma-ʔini-s-č<sup>h</sup>o/ maʔniš<sup>h</sup>o 'that which is not good'

/ma-no-s-<sup>1</sup>eqwel/ 'that which he is going to do, make'

or when ma- precedes mo<sup>1</sup>qe 'already' or t<sup>1</sup>ini 'still,' usually  
independent particles.

/ma-mo<sup>1</sup>qe-s-iqip-š/ mamo<sup>1</sup>qešiqipš 'that which is already  
covered up'

Verbs relativized or nominalized with ma-/ha- may be  
inflected just as other verbs are, for such categories as  
object and tense.

/ma-no-s-<sup>1</sup>eqwel/ 'that which he is going to do, make'

/ma-l-maniš-waš/ mamanišwaš. 'one that was lost'

/ma-l-uti-kuyupi-it/ malutikuyupiyit 'what comes to me  
(as inheritance)'

With the locativizing suffix -pi (q.v., 632.1), ma-/ha-  
produces locative relative forms.

/ʔini-s-č<sup>1</sup>am<sup>1</sup>n ha-iy-al-na<sup>1</sup>n-pi/ ʔiniš<sup>1</sup>čam<sup>1</sup>n ayananpi

'he does not know where they are going'

/ma-l-am-hikwɪn-pi/ 'where they put their loads down'

/ma-l-wahač-pi ha-šač-ʔ + R/ mawahačpi ašačšač 'where  
there are many turtles'

With certain verbs, ma-/ha- produces forms used in an adverbial sense, including

/ma-l-is-tik-Vn/ malištik<sup>h</sup>ɪn 'first, at first' (/is-tik-Vn/ ištik<sup>h</sup>ɪn 'to precede, go first')

/ma-l-ulu-aq-pey/ maluleqpey 'at last, finally' (/ulu-aq-pey/ uleqpey 'to follow, come after')

/ma-l-ʔinu-Vč/ małinuč 'really, truly' (/ʔinu-Vč/ ʔinuč 'to be true')

A contextual example of one of these adverbial forms:

/ka s-niwilen ha-l-is-tik-Vn/ kašniwilen alištik<sup>h</sup>ɪn  
'he was unwilling at first'

Nominalizations with the non-initial ha- form are often elided with the predicative particle ka- (q.v., 723),

/ka ha-l-aqwɪy-š heki/ kalaqwɪš eki 'that is worthless:  
one that is worthless / that'

/syuxtun ka ha-k-al-aq-šuč/ syuxtun kakalaqšuč 'I am  
heading for syuxtun: syuxtun [is] what I head for'  
and occasionally even with pa 'just, merely' and na 'and.'

/pa ha-l-wil/ pawil 'just what there is'

/na ha-l-ʔikɪmin/ ałikɪmin 'and one that is new'

Common to both the uses of ma-/ha- as an article with nouns and a nominalizer or relativizer with verbs, ma- when non-initial in the phrase is usually reduced to ha-. The reduced form ha- probably gives rise to the connective particle ha (q.v., 710) which introduces many non-nominal

and non-relativized elements non-initial in the phrase. In addition, the third person subject marker l- with ma-/ha- is nearly always deleted before a following consonant. The result is a good deal of potential confusion, not only as to which constructions are relative and which merely involve the connective particle ha, but even as to what is a noun and what a verb.

### 662.2 ti- 'what'

The prefix ti- is far less common than ma-/ha-, is strictly non-human in reference (while ma-/ha- may refer to a human agent), and seems to be used with only a few verbs, especially 'ip 'to say' and net 'to do.' The corresponding relative-interrogative pronouns are suku and sukiku, as in /suku ha-p-al-hik/ suk' apalik 'what are you doing?'

/s-esqen-it ti-k-'ip/ sesqenit tikip 'he asks me what I said'

/'ini-s-wil ha ti-k-net-us/ 'insil atiknetus 'I didn't do anything to him: does not exist / what I do to him'

/'ini-k-čamīn ti-s-neč/ 'inikčamīn tišneč 'I don't know what it is like'

/'kani pa ti-s-am-net-it/ kanipatisamnetit 'they do whatever [they want] to me'

Unlike the other prefixes in this series, ti- may be used interrogatively.

/ti-s-'ip ha-p-ti/ tisip apti 'what is your name: what does one say [for] your name?'

/ti-s-'uwen ha s-iy-hik-Vn/ tisūwen asihiken 'what do

they use it for?'

In a few expressions, ti- is used idiomatically; here it has no relativizing force.

/ti-s-neč/ tišneč 'why: what does it do? what is it like?'

/noʔ-kš ti-k-neč-waš/ nokš tiknečwaš 'it was my fault:

I did it myself'

/ti-...-net-muʔ/ 'relative, kinsman' plus possessive:

/ma-ti-k-net-muʔ/ 'my relative, kinsman'

662.3 wa- 'if; as, when, while'

The prefix wa- is translated both as 'if' and as 'when,' 'as,' or 'while.' There is also a particle haku 'if,' and other forms expressing the notion 'when:' relatively with hini- (q.v., 662.4) and na-... hi... (q.v., 662.5) and a particle moq, and interrogatively with ʔašnim. In the sense of 'when,' wa- is strictly relative; somewhat more commonly it is used in the sense of 'if,' although in some conditional sentences it could mean both 'if' and 'when.'

/ku-wa-k-kuti kim k-su-ʔinu/ kuwak<sup>h</sup>uti kim ksuʔinu 'if/

when I see it I will believe: if/when I will see it /

I believe'

The relative clause with wa- usually occurs initially.

/wa-s-wil hi s-aqway/ 'when he shoots, he hits it'

/wa-ʔini-s-wil ha ti-s-neč, hi s-woʔoʔ/ waʔinsil atišneč

hi swoʔoʔ 'if nothing happens, he was lying: if does

not exist / what it does / he is lying'

/no-s-am-kuti wa-s-am-aqta-qen/ nosamkuti wasameqteqen

'they will see as they pass by'

A few expressions of time (q.v., 731) contain wa-.

/wa-s-hik'in/ was<sup>h</sup>ik'in 'tomorrow: when it is morning'

/wa-s-ulkuw/ 'tonight: when it is night'

662.4 hini- 'when, as'

The prefix hini- means only 'when' or 'as,' strictly in a relative sense. The relative clause with hini-, as opposed to that with wa-, usually follows the main verb.

/k-kuti hini-s-tap/ k<sup>h</sup>ut iništap 'I see him as he enters'

/k-šumawiš-waš hini-k-ʔikimin/ kšumawišwaš inikikimin

'I was healthy when I was young'

/hini-s-axta-k<sup>h</sup>it hi s-su-uti-pšeʔ ha-poñ/ hini saxtak<sup>h</sup>it

iš<sup>h</sup>utipšeʔ apon 'when the wind blew it knocked down a tree'

662.5 na-... hi.. 'when'

This idiomatic construction belongs with wa- and hini-, although it has no morphological relation to them. Harrington believed that na- here is a reduced form of ʔana- 'past intention.' While this analysis is not completely satisfactory, it is more plausible than to identify na- with the particle na 'and.' The second element hi, which introduces the main clause, is a connective particle (q.v., 710).

/na-s-išmax, hi s-aqta-nowon ha-s-ʔača/ našišmax, isoqto-

nowon ašača 'when he hit it, his axe bounced off:

when he hits / bounces up / his axe (Span. hacha)'

/na-k-su-ni-apay ha-k-su-kuy-ʔ, hi k-ixut/ naksunapay

aksukuy, ikixut 'when I picked up my pot, I got burned'

## 663 Sentential Prefixes

There is a class of outer prefixes whose function is more or less to relate the verb to its context, linguistic or otherwise. Some of the items listed here may be independent particles, but it is difficult to make any sharp distinction between particles and outer prefixes. This problem is partially due to the rare occurrence of some of these forms, and to the fact that Harrington wrote much of the verb phrase as a single unit.

In deciding between prefix versus particle status, the rule of thumb is that an item is probably a prefix if it precedes only verbs; it is very likely to be a particle if other particles or non-verbal elements may intervene between it and the verb. But there are notable inconsistencies in this solution; what is clearly a particle intervenes between the verb and prefix in

/ma-tini-s-ʔoʔ-Vč/ maʔtinišoč 'that which is still wet'

and on the other hand, some prefixes may precede non-verbal forms. Such prefixes are demonstrably prefixes, since they may be preceded by other verbal prefixes, as with the negative marker ʔini- in

/no-ʔini-s-naʔ/ noʔnišnaʔ 'he will not go'

but they occur in other environments as well, where they are analyzed as particles.

/ʔini kič heki/ ʔinikič eki '[it is] not like that'

/ʔini tip na ʔoʔ/ ʔinitip naʔoʔ 'neither salt nor water'

The possible occurrence of prefixes with non-verbal forms is noted in the discussion of individual prefixes below.



## 663.1 čī- 'hortative, surprize'

This prefix is used either in a hortative sense,

/čī-k-iy-nañ/ čikinañ 'we should go!'

or to express surprize at a fact.

/ha, čī-p-ʔip-ê ha s-ax-kš-it ha-suku/ ha, čīpīpê hašaxkšit  
asuku 'what, you think he's given me something?'

/čī-ʔini-p-poš<sup>h</sup>on-Vn-ê/ čīʔnip<sup>h</sup>oš<sup>h</sup>oninê 'aren't you  
aware of it?'

/taka čī-ha-l-nañ/ taka čanañ 'where would she have gone?'

One case of čī- before a non-verbal form is

/haʔa, ha čī-ʔinu/ 'ah, it is true!'

## 663.2 ʔinipa-...-waš-ê 'if only'

This is a rather complex discontinuous construction, with the past marker -waš and the question marker -ê; it is apparently equivalent to kapa-...-ê (q.v., 663.4). This prefix looks as if it might contain the negative marker ʔini- plus pa 'just, merely,' although such an analysis is weak on semantic grounds.

/ʔinipa-k-tak-kuy-waš-ê ma-k-smīlīʔ/ ʔinipaktak<sup>h</sup>uyawašê  
makismīlīʔ 'if only I had brought my apron, dress!'

/ʔinipa-k-nañ-waš-ê/ ʔinipaknañawašê 'if only I had gone!'

/ʔinipa-s-akti-nu-naʔ-waš-ê/ ʔinipašaktinunawašê 'if only  
he had brought it!'

Neither ʔinipa-...-waš-ê nor kapa-...-ê is attested in conjunction with another sentence, in any construction such as 'if only..., then...'

## 663.3 ʔitwa- 'before'

This prefix is rarely attested; it may have some relation to wa- 'if, when' (q.v., 662.3). The clause introduced by ʔitwa- follows the main verb.

/wati-su-eqen-uw ʔitwa-s-nan/ watiseqenuw ʔitwašnan

'grab it from him before he goes!'

/no-k-iš-tiwal-nanan ʔitwa-s-taya-wax/ nokištiwananan

ʔitwaštayawax 'we two will take a journey before the rains set in'

## 663.4 kapa-...-ê 'if only'

The discontinuous sequence kapa-...-ê is glossed as equivalent to ʔinipa-...-waš-ê. A possible analysis of kapa- is that it contains pa 'just, merely' plus an unusual demonstrative form ka (q.v., 432).

/kapa-ka-k-hik-ê/ kapakahikê 'if only I had used it!'

/kapa-s-kum-li-ê hi xuxaw/ kapaskumilê hixuxaw 'if only Coyote would come!'

/kapa-k-ʔuw-ê/ kapakuwê 'I would like to eat it; if only I could eat it!'

## 663.5 ku- 'watch out lest...'

The form ku- occurs with the second person as either subject or object, often glossed with 'may' or 'might.' The full force of ku- may be captured by a translation such as 'watch out lest...'

/yu, ku-p-kil-elew/ 'hey, you may fall; watch out that you don't fall!'

/ku-s-tixwan-in ha-ʔanaqpuw/ kuštixwanin aʔanaqpuw 'watch

out, the wildcat might scratch you, claw you!'

An example in which *ku-* does not occur with the second person, and in which it does not carry its usual force, shows it preceding the pronoun *ʔapštɪʔ* 'how much, how many.'

/ku-ʔapštɪʔ ha-qsi ha s-tišal-nanan/ kuʔapštɪʔ aqsi ašti-  
šananan ' [who knows] how many days he worked at it?'

### 663.6 pamani- 'just barely'

The form *pamani-* occurs only a few times; a possible analysis is to identify the first syllable with *pa* 'just, merely,' and the final syllable might represent the reduced form [-ʔni-] of the negative marker *ʔini-*, in the sense of 'almost not.'

/pamani-k-kitwon/ pamanik<sup>h</sup>itwon 'I just barely got out'

/pamani-s-ni-apay/ pamanišnapay 'he just barely got up'

### 663.7 šiša- 'half, partially'

The status of *šiša-* as a prefix rather than a particle is uncertain; it is only rarely attested, and never with another outer prefix.

/šiša-s-kilamu/ šišaškilamu 'he is half-crazy' (note  
the reverse sibilant harmony, for \*[sisaskilamu])

/šiša-k-iy-icis-Vč/ šišakiyičičišič 'we are half-brothers'

Examples in which *šiša-* precedes nominal forms:

/šiša-nunašiš hi kay/ 'it (the rattlesnake) is half-devil'

/ma-s-aqliw hi šiša-ʔalap-ka-swaʔ/ 'his language [is]  
half Barbareño'

## 664 Relative Ordering of Outer Prefixes

The outer prefixes often cooccur: combinations of two are quite common, although three together are rather rare. On semantic grounds, some of these prefixes fall into what might be considered mutually exclusive classes, but it is not possible to group them morphologically into precise position classes. First, very few of the possible combinations are attested; most of these have the negative marker *ʔini-* as one member, which is the second to last prefix in the series, so that little is revealed about relative ordering. Second, mutually exclusive members of a class evidently do not necessarily occupy the same position classes. For example, the temporal prefixes *no-*, *ku-*, *ʔana-* and *ʔinina-* are mutually exclusive, as are the relative prefixes *ma-/ha-*, *ti-*, *wa-*, and *hini-*. But while relative prefix precedes temporal in

*/wa-no-s-tuhuy/ wanoštuhuy* 'while it will be raining'  
temporal precedes relative in

*/ku-wa-s-aqša-Vn/ kuwašaqšan* 'if he is going to die'  
Similarly, two different orderings of relative and negative obtain in

*/ma-ʔini-s-čho/ maʔniščho* 'that which is not good'  
*/ʔini-ti-s-am-ʔuwen/ ʔinitisamuwen* 'they don't use it  
for anything'

However, a few partially overlapping schemata can represent what is known of relative ordering among the outer prefixes, although a few of the transitive relations implied in the major schema below are not actually attested

(e.g. /ku-ʔini-/ or /či-no-/). The major schema is:

či-	ma-/ha-	no-	ʔini-	ti-
ku-	wa-			

of which no more than three prefixes cooccur, and of which a few are mutually exclusive (i.e. the relative prefixes ma-/ha-, wa-, and ti-, and the future prefixes ku- and no-). Minor schemata, whose exact relationship to the major one above cannot be determined, all show ʔini- following other outer prefixes:

ʔana-	
ʔinina-	
,ku-	ʔini-
,kapa-	

One unusual point of ordering is that the form ka, usually analyzed as a predicative particle (q.v., 723) preceding outer prefixes in the common combination /ka no-ʔini-/ kanoʔni-, follows ʔini- when the two occur alone: /ʔini-ka-/.

## 670 Inner Prefixes

The system of inner prefixes, which occur between the verb stem and person-number markers, is at once the delight and the bane of the analyst; it is the last pocket of resistance to segmentation and analysis. The primary problem involved with the inner prefixes is to find a common core of meaning in the compounds of a given prefix with various verb stems. Other problems include uneven productivity, the varying semantic force of some prefixes, the variant phonological shapes of many prefixes, and the difficulty of

setting up prefix position classes.

### 670.1 Prefix Classes

The concepts expressed by inner prefixes are quite varied. They range from purely grammatical categories through temporal, local, instrumental and other classificatory notions, and even include a number of concepts which are verbs in Indo-European languages, such as *qal-* 'of, by tying,' *tal-* 'of, by grasping,' or *uqšti-* 'of, by throwing.' On the other hand, verb stems express many concepts which we are predisposed to regard as likely to be expressed by prepositions or affixes, such as *kitwon* 'out: to emerge,' *-apay* 'up: to be up, above,' *-smon* 'together: to gather,' or *-sıq* 'firmly, tightly: to do firmly, tightly.' These combine in compounds such as

*/qal-smon/ qosmon* 'to tie together: to gather by tying'

*/tal-sıq/ tasıq* 'to hold firmly: to do firmly by holding'

*/su-uqšti-kitwon/ šuqštikitwon* 'to throw out: to cause to go out by throwing'

Some verbal prefixes, in combination with non-verbal stems (cf. 618), themselves contain the verbal force of such compounds, which have nouns or pronouns as stems, as in

*/wi-s-noxš/ wišnoxš* 'to hit on the nose' (-noxš)'

*/axi-pakas/* 'to do once' (*pakas* 'one')

*/yuq-muču?/* 'to be thin, slender' (*muču?* 'a small one')

The tentative classes of inner prefixes include 1) grammatical prefixes, 2) temporal prefixes, 3) prefixes of spatial orientation, 4) instrumental-medium prefixes,

5) action classifier prefixes, 6) verbal force prefixes, and 7) unanalyzable prefixes.

#### 670.2 Analysis

Inner prefixes vary widely in their susceptibility to analysis. Many of the prefixes are transparent. These tend to be those expressing purely grammatical notions such as 'causative' or 'desiderative,' and those with very concrete meanings such as 'quickly,' 'in the air,' 'with heat,' or 'of, by sewing.' Many of the other prefixes show a well-defined common core of meaning, but are semantically opaque in some compounds. Sometimes there are only one or two clear examples of a prefix used in a particular sense, with further examples fairly dubious. Such a case is /ax-kitwon/ 'to come out fast,' where other examples of aq-/ax- in the sense of 'fast, quickly' are all somewhat tentative. Often prefixes are found with uniquely occurring bound stems (q.v., 616); these are fused units, but the prefix generally retains its force, as in /aqni-suwewen/ 'to think (of),' where aqni- refers to mental activity.

A good number of prefixes have a common core of meaning that can be grasped intuitively after a time, but which is quite difficult to express. An example is iku-, attested in only three compounds:

/iku-mes/ 'to dam up (a stream), make a reservoir' (mes  
'to cross over')

/iku-čho/ 'to press, compress' (čho 'to be good, even')

/iku-apay-nVš/ iku<sup>1</sup>apaniš 'to be on top of; to stampede'

(-apay 'to be above, over' plus -nVš 'reciprocal')

The notion expressed by *iku-* seems to be perhaps pressure or restraint. Another point illustrated by the three occurrences of this prefix is its phonological indeterminacy: it could be *iku-* with *l*-epenthesis before a following vowel by rule 286.09, or it could be *ikul-* with *l*-deletion before dentals and sonorants by rule 286.22. In the absence of further examples, the underlying form will be assumed to be the simpler *iku-*.

The same prefix may express more than one notion. It is often the case that in most compounds a given prefix has one meaning, while a few other compounds agree among themselves on another meaning, which may or may not be an extension of the primary meaning. Thus with *yul-* 'of heat, with heat,' sometimes 'of anger,' the secondary sense 'of anger' is an extension of the primary sense. But with *maq-* 'of, with a line or rope,' sometimes 'of dragging,' and still other times 'quickly, vigorously,' the first two senses seem related, but not the third. Other cases may be examples of homonymy, where the occurrences of the prefix are more equally divided among unrelated notions, such as *qili-* 'habitually,' 'of, in water,' and 'of seeing, vision.'

### 670.3 Segmentation

The segmentation of prefixes is often problematic, particularly where the prefix is not well understood, or where the prefix is used in some idiomatic sense. This indeterminacy is increased by the alternant shapes of many



prefixes (e.g. pil- ~ pili-, uq- ~ ux-, qili- ~ qulu-), and by such phonological processes as deletion, epenthesis, and vowel harmony, all illustrated in

/s-uqwa-uti-aq-pey-us/ suqwa<sup>1</sup>uteqpeyus 'he forms an image, figure of it (e.g. in cat's cradle)'

There are many cases of compounds where the only likely segmentation is dubious at best.

[šunuškuy] 'to break a promise' : /su-uni-uš-kuy/?

[nusaqutun] 'to keep changing the mind' :

/nu-su-aqul-tun/?

[suqinunapi] 'to catch a disease' : /su-qil-nu-na<sup>2</sup>-pi/?

In other cases, alternative segmentations are possible, neither much more convincing than the other.

[sutiwanan<sup>1</sup>] 'to go by horseback' :

/su-tiwal-nan<sup>1</sup>/ or /su-uti-wal-nan<sup>1</sup>/?

[sutiwi<sup>1</sup>y] 'to sing a charm, spell' :

/su-ti-wi<sup>1</sup>y/ or /su-uti-wi<sup>1</sup>y/?

[axšuniwilpi] 'to dream of' :

/aqš<sup>1</sup>u-ni-wil-pi/ or /aqš<sup>1</sup>u-uni-wil-pi/?

Sometimes entire prefixes are subject to this indeterminacy, rather than individual compounds. Thus, is niwal- a distinct prefix, or a compound of /ni-wal-/ or /ni-iwal/? The same question applies to saq- (perhaps /su-aq-/), to uqwati- (perhaps /uqwa-ti-/), and to others.

#### 670.4 Productivity

The inner prefixes vary widely in productivity. The only really productive prefixes, which are likely to

appear with any verb, are those which express grammatical notions such as *su-* 'causative' or *al-* 'subordinate.' These occur hundreds of times in the corpus. Other prefixes tend to be considerably less freely productive; for most prefixes twenty or so compounds with different stems is highly productive, while most occur with only five to fifteen stems. Other than by the criteria of semantic transparency and the number of examples, the limits of productivity are unknown. Harrington often suggested new compounds, some of which the informant agreed to readily, some of which were rejected. But sparsely attested forms are not necessarily non-productive. One prefix *tiši-* 'of, with difficulty' was attested in the corpus at large in only five rather idiomatic examples, where its meaning was not at all clear. But in one text, *tiši-* occurred several times in succession, in such a fashion as to suggest that it could combine freely with any stem.

The same notion is often expressed by several synonymous or near synonymous prefixes, some of which may be more productive than others. For example, *tak-*, *uš-/ušla-*, and *waš-* all mean 'with the hand,' with *uš-/ušla-* most common. Similarly, *api-*, *uq-*, and *yul-* all have something to do with heat or fire, with *yul-* most common, and *aqta-*, *aqtipal-*, *pil- ~ pili-*, and *xal-* all mean more or less 'in the air,' with *aqta-* and *pil- ~ pili-* somewhat more common than the others. When these prefixes occur with the same verb stems, there is a good deal of synonymy,

*/xal-kum-pi-/ = /pili-kum-pi/* '[flying object] to hit'

but there is also semantic differentiation.

/xal-nowon/ xonowon 'to fly' (nowon 'to stand')

/pil-nowon/ pinowon 'to jump, rear up'

#### 670.5 Alternant Shapes of Prefixes

Certain unpredictable alternations and the operation of various phonological rules give rise to considerable allomorphy among inner prefixes. It should be stressed again that inner prefixes are those prefixes which occur between person-number markers and stems, not to be confused with the phonological notion of 'close' and 'remote' morpheme boundaries (q.v., 282). The division between close and remote boundaries, as determined by the limits of various phonological processes, falls somewhere in the middle of the string of inner prefix position classes; an inner prefix can be characterized by either a close or a remote boundary.

The principle phonological rules applying to inner prefixes, mostly across close boundaries, are:

1) low vowel harmony by rule 286.10, by which adjacent low vowels across close boundaries agree with stem-initial low vowels,

/aqta-qen/ eqteqen 'to pass by'

2) semi-optional deletion of /l/ across close boundaries before dental and palatal consonants and sonorants, by rule 286.22,

/tal-siq/ tasiq 'to grasp firmly'

3) vowel epenthesis between /l/ and a following sonorant

across close boundaries, optionally by rule 286.23,

/pal-wayap-š/ palawayapš 'to be crossed (like an X)'

4) epenthesis of /l/ between adjacent vowels across close boundaries, by rule 286.09,

/ulu-elew/ ululelew 'to wade'

5) and across remote boundaries, epenthesis of /y/ after /i/ before vowels by rule 286.04, or else deletion of pre-vocalic vowels by rule 286.05.

/uni-ašin/ uniyašin 'to eat during the night'

/uni-axi-yi?/ unaxiyi? 'to be half dark (at twilight)'

Of the unpredictable alternations, which are specific to each compound of prefix and verb stem, the most common are that

6) /q/ alternates with /x/ (cf. 272); this alternation is automatically implied by /q/ in the citation form of the prefix, but the prefix with individual compounds is shown as either /q/ or /x/;

/aqta-lokin/ oqtolokin '[wind] to stop'

/axta-pen/ extepen 'to blow away'

7) prefixes with a high vowel plus /l/ have an alternant form with the vowel repeated after the /l/ (cf. 271);

/pil-kow-Vn/ pilkowon 'to spill, tip over [intrans.]'

/pili-qotin/ 'to fall; to drip down'

8) and a few of the prefixes with high vowels show ablaut between /i/ and /u/, usually with /i/ more common (cf. 273).

/maxili-nan' / = /maxulu-nan' '[snake] to crawl'

## 670.6 The Form of Examples

In the major entry for each prefix, morphological information given includes first the approximate number or different stems the prefix occurs with, then the form the prefix takes before a following vowel if the prefix itself ends in a vowel (e.g. *aliy-V* for /ali-expen-š/ *aliyexpeč* 'to be singing,' and *čil-V* for /'či-apit/ *čilapit* 'to be piled up'), whether the prefix is characterized by a close or remote morpheme boundary, abbreviated as =MB and +MB respectively, when this can be determined, and finally, whether CVC reduplication falls on the prefix or the stem, abbreviated as PR 'prefix reduplication' and SR 'stem reduplication,' if this is known for the prefix in question. An example of this information in a major entry:

674.13 *pil- ~ pili-* 'through the air' (20) *pil-V* =MB PR

In the discussion of the prefixes, the examples given may be sentences or even derivative nouns, in addition to verb stems and verbs inflected for person and number. Stems occurring in the examples are glossed parenthetically (e.g. under *aqul-/aqulu-* is the entry /aqulu-kuy/ 'to touch with a stick' ('to hold'), where the stem *kuy* is glossed as 'to hold.' Verb stems are left unglossed whenever their meaning is clear from the meaning of the prefix and the gloss of the compound (e.g. under *aq-* 'fast, quickly' the stem *kitwon* needs no gloss in /ax-kitwon/ 'to come out fast'). In the interests of space, since the underlying forms of prefixes are cited in the main entry, examples are given in their surface form with appropriate segmentation (e.g. under

kal- 'of cutting' is the example [ko-lox] 'to cut a hole in'). But if there is a change in any morpheme but the prefix in question, both underlying and surface forms are cited (e.g. /naqal-tun-š/ naqatuč 'to be two abreast' under naqal-).

### 671 Grammatical Prefixes

This set of grammatical prefixes expresses purely grammatical concepts such as su- 'causative' and ni- 'transitive' rather than the more concrete notions found in the other prefix classes. The grammatical prefixes are in position classes furthest from the stem of all the inner prefixes. They show the remote morpheme boundary, which is characterized primarily by lack of low vowel harmony, deletion of /l/ before all consonants, and lack of l-epenthesis between adjacent vowels. CVC reduplication with these prefixes falls on the stem, with the exception of the causative marker su-.

#### 671.1 al- 'negative imperative' (100+) +MB SR

The negative imperative al- occurs only with the second person; it is equivalent to the negative ?ini- plus second person marker (cf. 690).

p-a-siyi? = ?ini-p-siyi? 'don't miss!'

p-a-tap 'don't come in!'

/p-iy-al-hik/ piyalik 'don't you (plural) do it!'

/p-al-?uw/ paluw 'don't eat it!'

#### 671.2 al- 'subordinate' (100+) +MB SR

The most common use of al- is in nominalized or rela-

tivized constructions with ma-/ha- (q.v., 521 and 662.1).  
With first and second subjects, al- is optional as a marker  
of nominalization.

/ma-k-al-su-ʔinu hi ma-qsi/ makasuʔinu imaqsɪ 'what I  
believe in [is] the sun'

/ma-cyɪw ha-p-al-ułiʃ/ 'you hold it by the edge: the  
edge [is] what you hold'

/syuxtun ka ha-k-al-kum-li/ syuxtun kakakumili 'I arrive  
at syuxtun: syuxtun [is] what I arrive at'

In nominalized forms with third person subjects, al- is  
obligatory with the dual and plural numbers,

/ma-iʃ-al-expen-š/ mašalexpeč 'two who sing'

/ma-iy-al-hik-Vn/ mayahiķen 'that which they use'

while it never occurs with the singular and indefinite.

Embedded verbs with first and second person subjects  
in non-relative constructions are occasionally marked with  
al-, here also a sign of subordination.

/s-uqni k-iy-al-momoy-Vč/ suqni kiyamomoyič 'it seems  
that we are crazy'

Sometimes a non-initial verb, not marked as relativized  
and not in a subordinate construction, appears with al-;  
it may be that al- marks the non-initial verb just as the  
particles hi and ka do (cf. 715.3 and 723.5).

/katu hi k-al-aqšiyik/ 'I would like a cat'

/ma-nɪ ha s-iy-al-ati-kuy/ 'they face the fire'

/kweki s-iy-al-aq-šuč/ kweki šiyalaqšuč 'they are headed  
over there'

The examples of al- here with regular non-relativized third

person subjects might also be analyzed as a failure on Harrington's part to note the initial glottalization of the agentive prefix *ʔal-* (q.v., 671.3). The agentive *ʔal-* very commonly occurs in such constructions, while Beeler notes in his Barbareño grammar (p. 24) that the third person marker *s-* never occurs with the subordinating *al-*.

671.3 *ʔal-* 'agentive: habitual, continuative' (100+) +MB SR

The agentive marker *ʔal-* is actually a nominalizing prefix (q.v., 522), although it is clearly related in some way to the subordinating prefix *al-*. The agentive *ʔal-* is very commonly used with personally inflected verbs, often in a reduplicated form, where it usually has a habitual or continuative force.

/k-ʔal-aqmil + R/ kálaqlaqmil 'I am a drunkard: I am  
one who drinks much'

/kay hi s-ʔal-wɪl + R/ kay isawɪlwɪl 'he is a hunter;  
he hunts: he / he is a hunter'

/pa k-ʔal-kuti + R hi mi-šup/ pakakutkuti imišup 'I am  
just looking at the ground'

/s-ʔal-aqhinaʔ-š/ šalaqhinaš 'he is very grateful'

Although the agentive construction itself has distinct dual and plural forms /ma-iš-al-/ mašal- and /ma-iy-al-/ mayal- (cf. 522.1), non-singular person-number markers occur with *ʔal-* in its habitual or continuative sense.

/k-iy-ʔal-ax-sumuʔ/ kiyalaxsumuʔ 'we are suffering'

/s-iš-ʔal-axuti-wil/ šišalaxutiwil 'they (dual) are  
talking, speaking'



/s-iy-ʔal-axšī-tap/ šiyalaxšītap '[people from another village] are ceremonially entering the fiesta'

The agentive prefix ʔal- is obligatory with some verbs.

ʔa-su-woqo 'to be quarrelsome' ('to smear with tar')

ʔa-pič 'to be reluctant, unwilling'

/ʔal-axuti-wil-Vš-Vn/ ʔalaxutiwilašīn 'to commune with spirits of the other world' (/axuti-wil/ 'to speak')

671.4 ni- 'transitive' (50+) n-V +MB SR

ni-kot 'to break [trans.]'

ni-ḡalaw 'to remote, detach' ('to come off')

ni-loq 'to perforate, make a hole in' ('to be perforated')

This prefix partially overlaps with su- 'causative,' and in some compounds the two are equivalent,

n-apit = s-apit 'to take up' ('to go up')

while in others they may cooccur.

/ni-su-wal-tun/ nisuwatun 'to put something over something else' ('to be doubled')

ni-su-tap 'to put into; to stuff (e.g. a doll)' ('enter')

671.5 nu- 'concomitant action' (20) nu-V +MB SR

This prefix denotes an action done along with some object or person, or while doing something else.

nu-naʔ 'to bring, take' ('to go')

ni-yiti 'to bring' ('to come')

nu-ʔakawayu 'to do while on horseback' (Span. a caballo)

nu-aqiwiwin 'to carry something while swimming'

nu-hik 'to do for, take the behalf of' ('to do')

671.6 nuti 'concomitant action' (4) nut-V +MB

This prefix seems to be equivalent to nu-, but it is less common and less idiomatic than nu-,

nut-otoyín 'to do while lying down' ('to lie')

nuti-nowon 'to do while standing'

/s-nuti-nowon ha s-ašín/ šnutinowon ašašín 'he eats

standing up: he does it while standing / he eats'

as compared to the more idiomatic form with nu-.

nu-nowon 'to stand up with a burden'

671.7 sili- 'desiderative' (100+) sil-/siliy-V +MB SR

?ini-k-sil-axuti-wil 'I don't want to speak'

/s-sili-čho?/ šhiličho? 'he wants to stop'

/s-iš-sili-ulu-aq-pey-us/ sišhilituleqpeyus 'they (dual)

want to follow it'

With an inanimate subject, sili- has the idiomatic meaning 'to be about to.'

/s-sili-tuhuy/ shilituhuy 'it is about to rain: it wants to rain'

/s-sili-kot ha-s-hilaq/ shilikot ashilaq 'its handle is about to (lit. wants to) break'

This prefix can be used with the force of a complementizer (q.v., 864) when an object noun is expressed.

/?ini-k-sili-pow ha-k-pa/ 'I don't want my staff to be crooked: I don't want to be crooked / my staff'

/k-sili-wil ha-k-katu/ ksiliwil ak<sup>h</sup>atu 'I want a cat: I want to exist / my cat (Span. gato)'

- 671.8 su- 'causative' (100+) s-V +MB PR  
 su-wayan 'to cause to hang; to lift'  
 su-tiyik 'to put into' ('to be inside')  
 s-ipyototon 'to boil; to cause to boil'  
 s-al-aqway' 'to fix, prepare: to cause to be ready'

Two less common allomorphs of su- are si- and sus-, with conditioning factors unknown.

- si-naxil 'to cause to be erect, upright'  
 sus-kuti 'to show to: to cause to see'  
 /sus-itax-may-š/ šušitaxmaš 'to boast, be proud: to cause them to be astonished'

The causative prefix sometimes has the force of 'let, allow.'

- ?ini-p-su-kitwon 'don't let it get in!' ('to enter')  
 ?ini-p-su-mixin 'don't let him stay hungry!'  
 /k-sus-uliš/ kšušuliš 'I let him hold it'

## 672 Temporal Prefixes

Temporal prefixes range from the rather grammatical notions of continuative or habitual action to more adverbial notions such as 'slowly' or 'at night.' All of the temporal prefixes for which reduplicated forms are attested show prefix reduplication.

- 672.01 ali- 'continuative, progressive' (75+) aliy-V +MB PR  
 k-ali-xilwon 'I am stooped over' ('to stoop over')  
 s-ali-kiyimin ka-s-ulkuw 'he tossed and turned last night' ('to turn over')  
 /s-ali-waš-tap ha-s-toqolo/ šaliwaštap aštoqolo 'he has his arms crossed: his hands are in / his armpits'

k-ali-yiw-us hi muhuw 'I am facing the beach, the south'  
('to seek, face')

While not necessarily losing its continuative force, ali-  
is idiomatic in many compounds.

ali-kitwon 'to excell, be outstanding' ('to come out')  
/ali-kow-Vn/ alikowon '[bird] to soar; to be on one's  
side' ('to be tipped')

672.02 api- 'quickly' (30) ap-/apiy-V +MB PR

api-ʔuw 'to eat quickly; to wolf food down'

api-kitwon 'to come out quickly; to take a boat out  
through the surf'

/su-api-uš-qiwın/ šapušqiwın 'to bail: to get the water  
out quickly' ('[water] to subside')

/k-su-api-aqawan/ ksapiyaqawan 'I dry it quickly'

672.03 aq-/ax- 'quickly' (6?) =MB PR

The prefix aq-/ax- is not very productive in this  
sense; the only clear example is:

ax-kitwon 'to come out quickly'

Others may include:

ax-patın 'to flap, flutter' ('to flap, flop')

/su-ax-woyon-š/ šoxwoyoč 'to throw crookedly: to cause  
to go crookedly rapidly' ('to be crooked')

672.04 aqi-/axi- 'iterative' (30) aqiy-V +MB PR

In the clearest examples aqi- has an iterative force;  
s-axiy-ılikın ha-ʔemet 'the squirrel (running along)  
sits down every now and then' ('to sit')

it is productive with numerals (cf. 618).

axi-masix 'to do three times' ('three')

Usually aqi- seems to be more a classifier with verbs which denote repetitive action, such as pounding, chopping, etc.

axi-kum 'to dance (i.e. to go up and down with the feet)'  
('to arrive')

axi-pen 'to work wood, do carpentry' ('to strip, peel')  
/su-aqi-nañ/ saqinañ 'to limp, be lame' ('to go')

It is possible that before vowels aqi- in this sense may appear as [aq-] as well as [aqiy-], but the shorter form [aq-] would probably be identified with the prefix or formative aq-/ax- (q.v., 612.2, 672.03, and 677.02).

672.05 aqta-/axta- 'habitually' (5?) aqt-V =MB PR

The prefix aqta- is not productive in this sense as qili- (q.v., 672.09) is; the only certain example is:

s-aqta-xil-apít 'he is in the habit of looking upward'  
(/xil-apít/ 'to look up')

Other possible examples include:

axta-wasín 'to be true' ('to be true')  
eqte-pšnekey 'to be bent backward'

672.06 ini- + ka- 'in the past' (5) iniy-V +MB

The force of this rare construction is not understood, especially because it can cooccur with the past marker -waš; it is a discontinuous sequence of ka- and the inner prefix ini-.

/ka-s-iy-ini-wati-čhoʔ/ kašiyiniwatičhoʔ 'they fell  
silent' ('to stop')

/ka-k-ini-eqwel-waš/ kakiniyeqwel ~ kakiniyeqwelewaš

'I did it, I made it'

672.07 iwa- 'for a moment, for a while' (25) iw-V<sup>e/o</sup> ~

iwa-V --- +MB PR

iwa-kitwon 'to go out for a moment'

iwa-kuti 'to take a look' ('to see')

k-iš-iwa-alpat 'we (dual) run a race, run for a while'

iw-eqwel 'to work for a little while' ('to make, do')

672.08 kil-/kili- 'rapid action' (10) kil-/kilil-V =MB PR

kili-kitwon 'to rush out' ('to come out')

kil-elew 'to fall down' ('to come down')

kili-tap 'to fall in, jump in; to enter suddenly'

kili-mes 'to attack' ('to cross over')

672.09 qili- 'habitual' (25) qil-/qiliy-V +MB PR

The prefix qili- is used either with the negative  
?ini-, where it is translated with 'never,'

?ini-s-qil-uxniwin 'he never hurries'

/?ini-k-qili-kuti/ ?iniq<sup>h</sup>ilikuti 'I have never seen it'

or with yes-or-no questions, where it is glossed with 'ever.'

?ini-p-qil-itaq-e 'haven't you ever heard it?'

/p-qili-?olxo? ha-suku-? + R/ pqili?olxo? asuksuku?

'have you ever stolen anything?'

672.10 quti-/xuti- 'momentaneous, suddenly' (25) qut-/

qutiy-V +MB PR

quti-tun 'to fork, branch into two' ('to be two')

xuti-peqen 'to come to a sudden stop'

/s-xuti-aqwičín/ sxutiyaqwičín ~ sxutaqwičín 'he suddenly  
gives a shout'

s-puti-nowon ha-ʔoʔ 'the water dashes into spray'  
( 'to stand' )

There are some idiomatic compounds with quti-.

xuti-nanañ 'to be restless, struggle' ( 'to go' )

quti-khít 'to be affectionate with' ( 'to come near' )

/xuti-nañ-pi/ xutinanpi 'to harm, annoy' ( 'to go' )

672.11 uni- 'at night' (10) un-/uniy-V +MB

uni-nañ 'to go by night'

uni-kutaʔ 'to get up in the night'

uniy-ašín 'to eat in the middle of the night'

uni-sumuʔ 'to be dark, lightless' (-sumuʔ ?)

672.12 uti- 'sudden, inceptive action' (30) ut-/utiy-V

+MB PR

uti-nañ 'to get going'

ut-otoyín 'to sprawl out: to be prone suddenly'

s-uti-wil 'suddenly: it exists all of a sudden'

/uti-aq-pey/ uteqpey 'to mimic, copy: to resemble suddenly'

/s-iy-su-uti-tataʔ-Vč + R/ šišutšutitatač 'they begin to  
treat him as their uncle (-tataʔ)'

672.13 wala- 'slowly' (2)

The prefix wala- is used in this sense only twice,  
once glossed as equivalent to wayi 'slowly' (q.v., 672.14).

wala-nañ 'to go slowly'

s-wala-ʔap = s-wayi-ʔap '[a boat] lands slowly'

672.14 wayi- 'slowly' (5)

wayi-nan' 'to go slowly; to go for a walk'

wayi-tap 'to enter slowly'

s-wayi-ʔap '[a boat] comes to shore slowly'

### 673 Prefixes of Spatial Orientation

The class of prefixes of spatial orientation includes directional prefixes as well as those which show static relationships. Two of these prefixes, akti- 'to come and ..., motion toward the speaker-hearer,' and yal- 'to go and ..., motion away from the speaker-hearer,' form a subclass of their own. These two prefixes combine freely with any verb, and their position class is one of the remotest from the stem of all the inner prefixes.

673.01 akti- 'to come and..., motion toward the speaker-hearer' (30) akt-/aktiy-V +MB SR

s-akti-kep' 'he comes to bathe'

s-iy-aktiy-itaq 'they come to listen'

s-akt-axi-kum 'he comes to dance'

s-akt-aqpala-nan' 'he comes stealing along'

In the compounds

akti-naʔ 'to come' ('to go')

akti-nu-naʔ 'to bring'

akti- is fused with the stem, so that all other prefixes precede it; it has lost its usual distant place in the chain of inner prefixes.



673.02 ata- 'on, at' (4) atal-V

ata-kumusi 'to be next, second' ('next')

/ata-cyiw-Vn/ atacyiwín 'to be on, at the edge (cyiw)'

atai-apay 'to be on, over, on top of' ('to be over')

ata-ti-wil 'to be under, below' (/ti-wil/?)

It is possible that otoyin 'to lie prone' contains this prefix with a uniquely-occurring stem; this would imply a close boundary for the prefix, due to low vowel harmony.

673.03 ati- 'to, toward' (5) at-V +MB

ati-k<sup>h</sup>it 'to face toward' ('to come near')

ati-k<sup>i</sup>y<sup>i</sup>min 'to turn toward' ('to turn over')

ati-kuy 'to face toward, head toward' ('to hold')

at-aq<sup>i</sup>? 'to be in the middle of' (aq<sup>i</sup>? ?)

673.04 ci- 'heaped up' (8) cil-V =MB PR

ci-nowon 'a hill' ('to stand')

cil-apit 'to be piled up' ('to go up')

wi-ci-pey 'to throw mud onto a wall (when plastering)'

('to stick to' plus wi- 'of, by blows')

ci-kaw 'to be uneven, badly made' (cf. ackaw /ac-kaw/?

'to err, make a mistake')

673.05 hi- 'low, deep' (4) hil-V =MB

hi-nowon 'to be deep' ('to stand')

/hi-mik-Vn/ himikín 'to be deep' (mik 'far away')

hi-taq<sup>i</sup>? '[terrain] to be rough' (taq<sup>i</sup>? ?)

/ma-l-hi-al-pul/ mahilalpul 'the low corner' ('to round

a bend, corner')

673.06 kupa-/kupal- 'around, about' (8) =MB

The evidence is contradictory as to whether this prefix contains a final /l/ or not.

kupe-<sup>l</sup>eqen 'to stick out, protrude' ('to extend beyond')

kupal-pakas 'to be scattered about' ('one')

kupa-<sup>?</sup>axulapšan 'to be green in a certain area' ('to be green')

kupe-lešexen '[acorns] to lie around on the ground where they fall' ('to spread')

673.07 mal- 'across, around' (6) =MB

mo-lokin 'to cross the mountains' ('to cut')

/mal-wiy/ mali<sup>w</sup>iy 'a pass between hills' ('to be notched')

si-mal-kawan 'to get lasso around head and one leg of an animal' ('to enclose tightly')

/mal-is-ti<sup>?</sup>/ mališt<sup>?</sup> 'to find unexpectedly' cf. English 'to come across' (/is-ti<sup>?</sup>/ išt<sup>?</sup> 'to find')

673.08 maquti-/maxuti- 'around, hither and thither' (10)

maqut-V +MB

maquti-nañ 'to run around, go hither and thither'

maquti-tap 'to go around visiting' ('to enter, visit')

maxuti-tap-š '[line] to be tangled, snarled' ('to enter')

maquti-pipin 'to play a children's circle game' (pipin?)

673.09 naqal-/naxal- 'of linear order' (6) =MB

neqel-keken 'to be in a row abreast' ('to extend, spread')

noqo-lomol 'to be in single file; to be piled up'

('to be piled')

/qal-naqal-tun/ qanaqatun '[two] to be tied with the  
same rope' ('to be two' plus qal- 'of tying')

/naxal-tun-š/ naxatuš 'to be two abreast' ('to be two')

673.10 naqti-/naxti- 'back, out of the way' (10)

naqtıl-V =MN PR

naqti-tap 'to move back' ('to enter')

naqti-kuy 'to get aside' ('to hold')

naqti-kitwon 'to go back, withdraw' ('to emerge')

naqtıl-al-apay 'to move back out of the way' ('to be  
over, above')

Some idiomatic compounds with naqti-:

naqti-nañ 'to slide, scoot' ('to go')

naqti-kum 'to be close to' ('to arrive')

naxti-wayan 'to hang in fringes' ('to hang')

673.11 palu- 'penetration into, through' (10) palul-V =MB

palu-lox = /tipa-lox/ tipolox 'to bore a hole through'

('to be perforated, have a hole')

palu-tap 'to bore a hole' ('to enter')

palu-c-pux 'to spit, impale' ('to string, run through')

palu-wowon 'to clean out a carcass' (-wowon?)

An unusual compound with palu- is:

/palu-ʔoqwon/ paloqwon 'to hit in the head (-ʔoqwon)'

673.12 qupili- 'of linear order' (3)

qupili-nañ 'to be in a row, line' ('to go')

qupili-tap 'to enter one by one' ('to enter')

qupili-wokoy 'to be in a row' ('to lie prone')

673.13 taya- 'of upright position' (2) =MB

This sense of taya- may be an extension of taya-  
'of rain' (q.v., 674.16).

taya-naxil 'to be erect, upright' ('to be upright')

toyo-nowon 'to stand upright, stand on end' ('to stand')

673.14 ti- 'off, onto' (10) t-V +MB SR

This prefix seems to have two opposite meanings: 'off'  
in some compounds,

ti-lokin 'to cut off, sever' ('to cut')

ti-pen 'to peel with a knife' ('to strip, peel')

/ti-pal-wekey/ tipelewekey 'to scrape, wipe off'  
( 'to wipe')

tipot 'to untie, unfasten' (/ti-pot/?)

and 'onto' in others'

ti-mes 'to fasten shut' ('to cross over')

ti-net 'to splice, join' ('to do')

/ti-aq-pey/ teqpey 'to stick to' ('to stick to')

/ti-ni-aq-pey/ tineqpey 'to mend' ('to stick to')

673.15 tipa- 'intrusion into' (10) tipal-V =MB

tipa-tun 'to butt in on' ('to be two')

tipe-čeq 'to split' ('to tear, split')

tipo-lox = palu-lox 'to bore a hole' ('to be perforated')

tipa-waq 'to gut a carcass' ('to burst')

673.16 tiwal- 'around, encircling' (7) =MB

tiwa-nanan 'to go around, travel' ('to go')

tiwo-lokin 'to have one's arm around' ('to cut')

tiwol-kom 'to embrace' ('to stroke, caress')

tiwo-šok 'to wrap around the waist (as a belt)' (šok ?)

673.17 ulu- 'into, against' (15) ul-/ulul-V =MB PR

ul-iqip 'to plug up (a hole)' ('to cover')

ulu-čeq 'to cut open' ('to tear, split')

ulu-tap 'to put into, ram into; to plug up a crack'

('to enter')

Idiomatic compounds are common with ulu-, including:

/ulu-aq-pey/ uleqpey 'to follow' ('to stick to')

/ulu-su-aqša-Vn/ ulušaqašan 'to beat to death' ('to die')

673.18 uš- 'off, out, away' (10)

uš-kuy 'to sweep, throw away' ('to hold')

uš-qen 'to use all up' ('to disappear')

/uš-ni-apay/ ušnapay 'to take out' ('to be up, above')

/su-api-uš-qiwın/ šapušqiwın 'to bail: to get the water  
out quickly' ('[water] to subside')

673.19 wal- 'adjacent, in linear order' (10)

wal-miy 'to make a cord with several strands' ('to twist  
into cord')

/wal-kum-li/ walkumili 'to get around to it' ('to arrive')

su-wal-apay 'to put over, on top of' ('to be above, over')

wa-tikay = tikay 'to be on top of'

With numerals as stems:

wa-tun 'two to be in line; to be doubled' ('to be two')

wal-masix 'three to be in line' ('three')

673.20 yal- 'to go and..., movement away from the speaker-hearer' (50+) +MB

k-yal-ax-yik-us 'I go to give it to him'

no-k-ya-kuti 'I will go and see it'

/yal-ikh<sup>h</sup>ili-<sup>?</sup>ay/ yalikh<sup>h</sup>ilil<sup>l</sup>ay 'go get some more!'

/s-iwa-yal-tiši-wil/ šiwayatišiwil 'he goes to play for a while'

673.21 yili- 'all around' (5) yiliy-V +MB

yili-wayan 'to hang [evenly] all around'

yili-tap 'to enter in a crowd' ('to enter')

yiliy-aquti-čho 'to be even all around' ('to be even')

/yili-mal-nanañ/ yilimananañ 'to run around (in confusion)' ('to go')

#### 674 Instrumental-Medium Prefixes

In this class of prefixes, there is an overlap between purely instrumental prefixes and prefixes which classify the subject or the object of the verb or the medium in which the action takes place. For example, uš-/ušla- is purely instrumental, while yul- 'of, with heat' may be instrumental in /su-yul-šot/ šuyulšot 'to peel by boiling,' but is more a classifier of the subject in /yul-wil/ yuwil 'to be hot.' In a parallel fashion, qil-/qili- 'of, in water' denotes the medium or instrumentality of the action in /qil-čomin/ 'to soften in water [intrans.],' but is a classifier of the subject in /s-qil-ik<sup>l</sup>kin/ 'water is standing (e.g. in a puddle).'

674.01 api- 'of, with fire' (7) ap-V +MB PR

api-ple? 'to be scorched, burned up' ('to perish')

api-qen 'to be burned entirely up' ('to disappear')

api-čho '[food] to be well-done, thoroughly cooked'  
('to be good, even')

/su-api-wil/ sapiwil 'to kindle, feed a fire' ('to exist')

674.02 aputi- 'of liquid in motion' (8)

s-puti-nañ 'water is running; a current flows' ('to go')

s-puti-nox 'much water is running' ('a big one')

/s-puti-smon-š/ šaputišmoč '[arroyo] flows into [the  
river]' ('to gather')

s-puti-kitwon ha-s-pil 'pitch is running out (of the  
pine log)' ('to emerge')

674.03 aq-/ax- 'with the mouth' (15) =MB PR

ax-tap 'to put into the mouth' ('to enter')

ax-kla? 'to shell acorns with the teeth' ('to crack')

ox-loq 'to bite a hole in' ('to be perforated')

oq-lokin 'to bite in two, bite through' ('to cut')

674.04 aqta-/axta- 'in, of the air' (20) aqt-V =MB PR

s-axta-khit 'wind; the wind is blowing' ('to come near')

s-ext-elew 'the north wind blows' ('to go down')

exte-pen 'to blow away in the wind' ('to strip, peel')

/aqta-ni-apay/ aqtanapay 'to fly upward' ('to be above')

s-oqto-pow ha-k-ya? 'my arrow flew off to one side'  
('to be bent')

674.05 aqtipal-/axtipal- 'in, of the air' (10) =MB  
 aqtipal-k<sup>h</sup>it 'to inhale, suck in' ('to come near')  
 /axtipal-pok'-Vn/ axtipolpokin 'to inflate' ('to swell')  
 s-aqtipa-čì 'it is very windy' ('to be sharp')  
 s-axtípo-nowon 'dust is rising, is in a cloud' ('to stand')

674.06 aqul-/aqulu- 'of, with a long thin object' (25)  
 aqul-aqulul-V =MB PR

This prefix shows not only the alternation aqul- ~ aqulu-, but also an alternation of /q/ and /x/ and of /u/ and /i/; the form with /u/ is far more common than that with /i/.

aqulu-kuy 'to touch with a stick' ('to hold')  
 axulu-kitwon 'to poke out with a stick' ('to emerge')  
 /aqul-c-<sup>?</sup>elew/ aqučelew 'to stick out the tongue (-<sup>?</sup>elew)'  
 /aqul-<sup>?</sup>kot/ aqunkot 'to be low, short' ('to break')  
 axili-wil-pi 'to tie poles onto a house frame' ('to be')

674.07 ašni- 'with the feet' (3)

This prefix occurs with only three verbs, where it is not easily segmentable (two of the stems are uniquely-occurring), but the pattern is striking'

ašni-we<sup>?</sup> 'to tread, trample' (cf. /si-ni-we<sup>?</sup> 'to kill')  
 ašni-pit 'to kick, stamp' (pit ?) cf. V. aqtapet to stamp  
 /ašni-sil/ asnisil 'to tread, step on' (sil ?)

The sequence ni- might be identified with the transitivizing prefix ni- (q.v., 671.4).



674.08 il- ~ ulu- 'of, in water' (15) ul-/ulul- =MB PR

This prefix is unusual phonologically in that the ablaut form with /i/ does not show an alternant form ili-, but the /l/ of il- is never dropped, even before dental consonants. The il- form is more common than ulu-.

il-tap '[water] to come in; to leak' ('to enter')

il-pok<sup>1</sup> 'to swell when wet'

/il-wiy + R/ ilwiywiy '[water] to slosh, spill in a vessel' ('to be notched')

ulu-mes 'to wade across' ('to cross over')

/s-su-ulu-kum-it ha-k-<sup>1</sup>apam ha-<sup>2</sup>o<sup>2</sup>/ s<sup>h</sup>ulukumit akapam<sup>1</sup> a<sup>2</sup>o<sup>2</sup>

'the water reaches up to my knees: it reaches to me / my knee(s) / water'

674.09 maq-/max- 'of, with a line or rope' (25) =MB PR

maq-tun 'to be two-ply, doubled-stranded' ('to be two')

max-mi-šup '[line, rope] to come down' ('down')

max-su-kitwon 'to pull out (e.g. a fish) on a line' ('to come out')

/maq-su-wol + R<sub>3</sub>/ maqsuwolowol 'to swing a rope'

By extension, maq- applies to garments and cloth-like objects as well.

maq-tap 'to put on a garment' ('to enter')

/maq-su-al-<sup>1</sup>al-apay/ maqsalalipay 'to pull up on a garment (e.g. a belt)' ('to be up, above')

674.10 maqili- ~ maqulu- 'of a line; of linear order' (15)

maqil-/maqul-V =MB

This prefix is somehow related to maq- 'of a line,

rope,' on both phonological and semantic grounds; it shows not only ablaut of /i/ and /u/, but also the /q ~ x/ and pil- ~ pili- alternations as well.

maxili-nañ = maxulu-nañ '[snake] to crawl; to reel out a line' ('to go')

maxi-tap 'to go around visiting' ('to enter, visit')

/maxil-al-koy/ maxilolkoy 'to spiral around, be spiral shaped' (/al-koy/ olkoy 'to go around')

maxulu-mes 'to cross on a line (like a spider)'

/s-maquulu-č-pax/ šmaquulučpax 'grain (of wood)' ('skin')

674.11 naq-/nax- 'with the body' (10) =MB

Compounds with this prefix all seem to involve the body, but just how is not clear.

naq-susu 'to sit squatting' (cf. /yuq-susu/ 'to sit with one knee on the ground')

nex-pey 'to lean against [intrans.]' ('to stick to')

/nax-č-ʔapañ/ naxčapañ 'to kneel' ('knee')

With uniquely-occurring stems:

naq-kiñiʔ 'to be constipated'

naq-škalalač 'to draw in the belly' (cf. Barabreño

yux-škalalač 'to bristle')

nox-koy 'to kneel'

naq-pin 'to turn the back (on)'

674.12 pal- 'of, with a pliable object' (5) =MB

pel-tepet 'to fold, roll a pliable object' ('to roll')

pal-kiyimin 'to turn inside-out' ('to turn over')

pol-ps-woyon 'to twist (e.g. strands) together' ('to be

crooked')

pala-wayap-š 'to be crossed (like an X)' ('to trade')

pol-olomol 'to wrap a pliable object around' ('to be  
piled up')

674.13 pil-/pili- 'through the air' (20) pil-V =MB PR

pil-<sup>o</sup>qot'in 'to fall, drip down' ('to come down')

pi-tap 'to fall in, jump in (e.g. into water)'

pili-wayan 'to drip down' ('to hang')

pil-xoyin 'to jump over' ('to go over')

674.14 qil-/qili- 'in, of water' (25) qil-V =MB PR

This prefix also shows the alternation of /q/ and /x/.

qil-<sup>o</sup>comin 'to soften in water [intrans.]'

xi-nan 'to float away, wash away' ('to go')

xili-mi-šup '[sediment] to settle in water' ('down')

/s-xili-wayan + R/ sxilxiliwayan 'it is floating'  
( 'to hang' )

With uniquely-occurring stems:

qil-oyok 'to be soaked' (/qil-loyok/?)

/qil-<sup>o</sup>cî?/ qincî? 'to drown'

674.15 tak- 'with the hand' (5) =MB

tak-tî? 'to hit, beat; to kill' ('to encounter')

tak-su-we? 'to rock to sleep' ('to sleep')

/tak-kuy/ tak<sup>h</sup>uy 'to hold, carry, wear' ('to hold')

Perhaps with uniquely-occurring stems:

tok-šon 'to grasp'

tak-wîn 'to pluck'

674.16 taya- 'of rain' (5) =MB

taya-kum 'to drizzle' ('to arrive')

toyo-lokin '[rain] to stop' ('to cut')

/taya-smomoy-Vn/ toyosmomoyin 'to drizzle' ('fog')

/taya-nox-Vn/ toyonoxin 'to rain hard' ('a big one')

/s-taya-wax/ štayawax 'the rains set in' ('to leak')

Perhaps related is mištoyo 'rainbow.'

674.17 ux- 'of, with fire' (4)

ux-pen 'to scorch, singe' ('to strip, peel')

ux-patin 'to burst into flame' ('to flap, flop')

/ux-yul-wil/ uxyuwil 'to be hot' ('to exist')

/s-ux-pše?/ šuxpše? 'the fire is out' ('to perish')

674.18 uš-/ušla- 'with the hand, palm' (15) ušl-V =MB SR

uš-kom = ušlo-kom 'to stroke, rub with the hand'

uš-melewēn 'to level off with the hand'

uš-phat 'to rummage through, dishevel' ('to fall apart')

usla-siq 'to press firmly by hand' ('to do firmly')

674.19 wala- 'of, with the body; of, with a massive or  
bulky object' (25) wal-V =MB

s-wele-tepet ha-kawayu 'the horse is rolling over'  
( 'to roll.' )

/s-wala-nax-pey/ swelenexpey 'he is leaning (e.g. against  
a wall)' ('to stick to')

/s-wala-qil-tap/ swalaqintap 'to dive: to enter the water  
with the body'

/qal-wala-tepet/ qeleweletepet 'to wrap up a bundle'

('to roll' plus qal- 'of tying')

674.20 waš- 'with the hand' (5) =MB PR

waš-nañ 'to reach out for' ('to go')

waš-tap 'to put the hand, a finger into' ('to enter')

With a uniquely-occurring stem:

waš-kay 'to carry in the hand'

674.21 waš-/wašla- 'of terrain; on the ground, on a surface' (12) wašl-V =MB PR

/was-sisín/ waš<sup>h</sup>isín '[terrain] to be very rough' ('to be misshapen')

/s-waš-noxš/ šwošnoxš 'a point, headland' ('nose')

/su-aqi-waš-č<sup>h</sup>o/ šaqiwošč<sup>h</sup>o 'to walk well' ('to be good')

/su-waš-p<sup>h</sup>en/ šuwešp<sup>h</sup>en 'to uncover' ('to strip, peel')

wošlo-lomol 'mountain (range)' ('to be piled up')

wošl-otoyín 'to lie flat on the ground' ('to lie prone')

An extension of this sense of waš- underlies compounds with numerals as stems.

waš-tun 'to be folded double' ('to be two')

was-masix 'to be folded triple' ('three')

674.22 wašti- 'of a flow, of liquid in motion' (10)

wašti-nañ 'to spill, fall in a stream' ('to go')

wašti-pow '[flow, stream] to bend'

/su-wašti-tap/ šuwaštitap 'to pour liquid into: to cause to flow into'

s-wašti-lokin-us ha-s-pice? 'his diarrhea stopped:

a flow stops to him / his diarrhea'

674.23 xal- 'in, through the air' (15) =MB PR

xal-kum-pi '[flying object] to hit, land on' ('to arrive')

xel-mes 'to jump across' ('to cross over')

xo-nowon 'to fly' ('to stand')

xol-qot'in 'to jump down' ('to come down')

674.24 yul- 'of, with heat' (22) =MB PR

yu-wil 'to be hot' ('to be, exist')

yǐ-čǐ 'to be hot' ('to be sharp')

/yul-kitwon-š/ yulkitwoč 'to go out into the hot sun'  
('to emerge')

/su-yul-šot/ šuyulšot 'to peel by boiling' ('to peel')

yu-naqpin 'to warm the back against a fire' ('to turn  
the back')

This prefix is extended to refer to anger in some compounds.

yul-tul 'to be angry' (cf. aqi-tul-š 'to be harmful')

/su-yul-wew/ suyuluwew 'to avert the gaze when angry'  
('to glance sidelong')

674.25 yuq-/yux- 'of the legs' (10) PR

yuq-nañ 'to sit with the legs straight out' ('to go')

yuq-susu 'to sit with one knee on the ground, the other  
knee raised' (cf. /naq-susu/ 'to sit squatting')

-su-yuq-lalam 'woman's buckskin loincloth' ('to tuck in')

/s-su-yuq-tikay ha-s-ʔiǎ/ shuyuqtikay asiǎ 'he has his  
legs crossed: he causes a leg to be over / his leg'

Some idiomatic compounds with yuq-:

yuq-mučuʔ 'to be slender, thin' ('a small one')

yǐq-čǐ 'to be sharp-pointed' ('to be sharp')

## 675 Action Classifier Prefixes

This is a large class of prefixes, a rather miscellaneous group. It ranges in semantic scope from non-temporal, non-spatial adverbial notions such as *tiši-* 'with difficulty' to classificatory notions such as *qal-* 'of, by tying,' or *aqni-* 'of mental activity.' It is difficult to make any sharp distinctions among these. In translation, many of these prefixes have the semantic content associated with verb stems in Indo-European languages. Examples with the stem *č<sup>h</sup>o* 'to be good, to do evenly' are /*kal-č<sup>h</sup>o*/ *koč<sup>h</sup>o* 'to cut evenly' from *kal-* 'of, by cutting,' /*lu-č<sup>h</sup>o*/ 'to grow straight, even' from *lu-* 'of growth,' and /*su-uni-č<sup>h</sup>o*/ *šunič<sup>h</sup>o* 'to stay happy' from *uni-* 'of remaining.' These prefixes are often paralleled by an unrelated verb; in addition to the prefix *qal-* 'of, by tying' there is a verb *aqsik* 'to tie,' but the two do not cooccur in such a compound as \*/*qal-aqsik*/.

675.01 *ali-* 'of equality, identity' (6) PR

*ali-wil* 'to be the same' ('to be, exist')

*ali-neč-pi* 'to be alike, the same' ('to be like')

*-ali-š-xey* 'first cousin' (*-xey* 'second cousin')

*ali-latiš* 'to be square: to have equal sides'

675.02 *apti-* 'of crushing, grinding' (4) apt-V +MB

*apti-may* 'to crush' ('to cover, overwhelm')

*apt-iqim = iqim* 'to crush'

/*su-apti-iṭey*/ *saptiṭey = iṭey* 'to crush'

/*s-apti-woyon-š ha-s-sapatu*/ *šaptiwoyoč as<sup>h</sup>apatu* 'he wears

his shoes down lopsided' ('to be crooked')

675.03 axi- 'of casual action'

The only clear example of this sense of axi- is

axi-kuy 'to take hold of casually'

but there may be other examples which are simply not glossed so transparently. This prefix is evidently more productive in Barbareño; an example quoted by Beeler (p. 26) which could just as well be Ineseño is

k-iy-axi-kuti 'we may happen to see'

675.04 aqni-/axni- 'of mental activity' (15) aqn-V +MB PR

aqni-čho 'to like, want' ('to be good')

aqni-wil 'to think' ('to be, exist')

aqni-yiw 'to want to' ('to seek, face')

With uniquely-occurring stems:

axni-sukutan 'to have pity on'

aqni-suwewen 'to think about'

/su-aqni-kul-š/ šaqnikulš 'to be sad'

675.05 aqpala-/axpala- 'of stiffness' (6) =MB

aqpala-nan 'to steal along, meander' ('to go')

/aqpala-su-aqša-Vn/ aqpalašaqašan 'to be stiff with rheumatism' ('to die, be ill')

aqpala-čiwikín 'to be oppressed in a nightmare' (cf.

/mal-čiwikín 'to be tired')

675.06 aqši-/axši- 'of calling, paying attention' (7)

aqši-tiwíč = /qul-tiwíč/ qítiwíč 'to watch, witness'

axši-tap '[those from another village] to enter a fiesta



ceremonially' ('to enter')

/su-aqšī-nananā/ šaqšīnananā 'to pay attention to' ('to go')

With a uniquely-occurring stem:

aqšī-yīk 'to like, be please with'

675.07 aqšū-/axšū- 'of eating' (10)

aqšū-tapīn 'to eat the evening meal' ('to be evening')

/aqšū-nox-Vn/ aqšūnoxīn 'to eat too much' ('a big one')

/aqšū-nī-Vč/ aqšīnīhīč 'to eat the midday meal' (/nī-Vn/  
nīhīn 'to be noon, midday')

/aqšū-kī?-kš/ aqšīkīkš 'to eat a food by itself, not  
mixed with other foods' (/kī?-kš/ kīkš 'oneself')

In some compounds aqšū- seems to refer to mental activity.

aqšū-čho 'to be pleased, contented' ('to be good')

/aqšū-su-miš/ aqšūšūmiš 'to cause to cry' ('to cry')

axšū-nī-wil-pī 'to dream of' ('to be, exist')

675.08 aquti-/axuti- 'of verbal or mental activity' (7) PR

This is a rather common prefix, of which some forms  
seem to refer to verbal or mental activity.

axuti-wil 'to speak, talk' ('to be, exist')

/ʔal-axuti-wil-Vš-Vn/ ʔalaxutiwilašīn 'to commune with  
spirits of the other world'

aquti-pleʔ 'to joke with, tease, show affection for'  
'to perish')

/su-aquti-kuyupi/ saqutikuyupi 'to notice' (cf. /aqni-  
kuyupi/ 'to think of')

With uniquely-occurring stems:

aquti-č-kwakwan 'to whisper, speak softly'

/su-aquti-kač/ šaqutikač 'to be annoying'

675.09 axuti- 'of sewing' (6) axutil-V =MB PR

axuti-ni-koyi 'to sew back over' (/ni-koyi/ 'to return')

/axuti-al-koy/ axutilolkoy 'to sew around' (/al-koy/  
olkoy 'to go around')

/axuti-cyiw-Vn/ axuticyiwın 'to hem: to sew along the  
edge (cyiw)'

With a uniquely-occurring stem:

axuti-piš 'to sew'

cf B *Palčanoxš*  
'one with a good sense of  
smell'

675.10 cal- 'well' (4)

cal-pup 'to be a good, industrious seed-gatherer' ('to  
seed-gather')

/cal-tiq/ cantiq 'to see well, see far' (cf. -tix 'eye')

/cal-xul-ni-yiw/ calxuniyiw 'to be a good hunter'

(/xul-ni-yiw/ xuniyiw 'to hunt, look for')

675.11 ici- 'of following' (4)

ici-nan = ici-tap 'to follow to the very end' (nan 'to  
go,' tap 'to enter')

ici-nanan 'to skulk around looking for something to  
steal' ('to go')

ici-paqalalan 'to chase' (cf. paxalan 'to be stiff')

675.12 ?ič- ~ iči- 'together with' (2)

This prefix, of uncertain shape, can be partially  
identified with a nominal prefix ič- ~ ?ič- ~ iči- (q.v.,  
577) with associative or inalienably possessed force.

There are only two verbal examples.

/iči-ti-Vn/ ičitin 'to name the same as' (-ti 'name')  
 /ʔič-ku-Vn/ ʔičkun 'to defend, side with' (ku 'person')

675.13 iku- 'of pressure, restraint' (3) ikul- =MB  
 iku-č<sup>h</sup>o 'to press, compress' ('to be good, even')  
 iku-mes 'to dam up (a stream)' ('to cross over')  
 /iku-apay-nVš/ ikulapanišš 'to be on top of; to stampede'  
 ('to be over, above' plus -nVš 'reciprocal')

675.14 itax- 'of hearing, report' (8) =MB

This is one of the few prefixes which is clearly related to a verb stem: itaq 'to hear.'

itax-kuy 'to be famous, well-known' ('to hold')  
 /itax-mik-Vn/ itaxmikin 'to be heard far away (mik)'  
 /itax-kum-li/ itaxkumili '[sound] to carry' ('to arrive')  
 /s-iy-aqni-itax-al-koy/ siyaqnitoxlołkoy 'they come  
 around to listen' (/al-koy/ olkoy 'to go around')

675.15 kal- 'of, by cutting' (10) =MB PR

kel-el<sup>k</sup>ew = /kal-al-koy-li/ kolol<sup>k</sup>koyili 'to cut in a  
 circle' (el<sup>k</sup>ew 'to go along the shore,' /al-koy/  
 olkoy 'to go around')

ko-č<sup>h</sup>o 'to cut evenly' ('to be good, even')

ko-lox 'to cut a hole in' ('to be perforated')

/kal-wiy/ kawiy 'to cut a notch in' ('to be notched')

With a uniquely-occurring stem:

kal-qunihas 'human figure (carved of wood)'

675.16 ki- 'a little: diminutive force' (20) kiy-V +MB

In context, ki- is often accompanied by pa 'just,

merely,' evidently to enhance the diminutive force of *ki-*.

/pa k-*ki*-*ʔoʔ*-*Vč*/ pak*ki*ʔoč 'I am just a little wet'

/pa s-*ki*-*aq*-*pey*-*us*/ pas*kiye*qpeyus 'he resembles him a little'

/ma-*sipit*-*Vš* hi s-*ki*-*ilakš*/ maš*ipitiš* iš*kiyi*lakš 'the mush is a little thin'

/s-*ki*-*uč*-*qhal*-*š*/ š*kiyuč*qhalš '[the door] is jar: it is a little bit open'

This prefix is once attested preceding the person marker:

/*ki*-s-*ʔowow*/ *ki*sowow 'it is whitish, a little bit white'

675.17 *kina-* 'of dying' (6) =MB

This prefix is evidently related to the verb *kinat*, attested once in /s-*kinat*-*us*/ 'he died along with her.'

*kina*-*kat* 'to survive, remain alive' ('to remain')

*kina*-*wil* 'to die' ('to be, exist')

*kine*-*qen* 'to die off, become extinct' ('to disappear')

*kina*-*ni*-*koyi* 'to come to, regain consciousness: to return from death'

675.18 *kupal-* 'of drinking' (2) =MB

*kupel*-*qen* 'to drink all up' ('to disappear')

/*kupal*-*čiw*-*Vč*/ kupač*iwuč* 'to drink on all fours with the mouth in the water' (-*čiw* 'paw')

675.19 *lu-* 'of growth' (15)

*lu*-*nañ* 'to grow' ('to go')

*lu*-*kilamu* 'to grow up to be crazy (*kilamu*)'

*lu*-*šuč*-*pi* 'to grow up to be ...' (cf. /*aq*-*šuč*/ 'to head

for, head toward')

lu-wahač̣ 'to be many-pointed, many-branched: to grow  
into many (wahač̣)'

675.20 mal- 'of birth' (10) =MB

s-mal-waq '[an infant being born] bursts forth, emerges'  
( 'to burst')

ma-sisin 'to be born with difficulty' ( 'to be misshapen')

/mal-s-ʔiɪ-Vn/ maʂiɪn 'to be born feet (-ʔiɪ) first'

/mal-aq-pey/ meɪeqpey 'to inherit: to follow by birth'

/mal-niwon-š/ maniwoč̣ 'to be mourning: to be bereft of  
one related by birth' ( 'to leave, let go of')

675.21 maq-/max- 'quickly, vigorously' (7)

max-kitwon 'to pull out quickly' ( 'to come out')

max-kutaʔ 'to get up quickly'

/maq-su-apit/ maqsapit 'to sing loudly, raise the voice'  
( 'to go up')

An idiomatic construction based on this sense of maq- is  
max-k<sup>h</sup>it 'to do something hard, vigorously'

used adverbially with other verbs, as in:

s-max-k<sup>h</sup>it-us ha s-wip 'he hits it hard'

/s-max-k<sup>h</sup>it-us ha s-yul-wil/ smaxk<sup>h</sup>itus asyuwil 'it is  
very hot: it does it hard / it is hot'

675.22 max- 'of dragging, sliding' (7)

This sense of maq- is probably an extension of the  
primary sense 'of, with a line or rope' (q.v., 674.09).

max-su-nañ 'to drag [trans.]' ( 'to go')

max-ni-koyi 'to drag oneself back' (/ni-koyi/ 'to return')  
 mex-weʔ 'to grind, whet' (cf. /ašni-weʔ/ 'to tread on')  
 /max-telen + R<sub>1</sub>/ mextelelen 'to drag on the ground' (cf.  
 /xal-c-telen/ xectelen 'to wear a pony-tail')

With a uniquely-occurring stem:

max-č<sup>h</sup>uyuy 'to slide down a bank (in play)'

675.23 mati- 'feeble, enervated activity' (8) mat-V +MB

mati-nañ 'to crawl, slink' ('to go')

mati-kalaš 'to sigh' ('to breathe')

mat-uliš 'to grasp a support (when feeble)' ('to grasp')

mati-hikwin 'to be tired from carrying a load' ('to  
 drop, put down a load')

675.24 niwal- 'with difficulty' (4)

niwa-laliw 'to do with difficulty' (cf. /max-laliw/ 'to  
 baste, sew roughly')

niwal-kum-i = niwa-tap 'to get up one's courage' (kum  
 'to arrive,' tap 'to enter')

675.25 pana- 'of impact, a report' (8) =MB PR

pana-pak-š 'to burst, pop' ('to pop')

pana-ks-patin 'to fall with a thud' ('to flop, flap')

pana-tim̄in 'to bang, boom' (cf. /i-tim̄in/ 'to give a  
 start (when frightened), to be timid')

pono-č<sup>h</sup>o 'to cut off straight across' ('to be good, even')

675.26 qal-/xal- 'of tying, binding' (30) =MB PR

qo-smon 'to tie together' ('to gather')

qal-k<sup>h</sup>it 'to make up a bundle' ('to come near')

/qal-maq-su-i-k<sup>h</sup>it/ qalamaqsik<sup>h</sup>it 'to tie very tight'  
('to come near')

/qal-wala-tepet/ qeleweletepet 'to tie up a bundle'  
('to roll')

xo-sokin 'to tie into a bundle' ('to cave in, be dented')

675.27 qili- ~ qulu- 'of seeing, vision' (17) qil-qilil-V  
=MB PR

This prefix shows not only ablaut of /i/ and /u/, but also the alternation of /q/ and /x/ and the pil- ~ pili-alternation.

qili-kuta? 'to raise the head to look at (while lying down)' ('to get up')

xil-apit 'to look upward' ('to go up')

xili-wasin 'to see well' ('to be true')

qulu-ni-koyi 'to look back' (/ni-koyi/ 'to return')

675.28 ta- 'of disintegration, a disease state' (6) =MB

to-šot '[hair] to fall out' ('to skin')

te-ple? 'to have tuberculosis' ('to perish')

te-pen 'to be bare, bald' ('to strip, peel')

to-p<sup>h</sup>ototon 'to rot, fall apart' ('to fall apart')

675.29 tal- 'of grasping, holding' (25) =MB PR

tal-qunun-pi 'to handle, fondle' ('to do')

to-smon 'to grasp together' ('to gather')

ta-siq 'to grasp firmly' ('to do firmly, tightly')

/tal-kuyuw'-Vn/ talkuyuw'en 'to grasp with the right hand  
(-kuyuw')

675.30 tani- 'a little, not very; please' (20) taniy-V +MB

The prefix tani- seems to be largely equivalent to ki- (q.v., 675.16), although it is used in constructions which are occasionally translated with the comparative in English.

/pa s-tani-šoyin/ paštanišoyin 'it is a little dark (in color)' ('to be dark, black')

tani-ʔowow 'to be whitish, a little white'

/pa s-tani-yux-wowon/ paštaniyuxwowon 'he is just a little taller (than his brother)'

With the imperative, tani- may mean 'please,' in the sense of softening a command or request.

/tani-ax-kš-it-ʔ/ taniyaxkšit 'please give it to me!'

/tani-uxniwān-ʔ/ taniʔuxniwān 'please hurry!'

Particles may occur with tani-.

tani-mi-šup 'a little further down'

tani-ʔal-apay 'a little above'

tani-mik '(to be) a little further'

Another construction with tani- is /ka ha-l-tani-č<sup>h</sup>o/ katanič<sup>h</sup>o 'it would be good if...(lit. what is a little good).'

/ka ha-l-tani-č<sup>h</sup>o p-aqili-č<sup>h</sup>owon/ katanič<sup>h</sup>o paqilič<sup>h</sup>owon  
'it would be good if you carried it on your head'

/ka ha-l-tani-č<sup>h</sup>o k-iy-su-uxni-wal-nañ/ katanič<sup>h</sup>o kisuxni-wañ  
'we had better go after him, follow him'

675.31 ti- 'of speaking, intention' (7) SR

ti-yep 'to tell, teach' ('to help')

ti-nu-naʔ 'to do on purpose' (/nu-naʔ/ 'to bring')



/ti-moloq-Vn/ timoloqin 'to talk of old times' (moloq  
( 'long ago' )

ti-sin 'to be shrewd, smart, knowledgeable' ('to do ably')

675.32 tišal- 'with a stroking motion' (4) =MB

tišo-č<sup>h</sup>o 'to flake flint' ('to be good, even')

tišol-kom-š 'to brush the hair' ('to stroke')

tisa-č<sup>h</sup>ī-č<sup>h</sup>ī 'to sharpen' ('to be sharp')

tiša-nanan 'to squirm, wiggle' ('to go')

675.33 tiši- 'with difficulty' (12) tišiy-V +MB

Often this prefix denotes not so much that the action expressed by the verb is done with difficulty, but that the subject of the verb is in the midst of difficulty or affliction. The subject occasionally has the Spanish gloss *pobrecito* 'poor little thing.'

tiši-pul-š 'to dig with difficulty'

tiši-ni-koyi 'to return with difficulty'

tiši-kitwon 'to go out with difficulty'

More idiomatic examples:

tiši-wil 'to play (as children do)' ('to be, exist')

ma-k-tiši-ʔalč<sup>h</sup>um 'my money (said by a poor person)'

675.34 ulu- 'unwillingly' (2) ulu-V +MB

There are only two examples of this prefix used in the sense of 'unwillingly,' but they are clearly segmentable.

ulu-nan 'to go unwillingly'

ulu-akti-naʔ 'to come unwillingly'

675.35 uni- 'of remaining, being left over, left behind'

(20) un-V +MB PR

uni-wil '[food] to be left uneaten' ('to be, exist')

un- $\dot{\text{li}}\dot{\text{k}}\dot{\text{i}}\dot{\text{n}}$  'to stay behind' ('to sit, reside')

s-uni-pakaš 'one is left' ('one')

/su-uni-č<sup>ho</sup>/ šunič<sup>ho</sup> 'to stay happy' ('to be good')

With a uniquely-occurring stem in a nominal form:

?uni-taxiš 'widow(er)' (/uni-tax-Vš/?)

675.36 uqni- 'of discontinuity' (10)

This prefix may be related to the verb stem uxni<sup>k</sup> 'to escape from.'

uxni-ni-koyi 'to change the mind, regret' ('to return')

uqni-nana<sup>n</sup> 'to turn the head' ('to go')

/su-uxni-lokin/ suxn<sup>i</sup>lokin 'to dissuade' ('to cut')

/su-uxni-niwon/ suxn<sup>i</sup>niwon 'to make someone stop what he  
he is doing' ('to leave, let go of')

The combination /su-uqni-wal/ suqniwal- refers to projection forward.

/su-uxni-wal-kitwon/ suxn<sup>i</sup>walkitwon 'to send out, put  
outside' ('to go out')

/su-uxni-wal-na<sup>n</sup>/ suxn<sup>i</sup>wana<sup>n</sup> 'to send somewhere' ('to go')

/su-uxni-wal-is-tik-Vn/ šuxniwališt<sup>ik</sup><sup>h</sup><sup>i</sup>n 'to send forward'

(/is-tik-Vn/ išt<sup>ik</sup><sup>h</sup><sup>i</sup>n 'to go forward')

675.37 uqšti- 'of throwing' (13) uqštil-V =MB

Most examples of uqšti- occur with the causative prefix su-.

/uxšti-mik-Vn/ uxšt<sup>i</sup>m<sup>i</sup>k<sup>i</sup>n 'to go far (mik) when thrown'

/su-uqšti-apít/ šuqštilapít 'to throw up onto' ('to go up')  
 /su-uxšti-kitwon/ šuxštikitwon 'to throw out' ('to go out')  
 /su-uxšti-mes/ suxstimes 'to throw over to' ('to cross')

675.38 uqwa- 'initial stage of an activity, especially  
 involving weaving' (12) uqwal-V =MB

uqwa-nan' 'to make' ('to go')

uqwa-siq 'to weave tightly' ('to do firmly, tightly')

uqwa-kimiy 'to do again, try again' ('to do again')

/su-uqwa-šuč/ šuqwašuč 'to begin to do' (cf. /aq-šuč/  
 'to head for, toward')

/s-uqwa-uti-aq-pey-us ha-s-ʔap ha-xuxaw/ suqwaluteqpeyus  
 ašap axuxaw 'he makes a string figure of coyote's  
 house' (/uti-aq-pey/ uteqpey 'to mimic, copy')

675.39 uxmal- 'of washing, cleaning' (6)

uxmal-paš 'to take an emetic; to drink much water to  
 induce vomiting' ('to vomit')

uxma-niwon 'to wash, rinse' ('to leave, let go of')

uxma-ni-koyi 'to wash again' (/ni-koyi/ 'to return')

uxma-tiq-š 'to wash the face' (-tix 'eye, face')

675.40 wati- 'apart; of disintegration' (30) wat-V +MB SR

A compound with wati- is usually equivalent to the  
 stem without wati-; wati- seems to classify the action as  
 involving disintegration of some sort.

s-wati-kot = s-kot 'it is broken'

s-wati-phatatan = s-phatatan 'it falls apart'

/s-(wati-)pluy ha-k-ʔišaq/ swatipluy ~ spluy akışaq

'my hip is out of joint'

wati-vey 'to lose (in a game)' ('to diminish')

/wati-tun-Vn/ watitunin 'to split in two' ('to be two')

An extension of the primary sense of wati- is that of cessation in a few compounds.

wati-č<sup>h</sup>o? 'to fall silent' ('to stop')

s-wati-kalsman 'silence falls' ('to be silent')

/s-wati-lokin-š ha-s-kalaš/ šwatilokič aškalaš 'his  
breathing stopped'

675.41 wati- 'of casual action' (6) watiy-V +MB

wati-seqneks 'to kick in passing'

k-su-wati-lokin 'I cut it in passing (I'll be back for  
it later)'

/wati-su-axsil-š/ watišaxšilš 'to go fishing now and then'

/no-k-wati-uxmal-tiq-š/ nokwatiyuxmatiqš 'I'll wash my  
face too'

675.42 wi- 'of, by blows, by hitting' (40) wi-V +MB SR

wi-čeq 'to split by blows'

wi-siq 'to pound tight' ('to do firmly, tightly')

wi-su-kitwon 'to knock out, dislodge with a blow'  
('to come out')

/s-wi-su-wala-tepet ha-tokoy/ swisuweletepet atokoy 'he  
is rolling a hoop (tokoy) along by hitting it (with  
a stick)'

/wi-c-pu-Vn/ wicpun 'to cut branches (-pu) off of a tree'

## 676 Verbal Force Prefixes

Some prefixes commonly occur with non-verbal stems, where the verbal force of the compound falls entirely on the prefix. These prefixes nearly all have semantically related forms which occur with verb stems as usual. As discussed in more detail in 618, non-verbal elements with verbal force prefixes may be nouns, pronouns, or even particles. Most of the nouns in these constructions are inalienably possessed, and are usually preceded by the third person possessive marker s- or its affricated equivalent c- (cf. 572.3).

## 676.01 aqni- 'to resemble N' (10)

s-aqni-wi 'it resembles a deer (wi)'

/s-aqni-ʔaxulis-waš/ šaqniʔaxulišwaš 'it resembled blood (ʔaxulis)'

/s-aqni-šup/ šaqnišup 'it is the color of (i.e. resembles) the earth (šup)'

With verb stems this prefix refers to mental activity, such as thinking and perception (cf. 675.04).

## 676.02 axi- 'to do so-and-so many times' (6)

s-axi-pakaš 'he does it once' ('one')

With verb stems axi- may have iterative force (cf. 672.04).

## 676.03 aqulu- 'to hold so-and-so many long thin objects together' (3)

aqulu-tun 'to hold two (e.g. sticks, fingers) together'

With verb stems this prefix is a classifier for long thin

objects (cf. 674.06).

676.04 lu- 'to grow into, branch into so-and-so many parts' (6)

s-lu-skumu 'it branches into four (skumu)'

lu-wahač 'to branch into many'

With verb stems lu- refers to growth (cf. 675.19).

676.05 ni- 'to divide into so-and-so many parts' (6)

ni-masix 'to divide into three parts [trans.]'

With verb stems ni- has transitive force (cf. 671.4).

676.06 maq- 'to be so-and-so many strands together' (3)

maq-tun '[rope, line] to be two-standed' ('to be two')

With verb stems maq-/max- is a classifier for action done by or with a line or rope (cf. 674.09).

676.07 naq- 'to be so-and-so many abreast' (4)

naq-skumu 'to be four abreast'

With verb stems naq- refers to an action somehow involving the body (cf. 674.11).

676.08 quti- 'to split up into so-and-so many parts' (5)

quti-tun 'to fork, divide into two' ('to be two')

quti-wahač 'to split up into many'

With verb stems quti- refers to sudden or momentaneous action (cf. 672.10).

676.09 su- 'to do as N does' (5)

su-xuxaw 'to play dead: to do as Coyote (xuxaw) does'

su-shamala 'to do as the Ineseño (shamala) do'

su-kanutu 'to do as Canuto (kanutu) did' (in a story of how Canuto lay down on the job and his fellow workers did likewise)

This sense of su- seems to have no relation to its usual causative force with verb stems (cf. 671.8).

676.10 su- 'to apply N' (7)

su-pîl 'to smear with pitch (-pîl)'

su-woqo 'to smear with tar (woqo)'

su-ʔaxpilił 'to sinew-back a bow' ('sinew, nerve')

This use of su- seems related to the usual causative force of su- with verb stems (cf. 671.8).

676.11 suya- 'to gather N' (2) =MB

suyo-mow 'to gather wild cane sugar (mow)'

/suya-poš/ šuyopoš 'to gather pinon nuts (poš)'

A related form is

/su-huxminaš/ šuhuxminaš 'to gather guata (huxminaš)'

This verbal force prefix has no corresponding form which occurs with verb stems.

676.12 tal- 'to hold so-and-so many together' (4)

tal-masix 'to hold three together'

With verb stems tal- refers to grasping action (cf. 675.29).

676.13 tip- 'to have much N, a large N' (20)

tip-tem 'to have big feet, broad feet' (-tem 'sole')

tip-aqliw 'to be talkative' (-aqliw 'word, voice')

/tip-aqšiw-ʔ/ tipaqšiw 'to have a paunch, a big belly'

(-ʔaqšiw 'belly, gut')

This prefix precedes only a few verb stems, all of which are open to analysis as inalienably possessed derivative forms with zero suffix (cf. 523.2).

tip-lu-qay 'to branch into many' (cf. /wi-qay/ 'to split down the middle [intrans.]')

tip-ackaw 'to make a big mistake; to sin'

tip-čiyuš 'to break much wind'

676.14 uqwa-/uxwa- 'to resemble N' (2)

s-uxwa-ʔalqap 'bedrock mortar: it resembles a mortar (ʔalqap)'

ʔal-uxwa-tukem 'lynx: one that resembles a mountain lion (tukem)'

A related verbal compound is

uqwa-ti-wil-pi 'to resemble' ('to be')

but otherwise uqwa- does not occur in this sense with verb stems; it refers to weaving or inceptive action (cf. 675.38).

676.15 uti- 'to hit N, to fall on N (a body part)' (5)

uti-ʔišaq 'to fall on the hip (-ʔišaq)'

uti-šipuk 'to bump the elbow (-šipuk)'

/uti-č-ʔapam/ utičapam 'to bump the knee (-ʔapam)'

With verb stems uti- may refer to a fall,

uti-pakas 'to fall unconscious' ('one')

uti-pšeʔ 'to fall down, collapse' ('to perish')

but in its primary sense uti- refers to sudden or inceptive action (cf. 672.12).



676.16 wal- 'to be so-and-so many in line' (4)

/wal-tun/ watun 'to be two in line; to be double'

With verb stems wal- has the force of adjacency or linear order (cf. 673.19).

676.17 waš- 'to be so-and-so- many thicknesses' (3)

was-masix 'to be folded triple'

With verb stems waš- refers to action or location on the ground or on a surface (cf. 674.21).

676.18 wi- 'to hit a blow on N (a body part)' (10)

/wi-s-noxš/ wišnoxš 'to hit on the nose (-noxš)'

/wi-s-ʔilīwīn/ wišilīwīn 'to hit on the shin (-ʔilīwīn)'

More idiomatic compounds:

/wi-s-tuʔ-Vn/ wištun 'to shake by the ear (-tuʔ)'

/wi-c-pu-Vn/ wicpun 'to cut branches (-pu) off a tree'

/wi-s-tīk/ wištīk 'to cut off the tip, top (-tīk)'

This sense of wi- is identical to its force with verb stems, where it refers to action done by blows (cf. 675.42).

#### 677 Unanalyzable Prefixes

Some of these prefixes are in common use, such as al- and aq-/ax-, but their semantic force cannot be determined from the compounds attested in the corpus.

677.01 al- (15) =MB PR

a-tiʔ 'to meet' (cf. /is-tiʔ/ ištīʔ 'to find')

ol-koy 'to go around' (cf. /ni-koyi/ 'to go back')

ol-poš<sup>h</sup>on = poš<sup>h</sup>on 'to sense, feel; be aware'

/al-puy-Vn/ alpuyan 'to be moist' (cf. /puy-Vn/ puyan

'to be dewy')

677.02 aq-/ax- (25) =MB PR

Although aq-/ax- has two distinct meanings, 'with the mouth' (cf. 674.03) and 'quickly' (cf. 672.03), it is very often unanalyzable; its domain may shade off into that of the unanalyzable initial formative aq-/ax- (q.v., 612.2).

aq-ulkuw 'to get up early' ('to be night')

eq-pey 'to resemble' ('to stick to')

aq-wayap 'to take revenge' ('to trade, exchange')

/ax-liyik-Vn/ axliyik<sup>h</sup>in 'to be half-full' ('middle')

677.03 aqs-/axs- (15) =MB PR

This prefix may have some relation to the unanalyzable initial formative aqs-/axs- (q.v., 612.2).

exš-wey 'to melt' ('to diminish')

/aqs-mow-Vn/ oqsmowon 'to savor' (/mow-Vn/ mowon 'to be sweet')

/aqs-pa<sup>1</sup>in-š/ aqšpa<sup>1</sup>ič = pa<sup>1</sup>in 'to flap, flop'

/uti-aqs-nowon/ utoqsnowon '[smoke, flame] to rise high' ('to stand')

677.04 aqti-/axti- (5)

aqti-kat 'to need' ('to remain')

axti-pak 'to inflate; to hiss' ('to pop')

aqti-koy 'to bask in the sun; be sheltered from the wind (cf. modern place name Saticoy = /s-aqti-koy/)' (cf. /al-koy/ olkoy 'to go around')

## 677.05 aqu- (12)

This prefix may be a form of aqul-/aqulu- 'of, with a long thin object' (cf. 674.06) with l-deletion, since most of the examples occur before dental-initial stems, but there is no apparent semantic similarity.

aqu-smon 'to gather together' ('to gather')

aqu-yep 'to scavenge, pick up discards' ('to help')

/aqu-puy-š/ aqupuš 'to pour into a cup' ('to be moist')

aqu-niwon 'to choose' (cf. /aqulu-ni-yiw/ 'to choose')

With uniquely-occurring stems:

aqu-tayin 'to be generous'

aqu-pepen 'to gather firewood'

aqu-nimak 'to hide oneself'

## 677.06 i- (7)

i-pa? 'to drive a stake' (cf. /ux-pa?/ 'to stake a hide')

i-pok 'to be bloated' ('to swell')

/i-lokin + R/ iloklokin 'to be striped' ('to cut')

i-khit 'to bring' ('to come near')

## 677.07 iwal- (8) =MB

iwel-peqen 'to rest, lie exhausted' ('to end')

/iwal-piš-Vč/ iwalsišič 'to be hollow, concave' ('bowl, basketry tray')

/iwal-is-ti?/ iwališti? 'to get what one deserves'

( is-ti?/ išti? 'to find')

/iwal-mopš-Vč/ iwolomopšič 'to foam up' ('to foam')

## 677.08 naqili- ~ naqulu- (4)

This prefix might possibly be composed of ni- 'transitive' plus aqulu- 'with a long thin object.' It shows the alternation of /q/ and /x/ as well as ablaut of /i/ and /u/.

naxili-na? 'to be loaded down' ('to go')

naqili-qen 'to use up' ('to disappear')

naxili-niwon 'to exceed by far' ('to leave, let go of')

/naqulu-kuti + R/ naqulukutkuti 'to aim' ('to see')

## 677.09 qupal- (3) =MB

su-qupa-tap 'to throw in through the door' ('to enter')

/qupal-<sup>1</sup>owow/ qupo<sup>1</sup>owow '[hair] to turn white (<sup>1</sup>owow)'

/s-iy-qupal-šoyin/ šiqupošoyin 'flies are in a dense crowd on it (it is black (šoyin) with flies)'

## 677.10 saq-/sax- (15) =MB

This prefix may be a combination of aq-/ax- with an idiomatic causative marker su-; saq-/sax- itself has no causative force.

saq-kumu? 'to weigh, measure' ('to measure')

saq-sumu? 'to taste' (-sumu? ?)

/sax-<sup>1</sup>eqen/ sexleqen 'to be useless, in vain' ('to extend beyond')

/sax-ni-al-ti<sup>1</sup>?-Vš/ šaxnatiš<sup>1</sup> 'apron' (/ni-al-ti<sup>1</sup>?-Vš/  
natiš<sup>1</sup> is a stem with many manufactured items)

## 677.11 šal- (5) =MB

šo-lox '[dog] to dig a hole under the door' ('to be perforated')

šal-uti-pey 'to shoot by mistake (/su-al-uti-pey/?)'  
 ('to stick to')

/su-šal-yoxon/ šušoloyoxon 'to shake up, agitate (a  
 liquid)' ('to whirl, be agitated') (/sus-al-yoxon/?)

677.12 takili- ~ takulu- (6)

This prefix shows the pil- ~ pili- alternation as well  
 as ablaut of /i/ and /u/.

/takil-ni-apay/ takinapay '[cloud] to be heaped up' ('to  
 be up, above')

/takil-al-ti<sup>?</sup>/ takilat<sup>?</sup> 'to have a splinter in one'  
 (/al-ti<sup>?</sup>/ at<sup>?</sup> 'to meet')

/takulu-max-keken/ takulumexkeken 'to smooth out'  
 ('to spread')

/takul-šoxš-Vn-Vš/ takulšoxšinaš 'a cord with down (-šoxš)  
 rolled in it'

677.13 uq-/ux- (6)

This prefix refers to fire or heat in a few compounds  
 (cf. 674.17), but not in these.

ux-pa<sup>?</sup> 'to stake out a hide' (cf. /i-pa<sup>?</sup>/ 'to drive a  
 stake')

uq-tixwan = tixwan 'to scratch'

/ux-s-sa/ uxsh<sup>a</sup> 'to lose a tooth (-sa)'

677.14 uqma- (3)

uqma-wil 'to suffer' ('to be, exist')

uqma-nanan<sup>1</sup> 'to look for something to do' ('to go')

uqma-ni-koyi<sup>1</sup> 'to go back outside' (/ni-koyi/ 'to go back')

## 677.15 uqwati-/uxwati- (6) uqwat-/uqwatil-V

The treatment of this prefix before vowels suggests that at least some of its occurrences might be composed of uqwa- plus ti-: the form with l-epenthesis shows a close boundary, while the form with i-deletion shows a remote boundary, characteristic of ti-.

- uqwatil-aqlil̥ '[sun] to come out' ('to be visible')  
 uxwati-wil̥ 'to be located, be in a place' ('to be, exist')  
 uqwati-lox '[wood] to be warped' ('to be perforated')

## 677.16 ušta- (6) uštal-V =MB

- uštal̥-ackaw 'to have bad luck' ('to err, make a mistake')  
 /ušta-aqša-Vn(-pi)/ uštalaqšan(pi) 'to cure, take care  
 of' ('to die, be ill')  
 ušte-pen 'to wipe off, fade out (/uš-ta-pen/?)' ('to  
 strip, peel')

This prefix might be interpreted as a combination of uš- plus tal-, both referring to action by the hand, in

- us-ta-sin̥ 'to clean well' ('to do ably')  
 /uš-tal-al-ti̥?/ uštalat̥i̥? 'to catch, receive' (/al-ti̥?/  
 at̥i̥? 'to meet')

## 677.17 wali- (10) wal-V +MB

- wali-šumaw̥iš̥ 'to be quiet, well-behaved' ('to be healthy')  
 /wali-k̥i̥?-k̥š̥/ walik̥ik̥š̥ 'to be one, alone, only' (/k̥i̥?-k̥š̥/  
 k̥ik̥š̥ 'oneself; alone (in compounds)')  
 /su-xul-wali-m̥ik̥-Vn/ suxuwalim̥ik̥in̥ 'to see far (m̥ik̥), to  
 see well at a distance'

This prefix is analyzable in two non-verbal compounds:

wali-šup 'last year (šup)'

wali-semana 'last week (Span. semana)'

677.18 yupi- (2)

yupi-kuyam = kuyam 'to sit on'

/k-yupi-ni-apay ha-šš/ kyupinapay ašš 'I scramble up  
the bank' ('to be up, above')

678 Inner Prefix Position Classes

Inner prefixes very frequently cooccur. Two main principles govern their relative ordering. First, the more productive prefixes tend to occur in the position classes furthest from the stem. Second, when the compound of a prefix plus verb stem is idiomatic, the prefix is likely to behave as a fused unit with the stem. The rough semantic classification of prefixes used in the prefix inventory on the preceding pages sheds little light on the actual facts of cooccurrence and mutual exclusivity.

A great many combinations of inner prefixes are attested, although this figure is minute compared to the mathematically possible permutations of prefixes taken two or three at a time. Compounds of three inner prefixes are common:

/maq-su-ni-apay/ maqsunapay 'to raise a line or rope;  
to string a bow' ('to be up, above')

/su-yul-axta-pok-Vč/ šuyuloxtopokič 'to cause to swell  
by heat' ('to swell')

/su-č<sup>1</sup>i-wal-naxil/ suč<sup>1</sup>iwanaxil 'to put upside down'  
('to be erect, vertical')

/uti-ali-max-keken/ utalimexkeken 'to raise the arms

from the sides' ('to spread')

/ti-ni-aq-pey/ tineqpey 'to fix, mend' ('to stick to')

Even four together are encountered:

/su-waš-ti-aq-pey/ šuwešteqpey 'to patch, splice' ('to stick to')

/su-uxni-wal-is-tik-Vn/ šuxniwalištik<sup>h</sup>in 'to send forward' (/is-tik-Vn/ ištik<sup>h</sup>in 'to go first')

/iwa-su-api-uš-qiwīn/ iwašapušqiwīn 'to bail for a while' ('[water] to subside')

In nearly all of the cases of three and four prefixes in a string, the last prefix or two is idiomatically fused with the verb stem. Longer sequences are easily imaginable, for example by adding a desiderative *sili-* or a causative *su-* or a momentaneous *iwa-*, but strings of more than four inner prefixes are not encountered in the corpus. In cases of multiple prefixes, a few highly productive prefixes are encountered repeatedly, such as the temporal prefixes *uti-*, *ali-*, and *iwa-*, and above all the causative *su-*. These more productive and easily segmentable prefixes occur in the position classes furthest from the stem, and the relative ordering of these remoter position classes is well established. It can be schematized as:

1	2	3	4	5	6	7	8	9
al-	iwa-	ya-	qili-	sili-	ni-	su-	uti-	ali-
al-		akti-			nu-			api-
?al-					wi-			
					maq-			



The first class immediately follows person-number prefixes (q.v., 650). The two prefixes *maq-* and *wi-* may be mutually exclusive with *ni-* and *nu-*, but this is not certain. On purely semantic grounds, it would seem that the three temporal prefixes *uti-*, *ali-*, and *api-* ought to be mutually exclusive, but the sequences /*uti-ali-*/ *utali-* and /*uti-api-*/ *utapi-* are both common. Included in these outermost position classes are most of the few prefixes which regularly shift CVC reduplication to the following morpheme (cf. 683), as in

/s-*ni-čeq* + R/ *šničeqčeq* 'he pounds it to pieces'  
 /pa k-*ʔal-kuti* + R/ *pa<sup>ʔ</sup>kakutkuti* 'I am just looking'

All of these inner prefixes in the furthest position classes from the verb stem are characterized by the remote morpheme boundary (q.v., 282), with the inexplicable exception of *maq-/max-* 'of, with a line or rope,' which is presumed to have a close boundary (q.v., 282) because low vowel harmony applies to it. Of all the inner prefixes which boundary phenomena show clearly to have either the close or remote morpheme boundary, somewhat less than two thirds show the close boundary.

The remaining inner prefixes which follow the outermost position classes schematized above, well over a hundred of them, cannot really be assigned any relative ordering, although it can be assumed on principle that prefixes characterized by the close boundary are closer to the stem than those with the remote boundary. There are scores of examples of these remaining prefixes in combination with one another, but little of a general nature can be said. For

example, given the sequences /aqta-pal-/ and /ti-pal-/, but with hardly a clue as to what classes these three fall into, little is revealed; the same is true of the sequences /naq-<sup>1</sup>ci-/ and /<sup>1</sup>ci-wal-/: how probable is the implied transitive relation /naq-<sup>1</sup>ci-wal-/? Unfortunately, the sum of such fragments of relative ordering is still fragmentary and chaotic.

Idiomatcity complicates any discussion of position classes. When the compound of a prefix and stem is in some sense idiomatic, having a meaning that is not the productive and transparent meanings of the components, then the prefix and stem are likely to act as fused units (cf. 290 on morphemization). The prefix does not behave in strict accordance with its usual position class. An example is the compound /akti-na<sup>?</sup>/ 'to come,' based on the stem na<sup>1</sup> - na<sup>?</sup> 'to go.' The prefix akti- 'motion toward the speaker or hearer' is normally one of the very first prefixes in the series of inner prefixes, but with the exception of

/akti-nu-na<sup>?</sup>/ 'to bring' (nu- 'concomitant action')

all other inner prefixes precede akti- in this compound.

/su-akti-na<sup>?</sup>/ saktina<sup>?</sup> 'to bring' (su- 'causative')

/apl-akti-na<sup>?</sup>/ apaktina<sup>?</sup> 'to come quickly'

/ulu-akti-na<sup>?</sup>/ 'to come unwillingly'

/uni-akti-na<sup>?</sup>/ uniyaktina<sup>?</sup> 'to come at night'

Other examples showing the idiomatic fusion of prefix and stem, with the consequent reversal of normal prefix ordering, include:

/su-axsil-š/ šaxšilš 'to fish: to cause many to bite'

/wati-su-axsil-š/ watišaxšilš 'to go fishing every  
now and then'

/ni-apay/ napay 'to get up, go up; ascend'

/wi-su-ni-apay/ wisunapay '[sea] to cast ashore'

/su-wayan/ 'to lift: to cause to hang'

/ali-su-wayan/ 'to hold aloft'

/ti-aq-pey/ teqpey 'to stick to'

/su-waš-ti-aq-pey/ šuwešteqpey 'to mend, fix'

The ever present possibility of idiomaticity is a prime factor in the difficulty of establishing precise position classes for the less common inner prefixes.

#### 680 Syntactic Reduplication of Verbs

Reduplication is a pervasive process with verb forms. It is both an inherent morphological feature of many stems (cf. 260 and 613 on lexical reduplication), as well as a highly productive inflectional device. Whereas syntactic reduplication in nouns is limited to CVC reduplication, four modes of reduplication apply to verbs, with CVC reduplication by far the most common. The phonological details of these are discussed under phonological rules 286.35 and 286.36. The behavior of inner prefixes vis-a-vis CVC reduplication is treated here, as are the frequent idiomatic specializations of simple versus reduplicated forms.

#### 681 The Force of Reduplication

Syntactically reduplicated verbs, unless they are used in some idiomatic sense, have a repetitive, distributive, intensive, or continuative force; it is often not directly

reflected in the gloss. A few examples illustrating the difference between simple and reduplicated forms are:

- /s-tal-memen/ štelmemen 'he touches it'  
 /s-tal-memen + R/ šteltelmemen 'he groping around'  
 /s-tal-memen-wun + R/ šteltelmemenuwun 'he is touching  
 them (one after another)'  
 /s-wati-kot ha-s-pu/ 'his arm is broken'  
 /s-wati-kot + R ha-k-su-kuy-ʔ/ swatikotkot aksukuy'  
 'my stone jar is broken to pieces'  
 /no-k-čimutelew/ 'I will take a bite, eat a bite'  
 /s-čimutelew + R/ sčimčimutelew 'he nibbles at it'

Other examples in which the semantic force of reduplication is clear are:

- /k-xul-ni-yiw + R/ kxunxuniyiw 'I am looking all over  
 for it'  
 /s-kili-tap/+ R/ skilkilitap 'he intrudes much, is very  
 intrusive'  
 /s-xal-kiyimin + R ha-kawayu/ sxalxalkiyimin akawayu  
 'the horse is bucking; it keeps twisting from side  
 to side'  
 /s-ni-wiy + R/ šniwiwyiw 'he is cutting notches on it'  
 /s-ikuk-š + R/ šikšikukš 'he is hewing (wood)'

## 682 Patterns of Reduplication

The patterns of reduplication used syntactically in verbal constructions are medial, bisyllabic, wuluwul, and CVC reduplication. These patterns are abbreviated in the derivations as R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, and R respectively.

## 682.1 Medial Reduplication

Medial reduplication involves the reduplication of a medial consonant, sometimes based on a CVC stem with a -Vn or -Vč augment (q.v., 612.1).

/k-mixɪn + R<sub>1</sub>/ kmixɪxɪn 'I am hungry'

/ʔini-p-siyɪʔ + R<sub>1</sub>/ ʔinipsiyiyɪʔ 'don't miss (the mark)!'

/s-phat-Vn + R<sub>1</sub>/ sphatatan 'it is falling apart' (cf.  
phat 'to fall apart')

## 682.2 Bisyllabic Reduplication

Bisyllabic reduplication is limited to verb stems of the form CVCVC, with the final consonant dropped in the initial reduplicated sequence. Reduplication ignores prefixes and falls on the stem.

/s-ali-kow-Vn + R<sub>2</sub>/ salikowokowon '[a bird] is soaring'

/s-quti-woyon-š + R<sub>2</sub>/ šqutiwoyowoyoč 'it is crooked'

/s-maq-su-wol-Vn + R<sub>2</sub>/ smaqsuwolowolon 'he is swinging  
a rope'

When the prefix ends in a consonant, it is reduplicated along with the stem-initial consonant.

/k-su-ax-woyon-š + R<sub>2</sub>/ kšoxwoy<sup>x</sup>woyoyoč 'I throw it very  
crookedly'

There are some cases in which a stem is never attested in its simple form, but appears with either medial or bisyllabic reduplication, glossed identically, as with the stem axk<sup>h</sup>ulun 'to make a racket' in

[axk<sup>h</sup>ululun] ~ [axk<sup>h</sup>uluxk<sup>h</sup>ulun]

and /max-telen/ '[rope] to drag on the ground' in

[mextelelen] ~ [mextelextelen]

### 682.3 wuluwul Reduplication

Syntactic examples of wuluwul reduplication are rather rare, usually based on a CVC stem which must either take wuluwul reduplication or some other augment or reduplication, such as wel- 'to shake' in

/s-wel + R<sub>3</sub>/ swelewel 'he sways his head and shoulders  
from side to side'

or wol- 'to turn, swing' in

/s-wol + R<sub>3</sub>/ swolowol 'he is dizzy'

Notice the alternative patterns of reduplication of wol- in

[smaqsuwolowolon] ~ [smaqsuwolowol] 'he is swinging a  
rope'

### 682.4 CVC Reduplication

With the exception of a few prefixes which regularly shift reduplication to the following morpheme (cf. 683), CVC reduplication falls on the first CVC sequence following person-number markers. This CVC sequence may belong to the stem,

/s-kitwon + R/ skitkitwon 'it is coming out'

or to a prefix,

/s-xili-wayan + R/ sxilxiliwayan 'it is floating'

or it may straddle morpheme boundaries.

/s-iy-eqwel + R/ siyeqyeqwel 'they are doing it'

/s-<sup>1</sup>ci-loq + R/ s<sup>1</sup>ci<sup>1</sup>ci<sup>1</sup>loq 'it is all full of holes'

It is not impossible for more than one mode of reduplication to apply simultaneously to the same form, no doubt further

intensifying it. The examples are of CVC and medial reduplication.

/k-mixín + R<sub>1</sub> + R/ kmixmixixín 'I am very hungry'

/ma-iy-al-aqi-mow-Vn + R<sub>1</sub> + R/ mayalaqlaqimowowon 'the fancy ones'

### 683 CVC Reduplication and Prefixes

With the great majority of inner prefixes, CVC reduplication falls on the first prefix immediately following person-number markers. There are several examples in the corpus of reduplication falling on successively remoter prefixes as they are added to the stem.

/s-max-keken + R/ smexmexkeken 'he is spreading it open'

/s-ali-max-keken + R/ salsalimexkeken 'he is stretching it out'

/s-uti-ali-max-keken + R/ sutsutalimexkeken 'he suddenly gives it a stretch'

However, a small number of prefixes are exempt from CVC reduplication; reduplication falls instead on the immediately following sequence, either on the stem

/k-wi-čeq + R/ kwičeqčeq 'I pound it to pieces'

/s-wati-lokin-š + R/ šwatiloklokič 'it falls apart'

/s-akti-kuti + R/ saktikutkuti 'he comes to watch'

/s-am-ti-lokin + R/ smtiloklokin 'they cut it off'

or on a following prefix.

/k-sili-pil-wayan + R/ ksilipiwayan 'I want to swing'

/s-ʔal-aqta-lokin-š + R/ šaloqloqtolokič 'he is a barber: he is one who cuts hair'

/s-iy-akti-aqu-smon + R/ siyaktaqtaqusmon 'they come  
to gather it'

Of around a dozen prefixes which shift CVC reduplication to a following morpheme, nearly all belong to the prefix position classes furthest from the stem, preceding the causative marker *su-* (cf. 678). These include *al-* 'subordinate,' *ʔal-* 'agentive, habitual,' *akti-* 'motion toward,' *yal-* 'motion away,' *ni-* 'transitive,' *nu-* 'concomitant,' *sili-* 'desiderative,' and *wi-* 'by blows.' A few other prefixes closer to the stem which shift reduplication are *ti-* 'off,' and *wati-* 'apart, of disintegration,' and perhaps *ašni-* 'with the feet' and *ušla-* 'with the hand.' With the exceptions of *ašni-* and *ušla-*, all of these prefixes are characterized by the remote morpheme boundary. But other prefixes with the remote boundary do take reduplication themselves, such as *su-* 'causative,' *uti-* 'inceptive, or *ali-* 'continuative.'

#### 684 Idiomatic Features of Syntactic Reduplication

Idiomaticity is involved in the syntactic reduplication of many stems and compounds: some obligatorily take reduplication, while others show unpredictable semantic differentiation between simplex and reduplicated forms.

As mentioned in the discussion of individual patterns of reduplication, there are some stems for which a simplex form can be posited, but which appear only in one reduplicated form or another. Examples include *axk<sup>h</sup>ulun* 'to make a racket' in



[saxk<sup>h</sup>ululun] ~ [saxk<sup>h</sup>uluxk<sup>h</sup>ulun] 'he is making a racket'  
 /maq-su-wol(-Vn)/ 'to swing a rope' in

[smaqsuwolowolon] ~ [smaqsuwolowol] 'he is swinging a  
 rope'

and /ali-kow-Vn/ 'to soar' in

[salikowokowon] ~ [salsalikowon] '[the condor] is soaring'

Other compounds obligatorily take CVC reduplication; a feature of such compounds is that reduplication falls on the stem even with prefixes which normally take reduplication themselves.

/il-wiy + R/ ilwiwywy '[water] to slosh, slop'

/iwal-k'it + R/ iwalk'itk'it 'to be cracked, chapped'

/s-pili-paq + R/ spillipaqpaq 'a travelling company splits  
 up (each going his own way)'

/nu-kuti + R/ nukutkuti 'to take aim (at)'

/naqulu-kuti + R/ naqulukutkuti 'to take aim (at)'

A few derivative forms following this pattern include

/puq'-Vč + R/ puqpuq'č 'to be scabby, mangey' (puq' 'yerba  
 del oso, a plant sp.')

two of which are simply based on noun stems with no derivational ending.

/s-atik + R/ satsatik 'he is alive' (-atik 'soul, spirit')

/s-ʔamin' + R/ samsamin' 'he is naked' (-ʔamin' 'body')

An example of a compound with obligatory reduplication not based on the CVC pattern is

/quti-woyon-š + R<sub>2</sub>/ qutiwoyowoyoč 'to be crooked, twisty'

There are many cases of semantic differentiation between simplex and reduplicated forms of the same stem or

compound of prefix plus stem, usually with CVC reduplication. Examples with unprefixated stems:

pow 'to bend, be bent'

/pow + R/ powpow 'to zigzag'

-pen 'to strip, peel' (e.g. /aqulu-c-pen/ 'to peel bark')

/s-pen + R ha-k-ʔapam/ spenpen akapam 'my knee is skinned'

axmuyun 'to sting, smart (with pain)'

/axmuyun + R<sub>2</sub>/ axmuyuxmuyun 'to be brave'

Examples with prefixed stems:

/ni-phat/ 'to take apart'

/ni-phat + R/ niphatphat 'to break to pieces'

/i-lokin/ 'to cut down a tree'

/i-lokin + R/ iloklokin 'to be striped'

/uti-lipin/ 'to cave in suddenly'

/s-uti-lipin + R/ sutiliplipin 'the ground is uneven'

## 690 Imperative Constructions

More than one construction is used with imperative force, some of which are presented piecemeal in the sections on prefixes and suffixes.

The normally inflected verb with a second person subject may be used with imperative force.

/p-niwon/ 'you put it down; put it down!'

/p-iy-ni-koyi/ pinikoyi 'you (pl.) come back; come back!'

Much more commonly the second person marker p- is dropped, although the dual and plural numbers are marked as usual. This construction (cf. 623.6) involves word-final

glottalization, and an automatic initial glottal stop with vowel-initial forms.

/tap-ʔ/ tap̚ 'come in!'

/axuti-wil-ʔ/ ʔaxutiwil̚ 'speak!'

/iš-ʔlɪkɪn-ʔ/ ʔiʃlɪkɪn̚ 'sit down (dual)!'

/iy-ti-yep-it-ʔ/ ʔitiyepit̚ 'tell (pl.) me!'

/uʃ-qen-pi-wun-ʔ/ ʔuʃqenpiwun̚ 'take them all!'

Word-final glottalization is realized as a glottalized /i/ after final vowels or glottal stop.

/kuti-ʔ/ kuti̚ 'look!'

/akti-naʔ/ ʔaktina̚ 'come!'

The negative imperative is expressed by two synonymous constructions. One is the negative ʔini- preceding person-number markers, equivalent to a regular non-imperative form.

/ʔini-p-niwon/ 'you do not let go; don't let go!'

/ʔini-p-iš-apit/ 'you (dual) do not go up; don't go up!'

/ʔini-p-iy-nañ/ ʔinipinañ 'you (pl.) do not go; don't go!'

The other is a negative imperative prefix al- following person-number markers.

/p-al-niwon/ paniwon 'don't let go!'

/p-iš-al-apit/ 'don't (dual) go up there!'

/p-iy-al-nañ/ piyanañ 'don't (pl.) go!'

With both negative imperative constructions, the second person marker p- is obligatory, and word-final glottalization does not occur.

A couple of suffixes peculiar to the imperative are the repetitive imperative marker -ʔay, corresponding to the

non-imperative form -iy,

/nowon-ʔay/ nowonay 'stand up again!'

/nu-naʔ-ʔay/ nuna<sup>1</sup>ay 'bring some more! bring it again!'

and the third person singular object marker -uw<sup>1</sup>, corresponding to the non-imperative form -us.

/yik-uw<sup>1</sup>/ 'give it to him!'

/ti-yep-uw<sup>1</sup>/ 'tell him!'

There are a few examples of imperative constructions with third person subjects.

/haʔá, expen-š-ʔ hi kay/ haʔá ʔexpeč ikay 'ah, let him sing!'

/ʔaxay-wun-ʔ ha s-iy-al-ax-sumuʔ/ ʔaxayu<sup>1</sup>wun<sup>1</sup> asiyalaxsumuʔ  
'let them suffer!'

## 700 Particles

Particles fall into several classes, including the connective particles *hi* and *ha*, bound particles straddling the boundary between particle and prefix, temporal, adverbial, locative, and prepositional particles, conjunctions and interjections. Particles could be defined strictly as monomorphemic sequences which do not fall into the major lexical categories of noun, pronoun, verb, or affix. But in actuality, many particles are clearly polymorphemic (e.g. /ʔal-apay/ 'up, above,' /ma-l-ʔinu-Vč/ ma<sup>l</sup>inuč 'really, truly'), and many have derivative forms (e.g. *mik* 'far, far away' and /mik-Vn/ mi<sup>k</sup>iñ 'to go far, be far away'). So the discussion of particles includes not only the monomorphemic particles per se, but also more complex constructions with functions similar to particles.

Morphologically, many of the monomorphemic particles show the CVC and CVCVC shape characteristic of noun and verb stems (cf. 511 and 611).

<i>mik</i>	'far away'	<i>moloq</i>	'long ago'
<i>moq</i>	'as, when'	<i>mutey</i>	'near, nearby'
<i>kim</i>	'then'	<i>kipiʔ</i>	'now, today'
<i>kič</i>	'like'	<i>numiš</i>	'after all'

But other particles commonly show final vowels,

<i>kača</i>	'because'	<i>hawala</i>	'only, alone'
<i>haku</i>	'if'	<i>wakapi</i>	'slowly, gently'

including many monosyllabic CV particles, particularly among the interjections; this canonical shape is extremely rare among verb stems and is not too common among nouns.

na	'and'	šu	'hey!'
pa	'just, merely'	he	'yes'
mê	'emphatic'	yu	'watch out!'

A certain amount of syntactic information is included in the discussion of individual particles. The position of the particle in the phrase is indicated: phrase-initial, preceding the verb, following the verb, or freely positioned in the phrase. If the particle when non-initial in the phrase is introduced by a connective particle, this is indicated before the major entry (e.g. [hi] mam' 'inside (of)'). When a verb following the particle takes a connective particle, this is indicated after the major entry (e.g. kîpî? 'now, today' --- hi + V). The connective particle is parenthesized if it is optional. Derivative forms of the particle are listed, such as /mîk-Vn/ mîkîñ 'to go far, be far away' under mîk 'far (away).'

#### 710 The Connective Particles hi and ha

The connective particles hi and ha are a ubiquitous feature of the Ineseño phrase. These particles introduce many major lexical items occurring non-initially in the phrase. In most environments one of these particles is obligatory to the exclusion of the other, although occasionally they seem to be used interchangeably. The particle ha is generally more common than hi. The origin of hi and ha is discussed in the following section, clarifying some of the apparent vagaries of their distribution as seen in later sections.

These particles are introduced by a late rule, after the application of any transformations which change word order. For example, a personal pronoun such as *no?* 'I' is introduced by *hi* when non-initial, as in

/no-k-eqwel hi no?/ 'I will do it: I will do it / I'

but if *no?* is transposed to precede the verb and comes to stand phrase-initial, it takes no connective particle.

/no? no-k-eqwel/ 'I will do it: I / I will do it'

#### 711 The Origin of *hi* and *ha*

The particle *hi* is not uniquely Ineseño; *hi* is the only connective particle in Barbareño, and it may be a feature of Proto-Chumash. But *ha* seems to be an Ineseño innovation. The Ineseño connective particle *ha* is clearly related to the nominal marker *ma-/ha-*, an article with nouns (cf. 540) and a marker of nominalization or relativization with verbs (cf. 521 and 662.1). Non-initial in the phrase, *ma-* is nearly always reduced to *ha-*.

/ma-čiči? hi s-kuti/ 'the child sees it'

/s-kuti ha-čiči?/ skut ačiči? 'the child sees it; he sees the child'

/kune? ha-iy-al-nañ/ kune? ayanañ 'who [are they] who are going?'

As a connective particle, *ha* is certainly used in far more environments than *ma-/ha-* as an article and nominalizer. But when the pattern of non-initial *ha-* being used for *ma-* became established, the use of of a non-initial *ha* may have spread into non-nominal environments on the model of *hi*,

the older connective particle. Eventually ha must have spread into much of the old domain of hi, largely replacing it except in specialized constructions. For example, hi is still used with proper nouns and personal pronouns, which would never have been marked with the article ma-/ha-.

As a purely typographical convention, ha- with a hyphen is used in nominal environments with nouns and nominalized verbs, while ha as an independent connective particle in non-nominal environments is written as a separate word. Phonologically, the two are identical.

#### 712 Connective Particles with Nouns

The use of connective particles with non-initial nouns is restricted to hi, which occurs primarily with proper nouns. Common nouns are nearly always preceded by the article ma-/ha- (q.v., 540), which probably gave rise to the connective particle ha; there is no contrast or cooccurrence of ha and ma-/ha- with nouns. However, there are environments in which common nouns do not take the article (cf. 543). In one of these environments, noun-noun and noun-particle predications (q.v., 813 and 814), the noun as second member of the predication may be introduced by hi.

/suku hi wič/ suk iwic 'what kind of bird [is it]?'

/kay hi s-kiyi? hi no?/ 'I am his (a dog's) master: he /  
his master / I'

It is possible for hi to occur with ma-/ha- in nominal predications in which hi introduces the second noun.

/suku hi ha-qsi/ suki aqsi 'what day [is it today]?'



/ma-k-al-su-ʔinu hi ma-qsi/ makasuʔinu imaqsi 'what I  
believe in [is] the sun'

Rarely, hi may precede common nouns which are inexplicably not marked with ma-/ha-, although these examples are outnumbered by parallel constructions with the usual ma-/ha-.

/ma-s-pu hi kuḥ/ 'the rabbit's paw'

/ma-s-čwin hi ʔoq<sup>h</sup>oš/ mašičwin iʔoq<sup>h</sup>oš 'her apron [of]  
otter [skin]'

Proper nouns and a handful of common nouns used in a locative or directional sense are introduced by hi.

/s-miš hi ponoya/ šmiš iponoya 'Ponoya cries'

/s-šlīkīn hi ʔasaka/ 'he lives [at] ʔasaka (Zaca)'

/s-ali-yšw-us hi muhuw/ 'he faces south, faces the beach'

### 713 Connective Particles with Pronouns

Personal, demonstrative, and relative-interrogative pronouns, as well as numerals and quantifiers, all follow different patterns with respect to the connective particles.

#### 713.1 Personal Pronouns

Personal pronouns are introduced by hi when non-initial.

/hawala hi kay/ hawal ikay 'only he'

/šhamala hi k-iy-kīʔ/ s<sup>h</sup>amala hikikīʔ 'we are Ineseno'

/ka k-hik-Vn hi noʔ/ kak<sup>h</sup>ikēn inoʔ 'I am using it'

Intensive forms of personal pronouns, with -kš suffixed (cf. 413), usually take no connective particle,

/s-eqwel kīʔ-kš/ seqwel kikš 'he does it himself'

but the particle is hi if one does occur.

/keʔ ha-ʔakay-Vš hi noʔ-kš k-hik/ keʔ aʔakayiš inokš k<sup>h</sup>ik

'I own this bed: this / bed / I myself / I own'

### 713.2 Demonstrative Pronouns

Demonstrative pronouns are divided into phrase-initial and non-initial forms (cf. 431). Of those which are non-initial, none is introduced by a connective particle except lo? 'that one yonder.'

/s-aq-pey-us hi lo?/ seqpeyus ilo? 'it resembles the  
one over there'

The probable explanation here is that lo? also doubles as a locative particle in the sense of 'over there,'

/s-eqwel hi lo?/ 'he made it over there'

since some locative expressions are introduced by hi (cf. 750 and 760 on locative and prepositional particles).

### 713.3 Relative-Interrogative Pronouns

Relative-interrogative pronouns are generally phrase-initial. They occur non-initially in embedded phrases, where they take no connective particle.

/no? ?ini-k-čamín taka? ku-k-nan'/ 'I don't know where  
I will go'

However, when kune? 'who' and suku 'what' are used nominally as 'someone' and 'something' respectively, they take ha, probably to be analyzed here as the article form ha-.

/s-kuti ha-suku/ skut asuku 'he sees something'

### 713.4 Numerals

Non-initial numerals are usually introduced by ha, never by hi,

/s-yux-wowon ha pakaš 'one is tall: is tall / one'

/s-kot ha 'iškoḿ ha-s-xolox/ 'two of his ribs are broken:  
is broken / two / his ribs'

although sometimes there is no connective particle.

/s-iy-ʔopxon masix ha-s-wop-ʔ + R/ siyopxon masix aswopwop  
'her three sons are orphaned: are orphaned / three /  
her sons'

With numerals, ha is not to be confused with the article  
ma-/ha-, since initial numerals do not take ma-.

/pakaš ha s-kina-kat/ 'one survived'

### 713.5 Quantifiers

Among the quantifiers, yilaʔ 'all' and wahač 'much,  
many' take no connective particle,

/koloʔ wahač ha-s-pey/ 'over there [are] many flowers'  
while the other quantifiers nox 'a great, large one' and  
kiceʔ and mučuʔ, both 'a small one,' usually take ha.

/k-yik-us ha kiceʔ/ 'I give it to the little one (i.e.  
to the baby)'

/kuneʔ ha mučuʔ/ 'who [is] the small(er) one?'

Initially, nox, but not kiceʔ and mučuʔ, may take ma-.

/ma-nox ha-štexex/ 'the big river'

An alternative analysis for nox here is that it is being  
used as a verb stem in a nominalized construction with ma-/  
ha-, as in /ma-l-nox/ manox 'the one that is great.'

### 714 Connective Particles hi and ha with Other Particles

The great majority of particles, when non-initial in  
the phrase, are not introduced by a connective particle.

A few particles, however, do take hi or ha when non-initial. These particles are indicated by a bracketed hi or ha preceding the main entry in the following discussion of particles. Thus, kípí? 'now, today' is listed as [hi] kípí?, implying the presence of hi with non-initial occurrences of kípí?.

/na hi kípí?/ níkípí? 'and now; and today'

A connective particle listed in parenthesis is optional.

### 715 Connective Particles with Verbs

The use of hi, ha, or no connective particle with verbs depends on the verb's position in the phrase and its relation to other verbs (e.g. co-ordinate or subordinate), and on what lexical items may precede the verb.

#### 715.1 No Connective Particle

The verb takes no connective particle hi or ha when it is preceded by outer prefixes (c.v., 660),

/wakapi no-k-mes/ 'I will cross slowly'

/syuxtun ku-k-nañ/ 'I will go to syuxtun'

/kay ?ini-s-wayan/ 'he is not flying'

by interjections, which do not count as part of the phrase,

/?ay, p-ašni-sil-it ha-k-?áí/ ?ay, pasnisilit akíí

'ow, you stepped on my foot!'

/yu, kú-p-kíl-elew/ 'hey, you might fall!'

and by most other particles.

/?iti? s-iy-álikín/ 'they live here: here / they live'

/moqe s-wil/ 'already there is [some]'

/mík s-xal-nowon/ mík sxonowon 'it flies far away'

## 715.2 Connective Particle with Another Particle

With some particles, when they occur in pre-verbal position, the following verb is introduced by a connective particle,

/kípiʔ hi s-uqma-wil/ 'now he is suffering'

/wakapi ha s-nañ/ wakap ašnañ 'he goes slowly'

sometimes by either hi or ha, as in the parallel examples:

/moloq ha p-akti-naʔ/ 'you came long ago'

/moloq hi k-kuyam-in/ moloq ik<sup>h</sup>uyamin 'I've been waiting  
for you a long time'

The possible occurrence of hi and ha between certain particles and verbs is noted in the discussion of individual particles.

## 715.3 Non-Initial Verbs with hi

In constructions similar to some of those in which ka (q.v., 723.5) and al- (q.v., 671.2) appear, hi marks a verb which is non-initial in the phrase because of a preceding noun phrase.

/noʔ hi k-su-ʔinu/ 'I believe in it'

/ʔoxtokow-ʔ hi s-axš-vey nañi/ ʔoxtokow išexšwey nañi  
'the ice melts too'

/mi-ʔilam hi s-wili-waş/ mułam išiwiliwaš 'it was at the  
arroyo: at arroyo / it was'

Occasionally hi and ka or hi and al- cooccur, although not as often as ka and al- together.

/katu hi k-al-aqšiyik hi noʔ/ 'I would like a cat: cat /  
I like / I'

/suku-<sup>?</sup> + R hi ka ha-l-akti-na<sup>?</sup>-it/ suksuku<sup>?</sup> ikalaktinalit  
 'I sense something: something comes to me'

The main verb following a relativized verb is usually introduced by hi, although ha and  $\emptyset$  occur here as well.

/ma-k-al-aqni-wil hi k-wala-tamay/ 'I forget what I was  
 thinking: what I think / I forget'

/wa-s-wil hi s-aqway/ 'when he shoots he hits it'

#### 715.4 Connective Particles in Subordinate Constructions

Both hi and ha occur with non-initial verbs in various subordinate constructions, where the main verbs precedes. Parallel examples include čam̃n + V 'to know how to...'

/k-čam̃n hi k-aqiw̃w̃n/ 'I know how to swim'

/s-čam̃n ha s-ti-sip/ ščam̃n astisip 'he knows how to  
 tell tales, stories'

and nithoy + V 'to be possible to...'

/ʔini-s-nithoy hi s-mik-Vn/ ʔinišnit<sup>hoy</sup> asmik̃n 'it can't  
 get far away: is not possible / it goes far'

/s-nithoy ha k-qil-hik/ šnithoy aq<sup>h</sup>ilik 'I can take care  
 of it: is possible / I take care'

#### 715.5 Connective Particles in Coordinate Constructions

The second verb of coordinate constructions (q.v., 881) is usually introduced by ha.

/s-kum ha s-wali-k̃<sup>?</sup>-k̃š/ skum ašwalik̃k̃š 'he comes alone:  
 he comes / he is alone'

/s-towič ha s-wala-tepet/ štowič asweletepet 'it is  
 turning quickly: it is fast / it turns'

/k-nañ ha k-axi-masix/ 'I have gone three times: I go /

I do it three times'  
more rarely by hi.

/s-ali-nowon hi s-kuti-wun + R/ salinowon iskutkutiwun

'he stands watching them: he stands / he watches them'

Likewise, the second verb of looser constructions lacking other conjunctions is introduced by ha, although it is possible that some of these cases may reflect a reduced form of the particle ha? 'in order to' (q.v., 770.02).

/no-k-i-pa? ha k-aqsik ha-k-waka/ 'I will drive a stake  
for tying (lit. I tie) my cow (Span. vaca)'

/k-kuti + R ha s-iy-uq-puy-š ha-?aqiwo/ k<sup>h</sup>utk<sup>h</sup>uti ašiyuqpuš  
a?aqiwo 'I am looking at the stars in a group: I am  
looking at / they are in a group / star'

/s-wati-vey ha s-tepu?/ swatiwey aštepu? 'he lost  
gambling: he loses / he gambles'

#### 715.6 Connective Particles with Interrogative Pronouns

Following relative-interrogative pronouns, the verb usually takes ha, but this varies with each form: kune?

'who,' tikali? 'how much, which one,' and /ti-s-neč/ tišneč  
'why' all take ha,

/kune? ha s-is-ti?/ kun ašišti? 'who found it?'

/tikali? ha s-axmay/ tikal asaxmay 'how much does he owe?'

/ti-s-neč ha ?ini-p-čamín/ tišneč a?nipčamín 'why don't  
you know?'

while s<sup>u</sup>ku and s<sup>u</sup>kiku 'what' take ha optionally.

/s<sup>u</sup>ku ~ s<sup>u</sup>kiku ha s-iy-tepu?/ s<sup>u</sup>k asitepu? ~ s<sup>u</sup>kik asitepu?  
'what (game) are they playing?'

More commonly, the verb is nominalized after *kune* 'who,' *tikali* 'which one, how many,' and *suku* 'what.'

/suku ha-iy-al-hik/ suk' ayalik 'what are they doing?:  
what [is] what they are going'

Of the other relative-interrogative pronouns, *ʔašnim* 'when' takes *hi* rather than *ha* or a nominalized verb form,

/ʔašnim hi p-nañ/ 'when do you go?'

*taka* 'where' takes *hi* if the verb is not nominalized,

/takaʔ hi p-nañ/ tak ipnañ 'where are you going?'

/takaʔ ha-l-wil/ tak awil 'where is it?: where [is] what  
it is'

and *taku* 'how' takes no connective particle at all.

/taku k-net-us/ 'how do I do it? what am I to do with him?'

## 720 Bound Particles

There is a small group of bound particles which seem to straddle the boundary between prefix and particle. Unlike most particles, which can often occur in any position in the phrase, bound particles must immediately precede some other lexical item: noun, verb, or particle. Harrington's practice was to write bound particles as a single unit with the following word, but this is not especially revealing. He often fused forms such as *moqe* 'already' and *tini* 'still' with a following verb, even though such sentences as

/moqe mutey' hi s-kum/ 'he is already getting close:  
already / close / he comes'

show these forms to be particles rather than prefixes.

If such items were analyzed as prefixes, they would



have to be treated as a special class of freely combining prefixes not restricted to any one lexical class, although it may be that in some cases the same form is a particle in some constructions and a prefix in others. Certain of the bound particles are distinguished from prefixes on phonological grounds, in that external sandhi may operate between a particle and a following word.

/pa ha-l-wil/ pawil 'just what there is'

/ka ha-l-akti-na?-it/ kalaktinalit 'what comes to me'

The bound particles discussed here are ?ini 'negative,' pa 'just, merely,' and ka 'predicative.' Other forms which might be analyzed as bound particles, but which are best treated elsewhere, include the connective particles hi and ha, and the conjunctions ha 'and,' na 'and,' kša 'and, as for,' and ?iya 'and, even.'

721 ?ini 'not'

The negative marker ?ini has a dual constituency as both a verbal prefix (q.v., 661), where nearly all other outer verbal prefixes precede it (cf. 664 on the ordering of outer prefixes), and as a particle which occurs freely with nouns, pronouns, and especially other particles.

Preceding nouns, ?ini occurs only in nominal predications lacking a finite verb (q.v., 810).

/?ini štapan/ '[it is] not [the reed called] štapan'

/moqe ?ini čiči?/ moqe?ničiči? 'she is no longer a child:  
already / not / child'

But usually a noun is negated with a construction involving

/ʔini-s-wil/ ʔinsil 'there is not: it does not exist.'

/ʔini-s-wil ha-l-am-aqliw-Vn/ ʔinsil alamaqliwɪn 'there  
is no food: does not exist / food'

/moqe s-iy-xal-nowon, ha kša hi kiwičɪʔ ʔini-s-wil/  
moqe sixonowon, hakši kiwičɪʔ ʔinsil 'they were  
already flying, but not Raccoon'

A special nominal construction is ʔini... na... 'neither...  
nor...;' na usually means 'and.'

/ʔini xutaš na svey/ '[it is] neither xutaš nor svey  
(two foodstuffs)'

Preceding pronouns, ʔini occurs in regular verbal  
predications; this construction emphasizes the pronoun,  
since the verb would ordinarily take ʔini as a prefix and  
the pronoun would be deleted.

/haku ʔini noʔ k-qil-hik/ hakuʔninoʔ qhilik 'if I had  
not cared for him: if / not / I / I care for'

/kača ʔini piʔ ka ha-p-hik/ kačaʔnipiʔ kapʰik 'because  
it's not yours: because / not / you / you who own'

A verbless predication with ʔini and a pronoun:

/ʔini noʔ ka k-ʔap/ ʔininoʔ kakap 'it is not my house:  
not / I / my house'

Constructions with ʔini plus some other particle are  
quite common, both in predications lacking a verb,

/ʔini ka mi:k/ '[it is] not far away'

/ʔini kič hi k-iy-kiʔ/ ʔinikič ikikiʔ [he is] not like  
us'

and in those in which a verb does appear. Here pa 'just,  
merely' precedes ʔini.

/ka k-eqwel-mu<sup>?</sup>/ kakeqwelumu<sup>?</sup> '[it is] my trade, work'

/ka s-ti-moloq-Vn-šaš hi puluy/ kaštimoloqič<sup>h</sup>aš ipuluy

'[it is] the myth of Crane-woman'

In emphasizing the possessor noun of a possessive noun phrase, the possessor noun is transposed to precede the possessed noun, which takes ka.

/k-<sup>?</sup>ap no<sup>?</sup>/ -> /no<sup>?</sup> ka k-<sup>?</sup>ap/ no<sup>?</sup> kakap 'it is my house:

I / my house'

### 723.2 Noun-Noun Predications with ka

The second member of a noun-noun predication (cf. 813) is usually introduced by ka.

/kay ka wo<sup>t</sup>/ 'he [is] a chief'

/ no<sup>?</sup> ka malik-Vš/ no<sup>?</sup> kamalikiš 'I [am] a first-born child'

/ma-slow<sup>?</sup> ha s-kalukš/ maslow<sup>?</sup> kaškalukš 'the eagle [is] his clan symbol'

Locative nominal predications take ka, too.

/<sup>?</sup>iti<sup>?</sup> ka s-iy-aqu-smon-š-mu<sup>?</sup>/ <sup>?</sup>iti<sup>?</sup> kašiyaqušmočmu<sup>?</sup>

'here [is] their gathering place'

### 723.3 Place Names with ka

The form ka frequently occurs in place names, many of which are simply nouns preceded by ka.

/ka swa<sup>?</sup>/ kaswa<sup>?</sup> 'village in Santa Barbara: where the tules (swa<sup>?</sup>) are'

/ka štayit/ kaštayit 'where the willows (štayit) are'

Other place names with ka are based on verbs.

/ka s-pax-mu<sup>?</sup>/ kaspaxmu<sup>?</sup> 'where the road turns: its

turning place'

/ka s-aqul-peqen/ kasaqunpeqen 'name of a village at the  
mouth of a canyon: where it ends'

#### 723.4 Emphatic Verbs with ka

Used with a verb, ka has an emphatic or declarative force, setting off main ideas in the discourse.

/ka s-kuy ha-su-yul-wil/ kaskuy asuyuwil 'he fetches  
fire'

/ka s-akti-na? ha-k-tata?, s-su-atik-it/ kasaktina? aktata?  
shatikit 'my uncle came; he revived me'

/s-su-uxsti-kuy ha-s-tokoy ka-s-nan/ shuxstikuy astokoy  
kashnan '[thunder] throws his hoop and goes'

/pi? ka ti-p-neč-waš/ 'you did it; it was your fault'

#### 723.5 Non-Initial Verbs with ka

A verb non-initial in the phrase may be introduced by ka, or else by the connective particle hi (q.v., 710), or occasionally by both. A good example shows two versions of the same sentence, first in the normal word order with the verb initial,

/s-su-yul-wil ha-qsi/ shuyuwil aqsi 'the sun heats it up:  
'causes to be hot / the sun'

and then with the verb non-initial.

/ma-qsi ka s-su-yul-wil/ maqsi kas<sup>h</sup>uyuwil

An example showing the cooccurrence of hi and ka is:

/kay-wun<sup>h</sup> hi ka s-iy-naqt<sup>h</sup>i-nan<sup>h</sup> hi ?al-apay/ kayuwun<sup>h</sup>  
ikasinaqtinan<sup>h</sup> i?alabay 'they withdraw high(er) up'

Occasionally the subordinating prefix al- (q.v., 671.2)

marks a non-initial verb.

/ma-nɪ ha s-iy-al-ati-kuy/ 'they face the fire'

The possible cooccurrence of al- with ka is discussed below.

### 723.6 Possible Nominalizations with ka

A frequent ambiguity with ka is that it may be elided with the non-initial ha- form of the nominalizing prefix ma-/ha-. Unlike the third person, first and second person nominalizations have no special nominal markers other than ma-/ha-, except for the optional occurrence of the subordinating prefix al-. So, a first or second person form with ka, if it does not contain the subordinating al-, may be analyzed either as ka directly preceding a regular verbal form or as ka elided with the ha- of a nominal form.

/noʔ ka k-eqwel/ noʔ kakeqwel 'I do it'

/noʔ ka ha-k-eqwel/ noʔ kakeqwel 'I do it: I [it is]  
who am doing it'

With al-, the nominal interpretation is obligatory.

/noʔ ka ha-k-al-qunun-pi/ noʔ kakaqunumpi 'I am doing  
it: I [it is] who am doing it'

But third person subjects, with their distinct verbal and nominalized forms (cf. 650), are not ambiguous. Examples of ka with clearly verbal forms:

/coyini ka s-otoyɪn/ 'another one is lying [there]'

/keɲi ha-ʔap hi ka s-eqwel-waš/ keɲ aʔap ikašeqwelewaš  
'he built this house: this / house / he built'

Nominalized examples:

/ka ha-l-aqwɪy-š heki/ kalaqwɪš eki 'that is worthless:

that which is worthless [is] that one'

/kay-wuñ ka ha-iš-al-aktina?/ kayuwuñ kašalaktina? 'they  
(dual) are coming: they [are] two who come'

### 723.7 Expressions of Time with ka

Some expressions of time occur with ka, all based on verb stems, similar to those with wa- (cf. 731).

/ka s-tapin/ kaštapin 'yesterday' ('to be late')

/ka s-ulkuw/ kasulkuw 'at night, tonight' ('to be night')

/ka s-hik̄in/ kaš<sup>h</sup>ik̄in 'early, in the morning' ('to be morning, to be early')

### 723.8 Other Constructions with ka

Other constructions with ka tend to be rather idiomatic. One such idiom is ka ?al- 'at most, at best,' as in

/ka ?al-mik-Vn ha s-kum-li hi ?alpinče?/ ka?amikiñ  
askumil i?alpinče? 'at the furthest [a buggy]  
reaches Santa Barbara [in a day's travel]'

Constructions with ka and other particles, which are fairly rare, include:

/ka hawala-pi/ kahawalapi 'that's all there is' (hawala  
'only, alone')

/ka ?iti? k-su-tap/ 'I put it in here: here / I put in'

/no-k-eqwel ka kič hi kay/ 'I will do as he [does]'

/?ini ka mik s-iwo-Vn ha-?a?/ ?inikamik siwon a?a? 'after  
a little way the crow calls out: not / far / sounds  
crow'

An unusual feature of the ordering of particles and outer prefixes is the relative ordering of ?ini and ka. Among

outer prefixes, the negative ?ini- is the second closest prefix to the person-number markers, while ka is analyzed as a prefix.

/ka no-?ini-k-nañ/ kano?niknañ 'I will not go'

But this relative ordering is reversed when only ?ini- and ka precede the verb; ?ini- here may be more identified with the bound particle ?ini. The presence of the subordinating prefix al- in these examples suggests that they are idiomatically nominalized forms, with segmentation uncertain.

/?ini ka ha-iy-al-hik' heki-mu-wuñ/ ?inikayahik' ekimuwuñ  
'they were not like this'

/?ini ka ha-p-al-ali-toxom'ê/ ?inikapalalitoxom'ê 'were  
you cold [in the night]?'

/?ini ka ha-k-al-ali-poš<sup>h</sup>on-Vn/ ?inikakalalipoš<sup>h</sup>onin  
'I was aware of nothing: I am not aware'

### 730 Temporal Particles

In addition to temporal particles per se, there are many more complex expressions of time. Nearly all of these temporal constructions precede the verb.

#### 730.1 /?ini-kim/ 'never' --- (ha) V

This form is a combination of the negative marker ?ini- and the conjunctive particle kim 'then;' it precedes the verb, which may take the connective particle ha.

/?ini-kim ha s-su-eqen-š/ ?inikim aš<sup>h</sup>eqeč 'it never  
comes off, never wears off'

/?ini-kim s-topšoqin/ ?inikim štopšoqin 'it never spoils'

730.2 [hi] kípí? 'now, today' --- hi V

This particle usually precedes the verb, which takes hi. Non-initial kípí? takes hi.

/kípí? ha-qsi/ 'today [is] the day'

/kípí? hi s-miš hi kay/ kípí? išmiš ikay 'now he weeps'

/s-exweyep-š hi kípí?/ šexweyepš ikípí? 'he is different  
(lit. changed) now'

730.3 moloq '(for) a long time; a long time ago'

--- hi/ha V

This particle precedes the verb.

/moloq hi k-kuyam-in/ moloq ik<sup>h</sup>uyamin 'I've been waiting  
for you for a long time'

/ti-s-neč ha ?ini moloq ha p-akti-na?/ tišneč a?nimoloq  
apaktina? 'why didn't you come earlier?: why / not /  
long ago / you come'

/moqe s-ni-apay ha-qsi, moloq/ moqe šnapay aqsi, moloq  
'the sun has been up for a long time already'

This particle, often reduplicated, is used in the sense of  
'old, ancient.'

/moloq he?/ 'this is old: old / this'

/moloq + R hi aqlíw/ molmoloq i?aqlíw [these are] old  
words'

/ma-moloq-? + R ha-ku/ mamolmoloq<sup>o</sup> aku 'the ancient people'

An inflected form hini-moloq, literally 'when [it was]  
a long time ago,' is used in the sense of 'formerly.'

/?al-włl-waš + R hi no? hini-moloq/ ?awılwılıwaš ino?

inimoloq 'I was formerly a hunter: one who hunted /



/hini-moloq hi s-č<sup>ho</sup> yila<sup>?</sup>-<sup>?</sup> + R/ hinimoloq išč<sup>ho</sup>  
yilyila<sup>?</sup> 'formerly it was a good tool'

A derivative of moloq is

/ti-moloq-Vn/ timoloqin 'to talk of old times'

/ti-moloq-Vn-šaš/ timoloqič<sup>haš</sup> 'myth, story'

730.4 moq ~ moqe 'already; immediate past'

These two particles are apparently related, although just how is unclear. Like most temporal particles, moqe precedes the verb, while moq follows. The pre-verbal form moqe is considerably more common than moq; the two cooccur in the same sentence in

/moqe k-nañ moq/ 'I have already gone'

Other examples:

/tikali<sup>?</sup> ha-l-kum-li moq/ tikal akumili moq 'what time  
is it?: how much / what it has gotten to / already'

/moqe s-ni-apay ha-qsi/ moqe šnapay aqsi 'the sun is  
already up; the sun has just come up'

/moqe ni-šot-Vš/ moqe nišotuš 'it is already skinned:  
already / something which has been skinned'

Both moq and moqe are used often to convey a sense of immediacy, often glossed with an English 'have V-en.'

/k-nañ moq/ = /k-uti-nañ/ 'I have just gone'

/s-qulu-wašlik ha<sup>?</sup> s-kuti moqe taka<sup>?</sup> k-iy-al-kum-li/  
šquluwašlik ha<sup>?</sup>skuti moqe taka<sup>?</sup> kiyakumili 'she  
peeks to see where we have gotten to: she peeks /  
so that / she sees / already / where / we get to'

730.5 /mu'cu? ha-l-yiti/ mu'cu? ayiti ~ mu'cu ayiti 'soon,  
after a little while' --- ha V

This idiomatic expression is based on mu'cu? 'a little one' plus a nominalized form of yiti 'to come' (cf. /ha-l-yiti/ hayiti 'more' among the adverbial particles), which might be literally translated as '[the interval] that comes [is] a small one.' The suffixed -li in the last example is inexplicable.

/mu'cu? ha-l-yiti ha s-kum-li/ mu'cu? ayiti askumili 'he  
will get there soon

/no-k-iwa-čho?, mu'cu? ha-l-yiti ha k-kimiy/ nokiwačho?,  
mu'cu ayiti ak<sup>h</sup>imiy 'I'll stop for a while; after a  
while I [will] start again'

/mu'cu?-li ha-l-yiti ha k-aqša-Vn/ mu'cu<sup>li</sup> ayiti akaqšan  
'soon I [will] die'

730.6 pačič? 'always, all the time'

This particle precedes the verb.

/pačič? ?al-ulu-aq-pey-us/ pačič? ?aluleqpeyus 'she always  
follows him: always / one who follows

/pačič? s-iy-šukuyoč ha-l-am-ašin/ pačič? šišukuyoč alamašin  
'they are always hoping for something to eat'

An idiomatic expression with pačič?:

/pačič? ha swayin-? + R/ pačič? aswaywayin 'every winter'  
= /yila? ha swayin-? + R/ yila? aswaywayin

730.7 tinaña? 'at last, finally' --- ha V

This particle precedes the verb.

/tinaña? ha s-al-is-tič?/ tinaña? ašalištič? 'at last she

found it'

/tinaṅa' ha k-niwon/ tinaṅ akniwon 'at last I let go'

/ka tinaṅa' ha s-oqtok/ katinaṅ asoqtok 'at last she  
got mad'

This particle is glossed 'until' in

/ka s-ʔuw, tinaṅa' ha s-aq-tiʔ/ kaʔuw, tinaṅ asaqtʔ  
'he ate until he got full'

### 730.8 tini 'still'

This particle precedes the verb.

/tini s-ʔihiy ha-qsi/ tini sihiy aqsi 'the sun is still  
high: still / is high (lit. tall) / sun'

/tini s-wil ha kiceʔ/ 'there is still a little: still /  
exists / a little bit'

/tini p-iš-ʔikimin/ tini pišikimin 'you two are still  
young: still / you (dual) are young'

## 731 Expressions of Time Other than Particles

Many concepts which are expressed as temporal adverbs in Indo-European languages take a verbal form in Chumash, either as petrified idioms (e.g. /ka s-ulkuw/ kasulkuw 'at night, last night') or as coordinate verbs (e.g. /k-naṅ ha k-axi-pakaš/ 'I went once: I go / I do it once').

### 731.1 Idiomatic Temporal Expressions

Petrified idiomatic forms are based on only a few verb stems, with various recurrent prefixes, including the stems hikin 'to be early, to be morning,'

/ka s-hikin/ kashikin 'early; in the morning; this

morning'

/wa-s-híkín/ washíkín 'tomorrow: when it is morning'

/wa-s-akti-híkín/ 'the day after tomorrow'

tapin 'to be late, to be evening'

/ka s-tapin/ kaštapin 'yesterday'

/ka s-tapin-iy/ kaštapiniy 'the day before yesterday'

and ulkuw 'to be late, to be night.'

/ka s-ulkuw/ kasulkuw 'at night; last night'

/ka s-ulkuw-iy/ kasulkuwiy 'the night before last'

/wa-s-ulkuw/ 'tonight: when it is night'

/wa-s-ulkuw-iwaš/ wašulkuwiwaš 'all night, all night long'

Similar expressions, a few of them based on noun stems,

include:

/s-ni-Vn/ šnihin 'at noon; it is noon'

/s-išaw-i/ šišawi 'in the summer; it is summer (lit.  
it is hot)'

/wa-swayin/ 'in the winter: when it is winter (swayin)'  
(swayin 'winter' may be a verbal form /s-wayin/)

/s-qap-Vn-Vn/ sqapunin '(it is) the most wintry month'  
(i.e. January - February, when willows and other  
trees first form leaf buds: s-qap 'leaf')

/wali-šup/ 'last year (šup)'

/wali-šup + R/ walwališup 'several years ago'

/wali-semana/ 'last week (Span. semana)'

Still more complex expressions of time include:

/wa-s-híkín ha s-axi-yi?/ was<sup>h</sup>íkín asaxiyi? 'tomorrow  
night'

/wa-s-híkín ha s-tapin/ was<sup>h</sup>íkín aštapin 'tomorrow night'

/wa-s-hik'in wa-moloq s-hik'in/ was<sup>h</sup>ik'in wamoloq s<sup>h</sup>ik'in  
 'tomorrow morning'

/wa-s-uti-wayan ha-qsi/ '(it is) mid-morning: when the  
 sun has gotten up'

/wa-s-wala-woyon ha-qsi/ waswolowoyon aqsi '(it is) mid-  
 afternoon: when the sun is tipping down'

/s-ali-tun ha-s-axi-yi'/ '(at) midnight: the night is  
 half gone'

Examples of these expressions in sentences:

/wa-s-hik'in ku-k-su-ipšel/ was<sup>h</sup>ik'in kukšipšel 'I will  
 cook it tomorrow: when it is morning / I will cook'

/s-yul-wil hi ka s-tapin/ syuwil ikaštapin 'it was hot  
 yesterday'

### 731.2 Temporal Expressions with Co-ordinate Verbs

Many verbs in co-ordinate constructions (q.v., 881)  
 are used with temporal force, including kimiy 'to do again'

/no-k-esqen-us ha-k-kimiy/ nokesqenus ak<sup>h</sup>imiy 'I will  
 ask him again: I will ask him / I do it again'

/s-uti-wil/ 'suddenly, sometimes: it is sudden,'

/s-uti-wil ha k-axunušpi/ 'suddenly I am afraid of it'

and various prefixes with numerals as stems (cf. 618).

/axi-masix/ 'to do three times'

/aqul-pakas/ 'to do one by one'

### 731.3 Nouns Used in a Temporal Sense

A few nouns referring to seasons and units of time are  
 used in a temporal sense (cf. the temporal noun phrase, 834).

/pakas' ha-qsi ha s-axi-kum/ 'he danced all day: one /

day / he dances'

/yiti-pakaš ha-s-axi-yi? ?ini-s-am-we?/ 'for five nights  
they did not sleep: five / night / they do not sleep'

/yila? ha-swayin-? + R ka ha-k-iy-al-aqta-qen/ yila?  
aswaywayin' kakiyaleqteqen 'we do it every winter:  
all / winters / what we pass'

#### 740 Adverbial Particles

This is a rather miscellaneous set of particles, including a few which are polymorphemic.

##### 740.01 /ha-l-yiti/ ayiti 'more'

This form is a nominalization of yiti 'to come;' examples are too few to state its distribution clearly.

/no-k-wal-tipot ha-l-yiti/ nokwaltipot ayiti 'I will  
untwist it some more.'

/masix-iy ha-l-yiti ha-k-ti-max-sipwal-mu?/ masixiy ayiti  
aktimaxsipwalumu? 'I have three more horizontals (to  
put on my house frame): three again / more / my hori-  
zontals'

The idiomatic form /muču? ha-l-yiti/ muču? ayiti 'soon,  
after a little while' embodies the same sense.

##### 740.02 hawala 'only, alone; except'

This particle is usually initial in its clause.

/hawala hi no? k-čamīn/ hawal ino? kčamīn 'only I know'

/hawala hi no? k-puñ/ hawal ino? kpuñ 'I grew up alone:  
alone / I / I grow up'

/?ini-s-iš-qili-kuti ha-ku, ma-s-iš-koko? hawala/

ʔinišišqilikut aku, mašiškokoʔ hawala 'they (dual)  
had never seen anyone but their father: they have not  
seen / person / their father / only, except'

This particle is used in some idiomatic senses, including

'as soon as' when it immediately precedes the verb,

/hawala hi s-kum ha p-ti-yep-it/ hawal iskum aptiyepit

'as soon as he comes, tell me!'

and also 'no more,' where it usually occurs with ka...-pi.

/s-wil-waš hiʔ moqe hawala/ šwiliwaš hiʔ moqe hawala

'there used to be some, but not any more: it existed  
but / already / no more'

/ka hawala-pi, s-uš-qen-š/ kahawalapi, šušqeč 'that's  
all there is, it is all gone'

740.03 hawlini 'anyway, in any case'

This particle may be based on hawala 'only.' It is  
initial in its clause.

/hawlini no-s-ax-al-tiʔ/ hawlini nosaxatiʔ 'he will pay  
for it anyway'

/hawlini s-is-tiʔ/ hawlini šištʔ 'she found it anyway'

/ʔini-k-čamɛn suku hi wič, hawlini hi wič/ ʔinikčamɛn  
suk iwic, hawlin iwic 'I don't know what kind of  
bird [it is, but] anyway [it's] a bird'

740.04 ʔinu 'true'

/ʔinu-ê/ ʔinuhê '[is it] true?'

/ʔinu hi khum/ ʔinu ikhum '[is it] true then?'

/hawala hi liyos hi ʔinu/ hawal iliyos iʔinu 'only God  
(Span. dios) [is] true'

Forms based on ?inu include two verbs

/su-?inu/ 'to believe: to act as if it were true'

/?inu-Vč/ ?inuč 'to be true, valid'

and forms used as particles, one based on /?inu-Vč/ ?inuč,

/ma-l-?inu-Vč/ ma<sup>1</sup>inuč 'truly, really'

and the other of uncertain derivation.

/pa ka ?inu/ ~ /paku ha ?inu/ paka?inu 'perhaps'

740.05 kakuwa? 'thus'

This particle seems to occur in a number of constructions, all idiomatic.

/he, kakuwa?/ 'yes, that's right: yes / thus'

/kakuwa? kew/ 'that is a pelican: thus / pelican'

/ma-s-ti-moloq-Vn-šaš hi puluy kakuwa? he?/ maštimo<sup>1</sup>loqič<sup>1</sup>haš  
ipuluy kakuwa? e? 'the myth of Crane-woman is as  
follows: her myth / Crane / thus / this'

The plural ending -wu<sup>1</sup> occurs with kakuwa? in

/kakuwa?-wu<sup>1</sup> hi p-iy-ki?/ kakuwawu<sup>1</sup> ipiki? 'you are the  
ones! thus / you (plural)'

740.06 ke? 'so, thus, in this way' --- (hi) V

The form ke? is in origin a demonstrative pronoun glossed 'this' (cf. 431), but it is often used in constructions in which it must be interpreted as 'so,' 'thus,' or 'in this way.' Both as a demonstrative and in its adverbial sense, ke? occurs initially in the phrase.

/ke? hi s-net-us/ 'he does like this'

/ke? k<sup>1</sup>ip<sup>1</sup>? no-k-iš-na<sup>1</sup>/ 'so now we (dual) will go'

/ke? s-eqen-i ha-k-?iwi?/ ke? seqeni akiwi? 'my companion



goes off this way: this way / goes off / my companion'  
 The particle pa 'just, merely' occurs with keʔ,

/pa keʔ s-ikmen + R/ pakeʔ siksikmen 'the surf comes in  
 just [like] this'

especially in an idiomatic form /pa keʔ ...ki-net-us ha V/  
 'it is nothing at all for...'

/pa keʔ k-ki-net-us ha k-su-wayan/ 'it is nothing at all  
 for me to lift it: just [like] this / I do a little /  
 I lift'

740.07 kila 'unanalyzable'

The particle kila is unanalyzable, occurring in two  
 sorts of constructions. One is imperative, either directly

/kila p-kuti heʔ/ 'look at this!'

or indirectly.

/kila piʔ/ 'now it's your turn: kila / you'

/ʔini ka ha-k-al-tani-ʔip-us kila s-iwa-expen-š/ ʔinika-  
 kataniʔipus kila šiwxepč 'if only I had told her  
 to sing!'

The other construction involves the particle kupa 'to see  
 who/what...'

/yiti-ʔay kila kupa ti-s-ʔup/ yitay kila kupa tišip  
 'come again to see what she says!'

/s-max-telen + R<sub>1</sub> kila kupa ʔini-s-iwa-tiʔ ha-ʔaʔililimuw/  
 smextelelen kila kupaʔnisiwatitʔ aʔaʔililimuw

'he trails a line to see if a fish will bite: he  
 drags a line / to see / it does not get caught / fish'

740.08 k<sup>h</sup>um' 'then, after all'

This particle immediately follows the main verb, usually in questions.

/takú s-am-net-us k<sup>h</sup>um' ha-k-ičtín'/ 'what have they done then to my child?'

/sukú ha-iy-al-hik k<sup>h</sup>um' ha s-iy-aqwíčín/ suk' ayalik k<sup>h</sup>um' asiyaqwíčín 'what's the matter with them then, that they're shouting?'

/ʔinu hi k<sup>h</sup>um'/ '[it's] true then!'

An idiomatic form based on k<sup>h</sup>um' is /k<sup>h</sup>um' ha ʔini pa/ k<sup>h</sup>umaʔnipa 'not at all,' which occurs anywhere in the phrase.

/k<sup>h</sup>um' ha ʔini pa noʔ ka k-čamín takaʔ ku-k-nań/ k<sup>h</sup>umaʔnipa noʔ kakčamín takaʔ kuknań 'I don't know at all where I'll go: not at all / I / I know / where / I will go'

/ʔini-k-aq-pey-us k<sup>h</sup>um' ha ʔini pa kiceʔ/ ʔinikeqpeyus k<sup>h</sup>umaʔnipakiceʔ 'I don't resemble him at all, not even a little'

740.09 [ha] k<sup>h</sup>us 'necessarily; must, should'

This particle follows the verb, and is usually glossed with 'must' or 'should.'

/p-nań ha k<sup>h</sup>us/ 'you should go'

/haku s-aqša-Vn-waš ha-k-qoʔ, hi k-miš-waš ha k<sup>h</sup>us/ haku šaqšanawaš aq<sup>h</sup>oʔ, ikmišwaš akus 'if my dog had died, I would have had to cry: if / died / my pet / I wept necessarily'

740.10 /ma-l-čhoʔ-muʔ/ mač<sup>h</sup>omuʔ 'at last, finally'

This construction, based on a nominalization of the

verb č<sup>h</sup>o? 'to stop, be finished,' with its inexplicable -mu? suffix, is cited only once. It is not attested in context.

740.11 /ma-l-ʔinu-Vč/ ma'linuč 'really, truly'

This form is based on a particle ʔinu 'true;' it precedes the verb.

/ma-l-ʔinu-Vč ha-s<sup>h</sup>amala/ ma'linuč as<sup>h</sup>amala 'truly [it is] Ineseno'

/ma-l-ʔinu-Vč ʔini-k-šaxšiš/ ma'linuč ʔinikšaxšiš 'truly I am cursed'

740.12 /ma-l-is-tik-Vn/ malištik<sup>h</sup>in 'first, at first'

This form is based on /is-tik-Vn/ ištik<sup>h</sup>in 'to precede, go first,' and it shows the usual reduction of ma- to ha- in non-initial position. Initially ka may precede it. A following verb takes ha.

/ka ha-l-is-tik-Vn ha s-aqmil ha-te, kım s-axšuta?/ kalištik<sup>h</sup>in asaqmil ate, kım šaxšuta? 'first he drinks tea (Span. té), then he has breakfast'

/k-su-waš-tun ha-l-is-tik-Vn/ kšuwaštun alištik<sup>h</sup>in 'I fold it first'

740.13 /ma-l-ulu-aq-pey/ maluleqpey 'finally, at last'

This form is based on /ulu-aq-pey/ uleqpey 'to follow,' and shows ha- in non-initial position. A following verb takes hi.

/ma-l-ulu-aq-pey hi s-nu-nañ/ maluleqpey išnunañ 'at last be brings it'

/k-kuti-wun-waš ha-l-ulu-aq-pey/ k<sup>h</sup>utiwunuwaš aluleqpey

'I saw them at last'

740.14 maqapa + ?ini 'perhaps'

The sequence maqapa + ?ini occurs only twice, both glossed as 'perhaps.' It is possible that the final syllable of maqapa could be identified with pa 'just, merely.'

/maqapa ?ini-s-wil-e/ maqapa?niswile 'perhaps it will  
be: perhaps / it is, exists'

/maqapa ?ini ?iti? ku-k-is-ti?/ maqapa?niti? kukišti?  
'perhaps I will find it here: perhaps / here / I  
will find'

740.15 mê 'emphatic'

This particle is attested in imperative constructions, where it follows the verb.

/ašîñ-? mē/ ?ašîñ mē 'eat!'

/suspun-it-? mē/ suspunít mē 'get it for me!'

/k-iy-nu-nañ mē/ kinunañ mē 'let's take it along!'

740.16 [hi/ha] nono? 'much, very much' --- hi V

This particle usually follows the verb.

/s-piliy ha nono?/ 'it is very sticky'

/k-chaqyañ hi nono?/ kichaqyañ inono? 'I am very  
much in love'

/nono? hi k-aq-pey-in/ nono? ikeqpeyin 'I resemble you  
a lot, very much'

740.17 numiš 'after all, anyway' --- ha V

This particle, which precedes the verb, is much less

common than the equivalent hawlīni.

/numiš ka s-nañ/ numiš kašnañ 'he goes anyway'

/numiš ha s-kum-us/ 'he overtook him after all'

740.18 paku 'immediately, right away' --- ha V

/paku kipi? k-iy-kum-li/ paku kipi? kikumili 'we get

there right now: right away / now / we arrive'

/paku no?-kš k-qil-hik/ paku nokš q<sup>h</sup>ilik 'I'll take care

of it right away: immediately / I myself / I care'

/paku ha s-īlikin ha s-ašin/ pak asīlikin ašašin 'he sits

right down to eat: right away / he sits / he eats'

740.19 (pa)šup 'maybe, perhaps'

This particle occurs initially with pa, and simply as šup elsewhere.

/pa šup no-s-aqša-Vn/ pašup nošaqšan = /no-s-aqša-Vn šup/

nošaqšan šup 'perhaps he will die'

/no? šup no-k-nañ/ 'maybe I'll go: I / maybe / I will go'

/ta-ple?-Vš šup heci?/ tepleš šup eči? 'maybe this is

tuberculosis: tuberculosis / perhaps / this'

740.20 wakapi 'slowly, softly; firmly' --- ha V

This particle precedes the verb.

/wakapi wakapi/ 'take it easy!'

/wakapi ha p-nañ/ wakap apnañ 'go slowly!'

/wakapi ha s-expen-š/ wakapi ašexpeč 'he sings softly'

/wakapi ha s-īlikin/ wakap asīlikin 'it is well-estab-

lished: it sits firmly'

/wakapi + R ha s-su-kitwon/ wakwakapi aš<sup>h</sup>ukitwon

'he takes it out very slowly, carefully'

#### 741 Adverbial Expressions Other than Particles

Just as with temporal expressions, a great many potentially adverbial concepts are expressed as either verbal prefixes,

/api-kitwon/ 'to come out quickly'

/kili-tap/ 'to come in suddenly'

/wayi-ni-apay/ wayinapay 'to climb up slowly'

or as verb stems,

-sɨq 'to do firmly, tightly'

/tal-sɨq/ tasiq 'to grasp firmly, tightly'

/uqwa-sɨq/ 'to weave tightly'

-ɕho 'to do well, evenly'

/kal-ɕho/ koɕho 'to cut evenly'

/lu-ɕho/ 'to grow straight, even'

or in coordinate verbal constructions (q.v., 881).

/wali-kɨʔ-kɕ/ walikɨkɕ 'to be alone'

/s-kum ha s-wali-kɨʔ-kɕ/ skum aɕwalikɨkɕ 'he comes  
alone: he comes / he is alone'

towiɕ 'to be fast, quick'

/s-towiɕ ha s-wala-tepet/ ɕtowiɕ asweletepet 'it is  
turning quickly: it is fast / it turns'

/su-wal-ɕho/ ɕuwoɕho 'to do well'

/k-su-wal-ɕho ha k-expen-ɕ/ kɕuwoɕho hakexpeɕ 'I sing  
well: I do it well / I sing'

Three apparently synonymous idiomatic verbal constructions are all glossed as '[it is] too much, excessive.'

/ʔini-s-axta-kumel-us/

/ʔini-s-axu-kumuʔ/

/ʔini-s-tikumemen/ ʔiništikumemen

These are used in an adverbial sense in coordinate verbal constructions.

/ʔini-s-axu-kumuʔ ha s-aq-tiʔ/ 'he eats too much: it is  
too much / he eats'

/s-icyulaʔ-it ʔini-s-tikumemen/ sicyulalit ʔiništikumemen  
'he teases me too much'

## 750 Locative Particles

Strictly locative particles, as opposed to those which might be called prepositional (q.v., 760), do not occur in close constituency with nouns. Two of these locative forms are demonstrative in origin.

### 750.1 [hi] ʔitiʔ 'here'

This particle usually precedes the verb.

/ʔitiʔ s-iy-ɪlɪkɪn/ 'they live here'

/ʔitiʔ s-il-kum ha s-ikmen/ 'the waves reach up to here:  
here / water reaches / waves, surf'

When non-initial in the phrase, ʔitiʔ plus the connective particle hi undergoes an irregular contraction /hi ʔitiʔ/ etiʔ.

/s-am-sinay-waš hi ʔitiʔ/ šamšinayawaš etiʔ 'they placed  
it here'

### 750.2 koloʔ 'yonder, over there' --- V

This form, which is phrase-initial, is basically an

inanimate demonstrative pronoun glossed 'that one far away.'

/koloʔ ha-l-ati-kuy/ kol alatikuy 'he heads over there:  
over there / what he heads for'

/koloʔ k-uti-otoyín/ koloʔ kutotoyín 'I fell sprawling  
over there'

An example of koloʔ in non-initial position due to noun  
transposition:

/ha kša ha-čičiʔ pa koloʔ s-naxalɨw/ hakšačičiʔ pakoloʔ  
šnaxalɨw 'and the child sat there in the corner:  
and / as for / child / just / there / is in a corner'

750.3 kweki 'yonder, over there' --- (hi) V

This form, like koloʔ above, is also basically a phrase-  
initial inanimate demonstrative, glossed 'that one (not far  
away)'; koloʔ and kweki in their locative senses are said  
to be equivalent.

/kweki hikwiñ-ʔ/ kweki hikwiñ 'put down the load there!'

/pa kweki hi s-iy-wayan + R/ pakweki hisiwaywayan 'they  
are hanging around right over there'

750.4 mɨk 'far, far away' --- (ha) V

/mɨk s-xal-nowon/ mɨk sxonowon 'it flies far away'

/mɨk k-iy-su-uxšti-kum-li/ mɨk kišuxštikumili 'we take  
[refuse] far away'

/ʔini ka mɨk ha s-iwo-Vn ha-ʔaʔ/ ʔinikamɨk asiwon aʔaʔ

'not far away a crow caws: not / far / sounds / crow'

An idiom with mɨk is

/mɨk ha k-su-oqtok-in/ mɨk aksoqtokin 'I cause you a lot  
of trouble: far / I make it difficult for you'



Derivatives of mīk are

/mīk + R/ mīkmīk 'coarse weave in basketry'

/mīk-Vn/ mīkīn' 'to go far, be far away'

/itax-mīk-Vn/ itaxmīkīn' 'to be heard far away'

/nu-mīk-Vn/ nīmīkīn' 'to take far away'

750.5 mutey' 'near by, close by' --- hi V

This particle precedes the verb.

/mutey' hi s-kum/ 'he is getting close'

/mutey' hi s-nowon + R/ mutey' iṣnownowon 'he is standing nearby'

It is used as a verb stem in

/ʔal-mutey'/ ʔamutey' 'neighbor; one who is nearby'

/naqti-mutey'/ 'to be close to'

760 Prepositional Particles

There is really no well developed class of prepositional particles, but rather a miscellaneous set of constructions which are used with locative and directional force, optionally in close constituency with a following noun. Of these, probably only weṇi 'beyond' is monomorphemic. A number of verb stems, especially in compounds with various prefixes, express locative and directional concepts of a prepositional nature.

760.01 [hi] /ʔal-apay/ 'up, above (N); on top (of N)'

This form is based on -apay 'to be up, above' plus the agentive prefix ʔal-. Used as a noun, it means 'sky,' and often 'in the sky.' It is also said (personal communication,

Russel Ruiz of Santa Barbara) to be the name of the cosmic serpent, the male principle, in the Chumash religion, just as šup 'earth' is the female principle.

/k-su-apit hi ʔal-apay/ ksapit iʔalapay 'I carry it up'

/mi-s-waskin hi ʔal-apay/ '[it is in the country] above  
miswaskin (a village)'

/ʔal-apay ha-wašla-lomol/ ʔalapay awošlolomol 'on top of  
the mountain range'

/ʔal-apay ha-ixtiʔ-Vš ha s-nanan/ ʔalapay aʔixtiš ašnanan  
'he is walking around on the roof: on top of / roof /  
he goes'

760.02 /-ali-xolox/ 'beside N, next to N

This expression is based on -xolox 'rib; house wall.'

It is a nominal form requiring a possessive prefix agreeing in number with the following noun.

/ma-s-ali-xolox ha-taʔ s-wil ha-mam/ 'the house is beside  
the oak tree: [at] its side / oak / is / house'

/ma-s-iy-ali-xolox ha-taʔ/ 'next to the oak trees'

760.03 [hi] /ʔal-al-mes/ ʔelemes 'across (from N)'

This form is based on the verb mes 'to cross over'; the occurrence of the initial ʔal- is parallel to /ʔal-apay/.

/ʔal-al-mes ha-sxamin/ ʔelemes asxamin 'across the ocean  
(i.e. on the islands)'

/ka-s-tepet hi ʔal-al-mes/ kaštepet iʔelemes [it is]  
across from kaštepet (a hill)'

/no-k-mes-li hi ʔal-al-mes ha-coyini ha-cyiw/ nokmesli  
iʔelemes acoyin acyiw 'I will cross over to the

other side (of the road)'

760.04 /ka ha-l-hik'-Vn/ kahiken 'with N, using N'

This construction is a nominalization of /hik'-Vn/ hiken 'to use,' and it usually agrees in number with the main verb. This form may precede or follow the noun with which it is in constituency.

/s-am-su-tow', ma-?uw-Vš ka ha-l-hik'-Vn/ smasutow', ma?uwaš  
kahiken 'they smoke him, using the stone pipe: they  
smoke / pipe / what one uses'

/ma-s-iy-pu ka ha-iy-al-hik'-Vn ha s-iy-axuti-wil/ masipu  
kayahiken asiyaxutiwil 'they are using sign language,  
they are talking with their hands: their hand / what  
they use / they speak'

760.05 [hi] mam' 'inside; in N, inside of N'

As a noun, mam' means 'house.' The phrase with hi mam' follows the verb.

/?ini-s-iy-we? hi mam'/ ?inisiwe? imam' 'they (i.e. dogs)  
do not sleep inside'

/kune? hi mam' ha-?ap/ 'who [is] inside the house?'

/s-am-su-woqo hi mam'/ 'they smear it with tar (woqo)  
inside'

760.06 [hi] /mi-koy'/ 'outside (of N)' --- ha V

This form contains the locative prefix mi- (q.v., 552), seen to be segmentable in the next particle discussed. The phrase with /mi-koy'/ may precede or follow the verb.

/no-k-su-yul-wil hi mi-koy'/ noksuyuwil imikoy' 'I will

build a fire outside'

/s-pil-nowon + R hi mi-koý/ spinpinowon imikoý '[a salmon]  
jumps out [of the water]'

/mi-koý ha-mup ha-l-wil/ mikoý amup awil 'it is outside  
of the cave: outside / cave / what it is'

760.07 [hi] /mi-pal-koý/ mipolkoý 'in back (of N)' --- hi V

The sequence pal- here is probably the same found in  
/mi-pal-lomol/ mipolomol 'mountain range.' The phrase with  
/mi-pal-koý/ mipolkoý may precede or follow the verb.

/mi-pal-koý hi s-otoýin/ mipolkoý isotoyin 'it is (lit.  
it lies) out in back: in back / it lies'

/s-nañ hi mi-pal-koý ha-mam/ šnañ imipolkoý amam 'he went  
behind the house'

760.08 [hi] /mi-šup/ 'down, under (N)' --- ha V

This form is based on šup 'land, earth,' and as a noun  
it means '(on) the ground.' It usually follows the verb.

/s-ílakš hi mi-šup/ šílakš imišup 'the ground is soft'

/mi-šup ha-k-al-nowon/ mišup akanowon 'I am standing  
below: below / I who stand'

/s-pil-kwey hi mi-šup/ 'it pours down (onto the ground)'

/mi-šup ha-xip ha-l-wil/ mišup axip awil 'it is under a  
rock: under / rock / what it is'

Verbal prefixes may occur with /mi-šup/ as a stem.

/xili-mi-šup/ 'to look down'

/su-mi-šup/ šumišup 'to lower [trans.]; to be sad'

/max-mi-šup/ '[line, rope] to come down'

760.10 weńi 'beyond (N), on the other side (of N)'

This particle usually precedes the verb; compare the nominal form /s-weńi-waš/ šweńiwaš 'half, side.'

/weńi s-wil ha-poń/ 'the tree is on the other side:  
on the other side / is / tree'

/weńi ha-wašla-lomol-? + R hi syuxtun/ weńi awošwošlolomol  
isyuxtun 'syuxtun is beyond the mountains: beyond /  
mountains / syuxtun'

/pa 'iti? weńi heči? ha-poń/ pa'iti? weńi eč apoń 'right  
here beyond this tree'

#### 761 Verb Stems with Prepositional Force

The verb stems which express locative and directional concepts may have equivalents among the prepositional particles, but not all do.

-apay 'to be up, over, above'

apıt 'to go up'

elew 'to go down, come down'

kitwon 'to go out, come out'

/liyik-Vn/ liyik<sup>h</sup>in 'to be in the middle (of)'

mes 'to go across, cross over'

/-mi-šup/ 'to go down'

/ni-koyi/ 'to go back'

/-al-koy/ -olkoy 'to go around, be around'

qotın 'to go down'

-smon 'to be together, get together'

tap 'to go in, come in'

tikay 'to be on top of'

tiyik 'to be inside (of)'

Examples of these stems with prefixes:

/s-xil-apit/ 'he looks up'

/s-aputi-smon/ '[water] flows together'

/s-pil-tap/ spitap 'he falls in, jumps in'

/s-su-tiyik/ shutiyik 'he puts it in(to something)'

## 770 Conjunctions

Included under conjunctions are particles which conjoin entire phrases (e.g. kača 'because') as well as those which conjoin either phrases or individual lexical items (e.g. na 'and').

### 770.01 ha 'and'

The particle ha 'and' introduces clauses rather than individual lexical items as na 'and' does. Initial in the phrase, ha is usually found with kša 'as for.'

/ha kipi? hi s-we?/ 'and now he is asleep'

/no-k-nañ ha k-kuti ha kim k-su-?inu/ noknañ akhuti hakim  
ksu?inu 'I will go to see and then I [will] believe'

/ka s-kuy ha-s-tuk ha s-su-tiyik ha-?o?/ kaskuy asietuk  
ashutiyik a?o?/ 'she takes her bowl and puts water  
into it'

/ka s-exen ha ka s-kimiy/ 'she ate it and did it again  
(i.e. ate another one)'

It is possible that some of the cases of ha identified with the non-initial connective particle ha in coordinate verbal constructions (q.v., 881) are to be analyzed as ha in the sense of 'and,' as in the last two examples above.

770.02 ha? 'so that, in order to'

The clause introduced by ha? follows the main verb.

/s-am-su-woqo, ha? ?ini-s-wax ha-?o?/ samsuwoqo ha?niswax  
a?o? 'they smear it with tar so that water will not  
leak out'

/p-uš-lešex ha? s-kolowoy/ 'you spread it (by hand) so  
that it [will] dry'

/towič-? ha? p-ašn/ towič a? pašn 'come quick so that  
you [can] eat'

It is possible that many of the cases recorded as the connective particle ha in coordinate verbal constructions (q.v., 881) are actually faulty hearings of ha?, since the notion 'in order to' must often be read into such constructions.

/no-k-i-pa? ha k-aqsik ha-k-waka/ 'I will drive a stake  
[so that] I tie my cow (Span. vaca)'

770.03 haku 'if'

This particle is less common than its prefixed equivalent wa- (q.v., 662.3); the two are sometimes given interchangeably.

/haku ~ wa- ?ini-s-wil ha ti-s-neč/ haku?nisil atišneč ~  
wa?insil atišneč 'if nothing happens to him...:  
if / does not exist / what happens'

/s-al-ax-sumu?-waš ha nono? haku ?ini no? k-qil-hik/  
šalaxšumuwaš anono? haku?nino? q<sup>h</sup>ilik 'he would have  
suffered much if I had not taken care of him: he  
suffered / much / if / not / I / I take care'

770.04 hiʔ ~ /hiʔ-kʰu/ hikʰu 'but'

The shorter of these forms is more common; the force of the final sequence -kʰu is not understood.

/s-uqštiku, hiʔ s-ʔal-su-woqo/ šuqštiku, hiʔ ʔasuwogo

'she is rich, but she is ill-tempered'

/ʔini-k-toxom-waš, hiʔ-kʰu wahač ha-step/ ʔiniktoxomowaš,

hikʰu wahač astep 'I wasn't cold, but [there were]

a lot a fleas'

770.05 /(pa)hawala hi/ hawali ~ pawali ~ pali 'as soon as'

This sequence is composed of pa 'just, merely' and hawala 'only' with the connective particle hi. It is attested once as /hawala hi/ hawali, a few times as /pa hawala hi/ pawali, but usually shows an irregular elision to [pali].

/hawala hi s-kum ha p-ti-yep-it/ hawal iskum aptiyepit

'as soon as he comes, you tell me!'

/pa hawala hi s-weʔ hi ponoja, ka s-kutaʔ hi ʔanucwaʔ/

palisweʔ iponoja, kaskutaʔ iʔanucwaʔ 'as soon as

Ponoja was asleep, ʔanucwaʔ got up'

770.06 ʔiya 'and, even'

This particle does not occur in the form ʔiya, but such an underlying form can be inferred by comparison with ʔiyapa 'even though, even if.' The particle ʔiya itself is attested only a few times, only with personal pronouns, where it is probably elided with the connective particle hi which introduces non-initial personal pronouns.

/ʔiya hi noʔ/ ʔiyinoʔ 'and I, even I'



/ʔiya hi kay-wuŋ/ ʔiyikayuwuŋ 'and they, even they'

770.07 ʔiyapa 'even if, even though'

The form ʔiyapa may contain pa 'just, merely,' since the initial sequence can be identified with ʔiya 'and, even.' The clause introduced by ʔiyapa may precede or follow the main clause.

/ʔiyapa ilēp-Vš no-k-yik-us, ʔini-s-aq<sup>h</sup>inaʔ-it/ ʔiyapa  
ʔilēpeš nokyikus, ʔinisaq<sup>h</sup>ina<sup>l</sup>it 'even though I am  
going to give him chia, he is not grateful to me'

/ʔini-s-axtak-it, ʔiyapa s-ti-yep-us/ 'it does not matter  
to me, even if he tells her'

770.08 kača 'because'

The clause introduced by kača may precede or follow the main verb.

/noʔ ka no-k-hik-Vn kača k-uxnīwīn/ noʔ kanok<sup>h</sup>iken kača  
kuxnīwīn 'I will use it because I am in a hurry'

/ʔini-p-su-kutaʔ, kača ʔini piʔ ka p-hik/ ʔinipsukutaʔ,  
kačaʔnipiʔ kap<sup>h</sup>ik 'don't pick it up, because it's  
not yours: do not pick up / because / not / you /  
you own'

/kača k-tikuy-šaši k-towič, ʔini-s-wil ʔal-ixip-it/ kača  
ktikuyšaši ktowič, ʔinsil ʔalixipit 'because I rely  
on being swift, no one beats me (in racing): because  
I rely / I am swift / exists not / one who beats me'

770.09 kani ~ kaniya 'no matter, however; whatever'

This particle occurs in two distinct constructions.

One is *kani*(pa) with relative-interrogative pronouns, where the form with *pa* occurs with all of the pronouns except *taka?* 'where' (cf. 429).

/kani pa kune?/ 'anyone; whoever, someone or other'

/kani pa suku/ 'anything; whatever, something or other'

/kani taka?/ 'anywhere; wherever, somewhere or other'

Example in a sentence:

/pa s-kuti kani pa suku/ 'he just sees something or other'

The other construction in the form *kaniya* (the exact phonological relation to *kani* is uncertain, but it may involve the connective particle *ha* plus *y*-epenthesis) occurs as a conjunction 'no matter...' The yes-or-no question marker *-ê* seems to be involved in this construction.

/kaniya taka? p-nañ, no-k-uliš-in-ê/ 'no matter where you go, I will get (lit. grasp) you'

/kaniya kupa k-nañ-ê, no-s-am-axla-ti?-it/ kaniya kupa knañê, nosamaxlatilit 'no matter how I go, they will chase me away'

770.10 *kič* 'like, as, as if'

This particle is used in several different constructions. Some are nominal, such as verbless predications with *kič* and a single noun,

/ʔini kič heki-mu-wuñ/ ʔinikič ekimuwuñ '[they are] not like that: not / like / those'

or two nouns either in a noun-noun predications

/ma-ʔanaxiʔ-ʔ + R kič heki-waš/ maʔanaxixiʔ kič ekiwaš  
'the old people (lit. old men) [were] like that'

or in a verbal predication.

/k-sili-wil ha-katu kič he<sup>1</sup>ni ha-k-katu/ ksiliwil akatu

kič e<sup>1</sup>n ak<sup>h</sup>atu 'I want a cat like this cat of mine'

Other constructions with kič may link a noun and verb, where kič may be introduced by the connective particle ha,

/ʔini-k-qili-kuti ha kič he<sup>1</sup>ki/ ʔiniq<sup>h</sup>ilikut akič e<sup>1</sup>ki

'I have never seen [anything] like that'

/ka s-aqmil pa kič ha s-is-ʔaxulapšan/ kasaqmil pakič

ašišaxulapšan 'he drinks it just as [if it were]

his medicine'

or kič may introduce a truncated sentence.

/no-k-eqwel kič hi kay/ 'I will do as he [does]'

/ma-čiči<sup>1</sup>ʔ hi s-kilamu pa kič ha-s-kokoʔ/ 'the child is

crazy just like his father [is]'

More rarely, kič may conjoin two verbs.

/s-su-neč-iy kič ha s-neč-waš + R/ š<sup>h</sup>unečiy kič ašnečnečwaš

'he made it (lit. causes it to be like again) like

it had been [before]'

770.11 kša 'as for'

The particle kša has a topicalizing force. It is used only initially in the phrase, introducing nouns and pronouns which have been transposed into preverbal position.

/kša ha-ʔeneq hi mo<sup>1</sup>qe s-kuti/ kšaʔeneq imo<sup>1</sup>qe skuti

'as for the woman, she has already seen it'

/kša hi xuxaw<sup>1</sup> pa s-kuti + R/ kšixuxaw<sup>1</sup> paskutkuti 'as for

Coyote, he is just watching'

The particle is seen unelided in

/kša ha-huču/ kša ahuču 'as for the dog'

More frequently than either occurs alone, ha 'and' and kša together introduce the phrase.

/ha kša hi pi? tikali?/ hakšipi? tikali? 'and as for you, how [are you]?'

/s-iy-nañ ha-píwí?, ha kša hi pi? ka p-uš-kik-š/ sinan apíwí?, hakšipi? kapuškikš 'the mosquitoes go [away], and you are scratching yourself'

770.12 kupa 'to see if..., to see who/what...'

This particle usually precedes relative-interrogative pronouns

/k-sili-k<sup>h</sup>it ha kupa ?apšiti?/ 'I count to see how many [there are]'

/no-k-iš-alpat, kila kupa kune? ha-l-towič/ nokišalpat kila kupa kun atowič 'let us (dual) run, to see who is faster: to see who [is] the fast one'

or the relative prefix ti- 'what.'

/k-esqen-us kupa ti-s-?ip/ kesqenus kupa tišip 'I ask him to see what he says'

But it occurs in other constructions as well, where it is glossed 'to see if...'

/no-k-kuti ha kupa s-pil-wayan/ nok<sup>h</sup>ut akupa spiwayan 'I will look to see if it is moving'

An idiomatic instance of kupa is

/no-?ini-k-tipay ha kupa pakas'/ no?niktipay akupa pakas 'I won't dig up even one'

## 770.13 moq 'as, when'

Clauses introduced by moq are less common than those with the relativizing prefixes wa- and hini- (q.v., 662.3 and 662.4). The clause with moq usually precedes the main verb.

/moq s-yul-wil 'ini-s-sapatu-Vč/ moq syuwil 'iniš<sup>h</sup>apatuč  
'when it is hot, he doesn't wear shoes (Span. zapato)'

/moq pa s-uti-pše<sup>?</sup> s-xal-nowon hi kiškiš<sup>š</sup>/ moq pašutipše<sup>?</sup>  
sxonowon ikiškiš<sup>š</sup> 'just as [the tree] was falling,  
kiškiš<sup>š</sup> flew away: as / just / it falls / flies / k.'

/k-takali-mi<sup>?</sup>-š moq k-aqta-qen/ ktakalimiš moq keqteqen  
'I get frightened when I pass by [there]'

## 770.14 na 'and'

This particle conjoins both nouns and verbs

/tip na 'o<sup>?</sup>/ 'salt and water'

/s-am-ph<sup>i?</sup> na s-am-tach<sup>h</sup>an/ 'they are playing walnut dice  
and tach<sup>h</sup>an (a game somewhat like pick-up sticks)'

as well as phrases.

/ka s-yal-wil ha-'ihiy-<sup>?</sup> na s-yiti/ kasyawil a'ihiy<sup>š</sup>  
nasyiti 'the man went hunting and returned: goes  
to hunt / man / and / comes'

Occasionally na connects the sentences of a discourse, but here it is not as common as ka.

The sequence /na hi/ is contracted to [ni],

/no<sup>?</sup> na hi kay/ no<sup>?</sup> nikay 'he and I: I and he'

/ka s-tapin na hi kipi<sup>?</sup>/ kaštapin nikipi<sup>?</sup> 'yesterday  
and today'

and on the basis of a nominalization with ma-/ha-,

/na ha-l-ʔikimin/ nalikimin 'and the new one'

it may be that na is elided with the non-initial ha- form of the article with nouns.

A negative construction with ʔini is ʔini... na...

'neither... nor..., ' as in

/ʔini swey na xutaš/ 'neither swey nor xutaš (foodstuffs)'

770.15 na<sup>ku</sup> 'or'

Nouns and pronouns conjoined with na<sup>ku</sup> often have the yes-or-no question marker -ê suffixed to the first member of the conjunction.

/noʔ-ê na<sup>ku</sup> piʔ/ 'me or you?'

/sukiku ha-l-qotin, ʔeneq-ê na<sup>ku</sup> ʔihiy-ʔ/ sukiku haqotin,

ʔeneqê na<sup>ku</sup> ʔihiy 'what was born, girl or boy?'

/malawa na<sup>ku</sup> čiyaw ha-ʔap/ 'eight or ten houses'

This particle is sometimes amplified with /hi khum/ 'then,' especially when it conjoins verb phrases.

/keni hi khum na<sup>ku</sup> ma-čoyini/ 'this one or the other'

/s-esqen-it k-nañ hi khum na<sup>ku</sup> no-ʔini-k-nañ/ sesqenit

knañ ikhum na<sup>ku</sup> noʔniknañ 'he asks me if I will go

or not: he asks me / I go / then / or / I will not go'

770.16 nañi 'too, also'

This particle precedes pronouns, but is otherwise phrase-final.

/ma-ʔuštaxax hi moč-muʔ nañi/ 'white clay [is a kind of]

paint too'

/ʔoxtokow-ʔ hi s-axš-vey nañi/ ʔoxtokow išexšwey nañi

'the ice melts too'

/no-k-iy-nañ nañi hi k-iy-kɨʔ/ nokinañ nañ ikikiʔ 'we  
will go too: we go / also we'

### 780 Interjections

Interjections are loosely appended to the phrase, usually before, but sometimes after. Of the few interjections longer than a single syllable, most have a stress marked as other than penultimate.

ʔa 'ah, oh'

/ʔa, k-su-manišš/ ʔa, kšumanišš 'ah, I miss it!'

ʔálala 'men's exclamation of surprize, distress' (cf.

Luiseno ʔalalá. 'exclamation of praise, pleasure')

ʔaw 'cry of fear, distress; the cry of a bear'

ʔay 'exclamation of pain, distress'

/ʔay, k-mati-hikwɨn/ 'ah, I'm [so] tired (from carrying  
my load)'

ʔáyaya 'women's exclamation of surprize, distress'

/s-wati-kót + R ha-k-su-kuy-ʔ, ʔáyaya/ swatikótkot

aksukuy, ʔáyaya 'my pot broke to pieces, alas'

In one manuscript is the cryptic notation that the soul of one recently dead is in ʔáyaya; there is the expression /s-uti-pliwɨwɨn ʔáyaya/ '[the soul] flounders (as in soft mud)'; the line /ʔáyaya ʔáyaya ika/ occurs unglossed in a mourning song.

ʔayayaya 'onomatopoeia for a rustling sound'

chiʔí 'exclamation used to quiet a child: hush!'

/chiʔí, niwon-ʔ heki/ chiʔí, niwon eki 'hush, stop that'

čĭ 'shoo!'

/čĭ, uti-nañ-?/ čĭ, ?utinañ 'shoo, get going!'

ha 'used when one has not heard what was said'

/ha, ti-s-?ip/ ha, tišip 'eh, what did he say?'

ha?á 'exclamation or surprize, pleasure'

/ha?á, expen-it-?/ ha?á, ?expenit 'ah, sing for me!'

haku 'a greeting: hello'

/haku čantĭk/ 'hello friend!'

hámama 'so much, so many!'

/hámama, wahač ha-ku/ 'oh, so many people!'

he 'yes'

/he, kakuwa?/ 'yes, that's it!'

hi ~ yi 'exclamation or fright'

ho 'acknowledgement of information'

/ho, s-?ip/ ho, šip 'oh [I see], he said'

/?ini-s-wil/ ?insil 'no (lit. it does not exist)'

?ĭ? 'sound of a groan'

/s-ikiniy ?ĭ? ?ĭ?/ 'he is groaning ?ĭ? ?ĭ?'

k<sup>h</sup>uhu - hik<sup>h</sup>u - hik<sup>h</sup>uhu 'who knows?'

/k<sup>h</sup>uhu, k-tamay/ 'who knows? I've forgotten'

pu 'sound of puffing, blowing'

/s-aq-pu-nVš pu/ šaqpunaš pu 'he makes a puffing noise'

šu 'exclamation to call a person's attention: hey!'

/šu, towič-?/ šu, towič 'hey, come quick!'

?ut 'exclamation used when one burns oneself'

yi 'exclamation of fright'

yu 'exclamation of warning: hey, watch out!'

/yu, ku-p-kil-elew/ 'hey, you might fall down!'



## 790 Relative Ordering of Particles

Combinations of two or more particles in a single phrase are common, and it is possible to make some generalizations concerning their relative ordering.

Certain particles when non-initial in the phrase are introduced by one of the connective particles *hi* and *ha*, usually *hi*, as noted in the discussion of individual particles above.

/s-pil-kwey hi mi-šup/ 'it pours down (onto the ground)'

/s-exweyep-š hi kɪpɪʔ/ šexweyepš ikɪpɪʔ 'it is changed now, different now'

The relative ordering of the bound particles is

pa - ʔini - ka

One or two of these bound particles may precede lexical items of any class: nouns, verbs, and particles. Examples of the three possible combinations of two bound particles:

/pa ʔini nonoʔ s-yux-wowon/ paʔninonoʔ syuxwowon 'he is not so tall: just / not / very much / he is tall'

/pa ka s-kuti + R/ pakaskutkuti 'he just watches'

/ʔini ka mɪk/ ʔinikamɪk '[it is] not far away'

There are no attested examples of all three bound particles cooccurring, although the sequence \*/pa ʔini ka/ \*paʔnika sounds intuitively possible.

Initially in the phrase, conjunctions are the first element of any series of particles,

/kača nonoʔ k-uxniwɪn/ 'because I'm very much in a hurry:  
because / very much / I hurry'

unless the conjunction itself is modified by a bound parti-

cle, usually pa 'just, merely.'

/pa kša hi k-iy-ki?/ pakšikiki? 'as for us: just / as  
for / us'

As for the remaining classes of particles, relatively few cooccur, although some of these few combinations are attested fairly often, such as /moqe mutey/ 'already nearby.' In the combinations that do occur, a steady transitive relationship prevails, and it is hoped that the following chart can be reliably extrapolated out of this transitivity.

tini	ke?	kîpî?	moqe	Locative	Prepositional
paku			hawlini		

The sets tini and paku, and moqe and hawlini seem to be mutually exclusive, since none of these four cooccur.

Examples of various cooccurrent particles:

/tini ke? k-iy-eqwel/ 'we still do it like this: still /  
[like] this / we do'

/paku kîpî? k-iy-kum-li/ paku kîpî? kikumili 'we arrive  
right now: immediately / now / we arrive'

/moqe mutey hi s-kum/ 'he is already getting close:  
already / close / he comes'

An example of locative and prepositional particles in a single phrase:

/pa ?iti? wenî heçi? ha-poñ/ pa?iti? wenî eč apon '[[it is]  
right here beyond this tree'

## 800 Syntax

The primary division in the discussion of syntax is between simple sentences and complex sentences with embedded, relativized, or otherwise subordinated clauses. The major topics in the simple sentence are predications lacking a finite verb, person-number concord, the syntactic relations of noun phrases to the verb, word order, and the better understood transformational processes. The deep structure strings underlying surface constructions are sometimes given in the following sections: these underlying strings are cited in bare stem form (i.e. without person-number concord), in neutral word order, enclosed in || brackets, as in

||čamín kay|| -> /kay hi s-čamín/ kay iščamín 'he knows'

Even more than at the phonological end of the description of Ineseño, the discussion of syntax is severely impaired by the lack of a living informant. Harrington's manuscript contains thousands of sentences, but the complexity of a syntactic construction seems to be directly proportional to the rarity of its occurrence. Many of the more interesting variations on basic constructions occur only a few times, and still others, easily imaginable as logical extensions of attested patterns, are not to be found at all. The result is that the full scope of the syntactic component of Ineseño is unknown: the description falters on many fine points, and there are gaps where the knowledge of larger issues is fragmentary. Accordingly, the aim of the present discussion is not to couch Ineseño syntax in rigorously formal terms, but to account for what is attested.

## 810 Predications Lacking a Finite Verb

Predications lacking a finite verb are quite common. They are generally nominal predications in which the copula is implied, although they also include more verbal constructions: nouns inflected with verbal person-number markers and verbs with the agentive prefix *ʔal-* instead of person-number markers. Predications in which the verb appears in a nominalized or relativized form are discussed in 854 on the cleft sentence transformation. The nominal predications with an implied copula may be a single noun, or noun-noun and even particle-noun predications, sometimes of considerable complexity.

## 811 Single Noun Predications: ka N

The simplest nominal predication is a single noun introduced by the predicative particle *ka* (q.v., 723.1).

/ka swanaḥ/ '[it is] the custom'

/ka štayit/ '[it is] a willow tree'

Such a noun is often possessed,

/ka k-ʔap/ kaḥap '[it is] my house'

/ka s-eqwel-muʔ/ kašeqwelumuʔ '[it is] her trade, work'  
perhaps with the possessor specified.

/ka s-ti-moloq-in-šaš hi puluy/ kaštimoloqič<sup>h</sup>aš ipuluy  
'[it is] the myth of Crane woman'

A less common 'stylistic variation on this pattern shows the article *ma-* rather than *ka* with possessive phrases.

/ma-s-ʔatišwin ha-yuxnuč/ mašatišwin ayuxnuč '[it is]  
the charm/fetish of the hummingbird'

## 812 Disjunct Possessive Predications

This predication is based on a possessive noun phrase, in which the possessor noun is emphasized. In regular possessive phrases (q.v. 581), the possessed noun with possessive markers precedes the possessor noun.

/ma-s-wop ha-wot'/ 'the chief's son: his son / chief'

In the disjunct possessive predication, the possessor noun appears before the possessed noun, which may take the connective particle *hi* rather than the non-initial article *ha-*.

/wawaw' hi s-šoxš'/ wawaw' iğ<sup>h</sup>oxš' 'it is goose down:  
goose / its down'

/ma-iy-al-aql-mow-Vn + R ha-s-iy-swanañ'/ mayalaqlaqimowon  
asiyiswanañ' 'it is the custom of the stylish ones:  
ones who are stylish / their custom'

Personal pronouns as possessors (with the occasional exception of *kay* 'he, she, it') are deleted (cf. 855.2), except in this disjunct construction in which the possessor pronoun precedes. The possessed noun is introduced by *ka*.

/no? ka k-?ap/ no? kakap' 'it is my house: I / my house'

/pi? ka p-hik/ pi? kap<sup>h</sup>ik' 'it is yours: you / your thing'

/kay ka s-neč-mu?/ kay kašnečmu? 'it is his habit,  
custom: he / his habit., custom'

## 813 Noun-Noun Predications: N ka N ~ N hi N

The commonest nominal predication is one in which two nouns are conjoined with *ka*, less often with the connective particle *hi*. A possessed noun usually takes second place,

/xwan ka s-ti/ xwan kaštī 'Juan [is] his name'

/ma-slow' ka-k-kalukš/ maslow' kak<sup>h</sup>alukš 'the eagle [is]  
my clan [symbol]'

and a personal pronoun usually takes first place.

/kay ka wot'/ 'he [is] a chief'

/no? ka malik-Vš/ no? kamalikš 'I [am] a first-born  
child'

Counter examples show the pronoun in second position,  
introduced by hi rather than by ka.

/shamala hi k-iy-ki?/ shamala hikiki? 'we are Ineseños:  
Ineseño / we'

/šiša-k-pepe? hi kay/ 'he is my half-brother:  
half my brother / he'

A variation on this pattern shows possessed nouns with  
emphatically transposed possessor pronouns in initial posi-  
tion,

/kay hi s-kiy? hi no?/ 'I am his (a dog's) master:  
he / his master / I'

and one underlying string

[-koko? pi? no?] 'I am your father'

shows both treatments: first the usual ordering

/no? ka p-koko?/ 'I [am] your father'

and then the form with the disjunct possessor.

/pi? p-koko? hi no?/ 'I am your father: you / your  
father / I'

In noun-noun predications involving the demonstrative  
pronouns, the form of the pronoun depends on whether it is  
initial or non-initial (cf. 431). With an initial demon-  
strative the following noun is introduced by ka,

/keʔ ka s-nanaŋ-waš/ keʔ kašnanaŋawaš 'this [is] its  
track, trail (lit. [where] it went)'

/kweki ka s-iy-ʔap-Vn-Vš/ kweki kašiyaphaniš 'that (over  
there) [is] their village'

while a non-initial demonstrative takes no ka.

/ma-k-ʔel heʔ/ makeł eʔ 'this is my necklace:  
my necklace / this'

/moqe su-tap-Vš heki/ moqe šutapiš eki 'that is already  
dyed: already / something dyed / that'

The noun-noun predication may involve the repetition  
of the same noun, once with a demonstrative and once in a  
possessed form with the emphatic disjunct possessor.

/keni ha-čičiʔ noʔ ka čičiʔ/ ken ačičiʔ noʔ kačičiʔ

'this child is my child: this / child / I / my child'

Examples of more complex noun-noun predications  
involving relativization (cf. 854 on the cleft sentence  
transformation) include

/ma-k-al-su-ʔinu hi ma-qsi/ makasuʔinu himaqsi 'what I  
believe in [is] the sun'

/ta-ple]-Vš heʔ ha-k-al-tak-kuy/ tepleš eʔ akatakuy  
'this is tuberculosis that I have: tuberculosis /  
this / what I have'

#### 814 Particle-Noun Predications

Some nominal predications involve a noun and one or  
more particles, with the copula implied. The noun usually  
follows the particle.

/moqe ʔeneq/ '[she is] already a woman'

/hawlini hi wič/ hawlin iwíč 'anyway [it is] a bird'

/pa tani-moloq heči?/ patanimoloq eči? 'this is not so  
old: just / a little old (lit. long ago) / this'

/?ini aqliw' hi ?iti?/ ?ini?aqliw' eti? '[it is] not a  
word here (i.e. a Ventureño form cited by Harrington  
has no Ineseño cognate)'

The particle may be a prepositional particle in con-  
stituency with a noun,

/weñi ha-ta? ?iškoñ ha-mañ/ weñ ata? ?iškoñ amañ 'beyond  
the oak tree [are] two houses'

/mi-pal-koý ha-mañ ha-aqmil-mu?/ mipolkoý amañ  
a?aqmilimu? 'behind the house [is] a spring'

and other locative phrases parallel to prepositional phrases  
occur in similar constructions.

/kolo? ha-wašla-lomol wahač ha-s-peý/ kol awošlolomol  
wahač aspeý 'there [on] the hill [are] many flowers'

The predication with kič 'like, as' (q.v., 770.10)  
regularly lacks a finite verb. The predication may consist  
of kič followed by a single head noun,

/kič hi xwakin/ '[he is] like Joaquin'

/?ini kič ha-makina ma-iy-al-tiwal-nanañ hi kípí?/  
?inikič amakina mayatiwananañ ikípí? '[it is] not  
like the autos (Span. maquina) that go around now'

but more often, two nouns are conjoined with kič; kič may  
either occur between them

/ma-qweleqweł kič ha-štapan/ 'poplar [is] like tule  
(in being highly flammable)'

or it may precede both.



/kič ha-s-peý heča? šup ma-s-iy-aqliw ha-s<sup>h</sup>amala/ 'the  
Ineseño language is like a flower of the field:  
like / flower / this / earth / their language / I.'

### 815 Nouns Inflected as Verbs

Nouns are sometimes prefixed with person-number markers and treated just as verbs. Such nouns nearly always denote classes of people.

/s-?ucan/ 'sucan 'he is a dwarf, midget'

/p-?iniyu/ 'piniyu 'you are an Indian (Span. indio)'

/s-?axi/ 'saxi 'he is a homosexual, transvestite'

/k-?alap-ka-swa?/ 'kalapkaswa? 'I am from kaswa?: I [am]  
a kaswa? person'

/s-paxa?-iwaš/ 'špaxa?iwaš 'he was a paxa? (a ceremonial  
official)'

Note the nominal ending -iwaš 'dead, defunct' rather than the verbal past marker -waš in the last example above.

An example with a fuller verbal apparatus is

/hini-k-čiči? hi k-šumawišš/ 'when I was a child I was  
healthy: when I [am/was] a child / I am healthy'

Derived nouns are sometimes conjugated as verbs; these are not necessarily human or animate in reference.

/moqe s-iy-su-tap-Vš/ moqe šišutapišš 'they are already  
dyed: already / they [are] something dyed'

/s-iš-aq-pey-štaš/ šišeqpeyštišš 'they (dual) are alike:  
they (dual) [are] something identical'

/moqe s-uni-exmeš-štaš/ moqe šunexmeštišš 'there is no  
more hope: already / it [is] a hopeless matter'

The common construction in which the agentive prefix *ʔal-* (q.v., 671.3) occurs between person-number markers and the verb stem might, strictly speaking, be interpreted as another example of a noun (here an agent noun) inflected as a verb: 'to be one who does X.' This construction often has habitual or continuative force.

/k-ʔal-aqm̄l + R/ k̄alaqlaql̄m̄l 'I am a drunkard; I am  
one who drinks much'

/s-iy-ʔal-w̄l + R/ siȳaw̄lw̄l 'they are hunters'

/s-ʔal-aq̄hinaʔ-*in*/ s̄alaq̄hinalin 'he is grateful to you:  
he is one who is grateful to you'

#### 816 Agentive Predications

In agentive predications, the verb takes the agentive prefix *ʔal-*, but lacks the person-number markers characteristic of such a construction as

/s-iy-ʔal-w̄l + R/ siȳaw̄lw̄l 'they are hunters'

In this respect, agentive predications are more like nominal predications, but they have a habitual force.

/ʔal-axi-pen-š-waš/ ʔalaxipečwaš 'he was a carpenter'

/pač̄iʔ ʔal-ulu-aq-pey-us/ pač̄iʔ ʔaluleqpeyus 'she  
always follows him: always / one who follows him'

/kwek̄i ʔal-*il̄ik̄in* hi xuxaw̄/ 'Coyote lives over there:  
over there / one who dwells / coyote'

/ʔal-aqw̄iy-š hi xuxaw̄/ ʔalaw̄iš ixuxaw̄ 'Coyote is  
no-good: one who is worthless / coyote'

/pa ʔini ʔal-wil heki/ paʔni ʔawil eki 'that just isn't  
anything: just / not / what is / that one'

## 820 Concord and Personal Orientation

This section deals first with the concord of person and number which may exist between the verb and the various noun phrases associated with it, and between the possessed and possessor nouns in possessive constructions. Concord is complete in first and second person constructions, but number agreement is rather loose in third person constructions. Second, the personal orientation of the verb varies: there is a small marked class of impersonal verbs for which person is shown indirectly by object suffixes, while the majority of verbs are marked more directly for person. There is also a pattern of agreement between object nouns and object suffixes in verbs.

## 821 Concord in First and Second Person Constructions

In first and second person constructions, person-number concord is complete between the verb and subject or object pronouns, and between the possessor pronoun and the possessive markers of the possessed noun.

Bound subject prefixes in the verb (q.v., 650) and possessive prefixes in the noun (q.v., 571) match the person and number of first and second person pronouns exactly. Possessor pronouns are later deleted (cf. 855.2), except when transposed for emphasis (cf. 853.3),

[[ma--tu<sup>?</sup> pi<sup>?</sup>]] -> /ma-p-tu<sup>?</sup>/ 'your ear(s)'

[[ma--ti<sup>?</sup>k k-iš-k<sup>?</sup>i<sup>?</sup>]] -> /ma-k-iš-ti<sup>?</sup>k/ 'our (dual) mother'  
while subject pronouns are frequently retained.

[[čam<sup>?</sup>in no<sup>?</sup>]] -> /k-čam<sup>?</sup>in hi no<sup>?</sup>/ 'I know: I know / I'

[[kuti p-iy-kíʔ]] -> /p-iy-kuti hi p-iy-kíʔ/ pikuti ipikíʔ  
 'you (pl.) see: you see / you (pl.)'

Bound object suffixes in the verb show some neutralization in the non-singular numbers, where the first and second person dual and plural are all neutralized in the single suffix -iyuw. The free object pronoun is nearly always deleted (cf. 855.4).

[[ikš- piʔ noʔ]] -> /k-ikš-in/ 'I give it to you'

[[itaq noʔ kay]] -> /s-itaq-it/ 'he hears me'

[[no--kuti k-iš-kíʔ [ma--tík k-iš-kíʔ]]] -> /no-s-kuti-iyuw  
 ha-k-iš-tík/ noeskutiyiyuw akištík 'our (dual) mother  
 will see us: will see us / our (dual) mother'

## 822 Number Agreement in the Third Person

Number agreement in third person constructions is not necessarily a regular process, either between the verb and its subject and object noun phrases or between possessed and possessor noun phrases. It should be noted that the dual and plural are distinct only in subject and possessive prefixes; object suffixes and nouns themselves are marked only as singular versus non-singular.

### 822.1 Agreement of Verb and Subject Noun

In number agreement between verbs and subject nouns, it is most common for number to be marked only in the verb, with the noun plural by implication.

/s-iy-axi-kum ha-ku/ 'the people are dancing: they dance  
 / person'

/s-iy-astimín ha-píwíʔ/ 'the mosquitoes are buzzing:

they buzz / mosquito'

Even the dual number may be marked only in the verb.

/s-iš-pili-nowon ha-ʔapap'/ šišpilinowon aʔapap' 'two balls  
are flying: two move in the air / ball'

About equally common are the alternatives of marking number  
in both noun and verb,

/s-iy-iwo-Vn ha-poñ-ʔ + R/ siyiwon aponpoñ' 'the trees  
are rustling: they sound / trees'

and of not marking number at all.

/s-ipšel ha-ʔixpaniš/ šipšel aʔixpaniš 'the acorns are  
ripe: it is ripe / acorn'

It is fairly rare for plurality to be marked in the noun  
but not in the verb.

/s-aqša-Vn-Vč ha-s-ha-ti-net-ʔ + R/ šaqšanič as<sup>h</sup>ats<sup>h</sup>atinet'  
'his joints are stiff: it is stiff / his joints'

The indefinite subject marker am-, on the few occasions  
when it occurs with a nominal subject, usually occurs with  
a plural noun,

/ka s-am-nañ ha-ʔihiy-ʔ-ʔ + R/ kasamnañ aʔihiyhiy'  
'the men go: some go / men'

although the noun may not be overtly marked for number.

/yilaʔ s-am-nañ ha-ku/ 'all the people go: all /  
some go / person'

A pronominal subject is nearly always overtly marked for  
number.

/kay-wuñ ka s-iš-akti-naʔ/ kayuwuñ kašišaktinaʔ 'they  
(dual) are coming: they / two come'

/s-iy-eqwel heñi-wuñ/ 'these people do: they do / these'

## 822.2 Agreement of Verb and Object Noun

The pattern of number agreement between verbs and object nouns is somewhat different from that of subject nouns. It is about equally common for number to be marked either in the verb only,

/s-ulu-aq-pey-us-wun ha-weselu ha-miy/ suleqpeyuswun

aweselu amiy 'the wolf chases the calves (Span. vecero): chases them / calf / wolf'

/no-s-tak-ti<sup>?</sup>-wun ha-qolol/ noštaktiwun aqolol 'it will

kill the mice: it will kill them / mouse'

or not at all.

/k-ti-lokin ha-tomati/ 'I cut some tomatoes (Span.

tomate): I cut / tomato'

/s-am-is-ti<sup>?</sup>-waš ha-s-se/ šamištiwaš ašhe 'they found

some bones: they found / bone'

The marking of number for both verb and object noun is less common,

/<sup>?</sup>ini-p-sili-wil-us-wun ha-s-iy-hik-<sup>?</sup> + R ha-<sup>?</sup>coyini-wun/

<sup>?</sup>inipsiliwiluswun asihikhik <sup>?</sup>acoyiniwun 'don't covet other people's things!: you do not want them / their things / others'

and the marking of number only in the noun is rare, just as it is with subject nouns.

/ka s-<sup>?</sup>ip-us ha-s-šay-<sup>?</sup> + R/ kašipus aš<sup>h</sup>ayšay 'he says

to his daughters: he says to 3rd sg. / his daughters'

## 822.3 Number Agreement in Possessive Constructions

The loose marking of number agreement between third

person verbs and nouns is partially paralleled in possessive constructions with third person possessors. Number in the possessor noun is usually expressed only in the possessive prefix of the possessed noun,

/ma-s-iy-<sup>?</sup>i<sup>l</sup> ha-ku/ masi<sup>l</sup>aku 'the people's feet:  
their foot / person'

/ma-s-iš-hawa<sup>?</sup> ha-s-oxk<sup>o</sup>n/ mašiš<sup>h</sup>awa<sup>?</sup> asoxk<sup>o</sup>n 'the aunt  
of the two thunders (i.e. the rainbow): their (dual)  
maternal aunt / thunder'

/ma-s-iy-aqliw<sup>?</sup> ha-<sup>?</sup>alap-mi-c-qanaqa<sup>ñ</sup>/ 'the language of  
the Ventureños: their language / Ventura person'

although number may also be specified here.

/ma-s-iy-koko<sup>?</sup>-iwaš ha-s-<sup>?</sup>opxo<sup>ñ</sup>-<sup>?</sup> + R/ mašikoko<sup>?</sup>iwaš  
ašopš<sup>o</sup>opxo<sup>ñ</sup> 'the dead father(s) of the orphans:  
their dead father(s) / orphans'

Number in the possessed noun is usually not marked when the possessor noun is plural, as in the example above, or in

/ma-s-qap ha-po<sup>ñ</sup>-<sup>?</sup> + R/ masqap aponpo<sup>ñ</sup> 'the leaves of  
the trees: its leaf / trees'

where number is not marked even in the possessive prefix.

This practice often leads to ambiguity, as in

/ma-s-iy-tomol/ masitomol 'their boat - their boats'

/ma-s-iy-koko<sup>?</sup>-iwaš ha-s-<sup>?</sup>opxo<sup>ñ</sup>-<sup>?</sup> + R/ mašikoko<sup>?</sup>iwaš  
ašopš<sup>o</sup>opxo<sup>ñ</sup> 'the dead father(s) of the orphans:  
their dead father(s) / orphans'

In the text in which it occurs, this latter example must be interpreted as 'their dead fathers.'

## 823 Other Forms of Concord

There are other forms of concord in addition to the agreement of person and number markers.

A third person plural object is marked in the verb by (-us)-wun, which stands for a particular noun phrase which may be deleted, but an unspecified plural object is marked by -š or -nVš (q.v., 631.4 and 631.3).

/s-su-kep'-š/ š<sup>h</sup>ukepš 'he baptizes (lit. bathes) many'

/no-k-axta-wal-ašay-nVš/ nokaxtawalašaniš 'I will dry many by the fire'

When the subject noun phrase is identical to another noun phrase in constituency with the same verb, this second noun phrase is replaced by the reflexive suffix -šaši (q.v., 631.2).

/k-uštewe?-šaši/ kuštewešiši 'I pricked myself'

/ha kša hi kay-wun ha-ʔaqiwo s-iš-eqwel-šaši/ hakši

kayuwun aʔaqiwo šišeqwelšiš 'and they (dual) turned into stars: and / as for / they / star / they (dual) make themselves'

The reciprocal suffix -nVš (q.v., 631.3) appears when a non-singular noun phrase serves a dual function as both subject and object in a reciprocal relationship.

/p-iš-su-uni-watmay-nVš/ piš<sup>h</sup>uniwatmaniš 'you two missed each other (in passing)'

## 824 Object Agreement

It is common for verbs to take an object suffix in agreement with the possessive marker of a following object



noun or dative noun (cf. 830 on the relations of nouns to the verb; cf. 631.1 on uses of the object suffixes).

/no-s-ti-lokin-in ha-p-šuš/ noštilokinin apšuš 'he will cut your hair: he will cut [for] you / your hair'

/s-mal-aq-pey-us ha-s-koko?/ smeleqpeyus askoko? 'he inherits it from his father: he inherits [from] him / his father'

This construction is reflected more faithfully by the English gloss in

/s-aqway-it ha-k-?ił/ saqwayit akił 'it hit me on the leg: it hits me / my leg'

In more complex constructions, object agreement may even be extended to cases of embedded or relativized sentences as objects, where the object suffix of the main verb agrees with the subject prefix of the subordinate verb.

An embedded example (cf. 865):

/pa s-kuti-wun + R ha s-iy-ašın/ paskutkutiwun ašiyašin  
'he just watches them eating: just / he watches them / they eat'

A relativized example (cf. 870):

/k-itaq-in ha-p-al-?ip-us/ kitaqin apałipus 'I hear what you are saying: I hear you / what you say'

## 825 Impersonal Verbs

Grammatically, the most marked form of personal orientation shown by the verb is in the small class of impersonal verbs. Impersonal verbs take the third person singular subject marker s-, with the indirect referent expressed by

an object suffix. This construction, as in

/s-č<sup>h</sup>o-it/ ščholit 'I have good luck: it is good [to] me'  
 is analogous to the German 'es geht mir gut' or to the  
 French 'il me fait mal.' The pronoun expressed as object  
 here is the experiencer of the state or action; the actual  
 case relationship of the pronoun to the verb is dative (cf.  
 832). Other examples:

/e-yiw-iyuw/ 'we have good luck: it seeks, faces us'

/no-s-ʔaximik-in/ nošaximikin 'you will have bad luck:  
 it will be bad [to] you (singular)'

/ʔini-s-axtak-us-wun ha-s-iy-ʔalč<sup>h</sup>um/ ʔinisaxtakuswun  
 ašiyalč<sup>h</sup>um 'their money does not matter to them:

it does not matter [to] them [about it] / their money'

Impersonal verbs belong to the class of verbs which overtly  
 mark the third person singular object with -us.

/s-api-č<sup>h</sup>o-us/ sapič<sup>h</sup>olus 'he has a sudden stroke of  
 good luck: it is suddenly good [to] him'

Most of the impersonal verbs express bodily states.

A few need no overtly expressed noun subject,

/s-itax-kolon-us/ sitoxkolonus 'his heart is palpitating:  
 it palpitates [to] him'

/s-tapškayan-it/ štapškayanit 'I am nauseated, sick at  
 my stomach: it is nauseating [to] me.

while others, freer in combination, require a subject.

/s-aq-ʔuw-š-it ha-k-ʔamīn/ šaqušit akamīn 'my body  
 itches: it itches (lit. bites) [to] me / my body'

/s-škīy-us ha-s-ʔoqwoŋ/ šiškiyus ašoqwoŋ 'his head hurts;  
 he has a headache: it hurts [to] him / his head'

When the impersonal verb shows a noun subject, the possessive prefixes of the noun (if it is possessed) agree with the object suffix of the verb (cf. 824 on object agreement).

#### 826 Personal versus Non-Personal Verbs

There is no distinct class of personal and non-personal verbs, as compared to the impersonal construction (q.v., 825 above), but the notion is useful in discussing many verbs dealing with body parts and bodily states. The duality between personal and non-personal verbs corresponds to the difference between pairs of related English sentences such as personal: I have chapped lips

and non-personal: my lips are chapped

In Ineseño, personal and non-personal verbs are not transformationally related as in the English example above: a given verb is either personal or not. The personal verb takes a personal subject, in agreement with the possessive prefixes of a following object noun,

/k-wati-klep ha-k-šipuk/ 'my elbow is skinned: I am  
skinned / my elbow'

/k-unčhuš ha-k-ʔił/ kunčhuš akił 'my leg hurts: I have  
pain / my leg'

while the non-personal verb has a third person subject in agreement with a following subject noun, with person marked only in the possessive prefixes of the noun.

/s-wati-pluy ha-k-ʔišaq/ swatipluy akišaq 'my hip is  
out of joint: it is disjointed / my hip'

/s-tikis ha-k-šepšleʔ/ 'my lips are chapped: it is

chapped / my lip'

Ambiguous in this respect are many verbs which are attested only with third person singular subjects and possessors, such as

/s-wati-ps-kuy ha-s-ni?/ swatipškuy ašni? 'he broke his neck'

There are a great many verbs, necessarily personal, which do not occur in conjunction with a noun, but which themselves imply the noun.

/k-tihiw'/ 'I have a cracked heel'

/s-hikoč/ šhikoč 'she is blackish around the eyes'

/k-yuweqš/ 'I have sore eyelids'

Personal and non-personal verbs are not labelled as such explicitly elsewhere: the difference is reflected in the gloss of the personal 'to have...' and the non-personal 'to be...', as in

personal: wati-klep 'to have some body part skinned'

non-personal: tikis 'to be chapped'

### 830 Syntactic Relations of Noun Phrases to the Verb

A noun phrase may be related to the verb in one of several ways. These relationships, as presented here, are not the underlying case relations of case grammar in generative semantics; they are more superficial syntactic relationships: subject, dative, object, locative, and temporal phrases. Noun phrases in these various relationships to the verb are marked as such only by relative ordering, although their semantic relations are usually clear.

## 831 Subject

The subject noun phrase may be the agent of a verb,

/ka s-ʔip hi ʔonoq/ kaʔip iʔonoq 'Buzzard says...:

he says / buzzard'

/s-kuti-wun ha-čičiʔ/ 'the child sees them: he sees

them / child'

the experiencer of a sensation or psychological event,

/s-mixin hi kay/ 'he is hungry: is hungry / he'

/s-oqtok hi ʔanucwaʔ/ ʔanucwaʔ is angry: is angry /

ʔanucwaʔ (a duck sp.)'

or, loosely, the patient or object of an intransitive verb,

/s-elew ha-ʔulam/ 'the flood comes down: comes down /

the flood (lit. creek)'

/s-ipšel ha-ʔixpaniš/ šipšel aʔixpaniš 'the acorns are

ripe: is ripe / acorn'

including the patient to whom some noun or quality is attributed in verbal derivatives with -Vč (q.v., 622).

/k-qoʔ-Vč hi noʔ/ q<sup>h</sup>oč inoʔ 'I have a pet: I am with

a pet / I'

/s-teleq-Vč ha-ʔaqiwo/ šteleqeč aʔaqiwo 'the star has

a tail (i.e. a comet): it is be-tailed / star'

## 832 Dative

The dative noun phrase may be the goal of an action, either in the sense of transferal,

/s-am-yik-us ha-wot'/ 'they give it to the chief'

/s-nuwit-us-wun ha-s-ičtin-wun/ snuwituswun ašičtin-wun

'he brings it [as a present] to his children'

or motion toward a point in space.

/no-k-ni-koyi hi syuxtun/ 'I will go back to syuxtun'

/ʔopnow ka ha-k-iy-al-aq-šuč/ ʔopnow kakiyalaqšuč 'we

are headed to ʔopnow: ʔopnow / what we head for'

The directional suffix -li (q.v., 632.3) may occur with the verb, marking the dative phrase more explicitly.

/s-mes(-li) hi mi-č<sup>h</sup>umaš/ smesl imič<sup>h</sup>umaš ~ smes imič<sup>h</sup>umaš

'he crosses to Santa Cruz Island'

Broader uses of the dative include the source of an action,

/s-su-eqen-š ha-s-ʔik/ š<sup>h</sup>eqeč ašik 'she takes it out of

her mouth: she removes from / her mouth'

and the beneficiary of the action.

/ta<sup>h</sup>ku k-net-us he<sup>h</sup>ni ha-čiči<sup>h</sup>?/ ta<sup>h</sup>ku knetus he<sup>h</sup>ni ačiči<sup>h</sup>?

'what [will] I do with this child?'

Usually, however, the dative is not expressed in a full noun phrase, but occurs most commonly in the form of a suffixed object pronoun (cf. 631.1).

/s-am-su-eqen-it/ samseqenit 'they take it away from me'

/ikš-it-ʔ ha-l-am-ašin/ ʔikšit<sup>h</sup> alamašin 'give me food!'

### 833 Object

The object noun phrase is, loosely defined, the patient of a transitive verb,

/s-ʔuw ha-šow/ šuw ašow 'he eats pespibata'

/ma-takak ha s-am-axšiš/ matakak ašamaxšiš 'they invite

Quail (to the fiesta): quail / they invite'

or the subject of a verb embedded with the causative su-.

/ka s-su-tap ha-po<sup>h</sup>n/ kaš<sup>h</sup>utap apo<sup>h</sup>n 'he puts a stick in:

he causes to go in / stick, wood'

The distinction between dative and object noun phrases is not an easy one to make, in the absence of information on the underlying cases related to a given verb. The clearest examples are in sentences in which both dative and object noun phrases appear, as in

/s-am-axi<sup>1</sup>k<sup>1</sup>n-us hi kulilaw<sup>1</sup> ha-s-sa/ samaxi<sup>1</sup>k<sup>1</sup>nus ikulilaw<sup>1</sup>  
 as<sup>ha</sup> 'they offer the tooth to the kulilaw<sup>1</sup> (a spirit):  
 they offer to 3rd sg. / [to] kulilaw<sup>1</sup> / tooth'

#### 834 Temporal/Locative

The temporal or locative noun phrase focusses the action on some point in time or space. Temporal examples:

/coyini ha-qsi hi s-kum hi xuxaw<sup>1</sup>/ coyin aqsi iskum ixuxaw<sup>1</sup>  
 'Coyote comes the next day: next (lit. another) /  
 day / comes / coyote'

/yila<sup>?</sup> ha-swayin<sup>1</sup>-? + R ka ha-k-iy-al-aqta-qen/ yila<sup>?</sup>  
 aswaywayin<sup>1</sup> kakiyaleqteqen 'we do it every winter:  
 all / winters / what we pass'

/yiti-pakas<sup>1</sup> ha-s-axi-yi<sup>?</sup> ?ini-s-am-we<sup>?</sup>/ '[for] five  
 nights they didn't sleep'

Locative Examples:

/s-uqma-wil ha-čayaš<sup>1</sup>/ 'he suffered [on] the road, trail'

/syuxtun ha-l-ilik<sup>1</sup>n/ 'he lives at syuxtun: syuxtun /  
 one who dwells'

/s-wil-waš ha-maxalamiš<sup>1</sup> hi ?asaka/ šwiliwaš amaxalamiš<sup>1</sup>  
 i?asaka '[there] was a fiesta [at] ?asaka'

A prepositional phrase (q.v., 760) is counted as a locative

phrase here.

/s-iy-sinay ha-malak liyik ha-tomol/ sisinay amalak liyik  
atomol 'they put tar inside (lit. [in the] middle  
[of]) the boat'

The inclusion of temporal and locative noun phrases in a single class is not meant to imply that these expressions are mutually exclusive. In the absence of examples of temporal and locative noun phrases in the same sentence, both in postverbal position, their relative ordering is indeterminate.

### 835 The Relative Order of Noun Phrases

In neutral, unmarked word order, noun phrases follow the verb: their relative ordering is

Dative - Object - Subject - Temporal/Locative

Usually, only word order distinguishes these various noun phrases syntactically. But occasionally postverbal nouns are clearly marked as subject versus dative or object by a difference in number between subject and dative or object, marked both in the nouns and in the verb (cf. 822), as in

/s-aqni-wil-us-wun ha-?eneq-? + R heki ha-?ihiy-?/  
saqniwiluswun a?eneqneq ek a?ihiy 'that man thinks  
of women: thinks of them / women / that / man'

A free personal pronoun (q.v., 413) as subject occupies the same relative position which a non-pronominal subject would take, as in

/?iyapa ?ini-k-iy-?uw ha suku k-iy-k?/?iyapa?nikiyuw  
asuku kiki? 'even if we don't eat anything: even if



/ we do not eat / something (lit. what) / we (pl.)'

A limitation on the order of noun phrases as presented above is that there are no examples of more than two noun phrases following the verb. Evidently, when the sentence contains three noun phrases, one of them is obligatorily transposed to precede the verb. For example, given subject, object, and locative phrases in

/ma-ʔeneq hi s-siḥay ha-malak' hi mam' ha-s-ʔawaq/ maʔeneq  
 ishḥinay amalak' imam' asawaq 'the woman puts tar  
 inside her jug'

the subject has been transposed to precede the verb, leaving the object and locative phrases after the verb. In another example,

/ma-takak ha s-am-axšiš ha-maxalamšiš hi ʔasaka/ 'they  
 invite Quail to the fiesta at ʔasaka: quail / they  
 invite / [to] fiesta / [at] ʔasaka'

the object is transposed, leaving the dative and locative. An exception to this principle, of course, is where a third noun phrase is only implied in a suffixed object pronoun, in addition to two full noun phrases.

/s-uliš-it ha-k-tuʔ ha-ʔihḥiy-ʔ/ šulišit aktuʔ aʔihḥiy'  
 'the man grabs me by the ear: he seizes me / my ear /  
 the man'

Examples of the various combinations of postverbal noun phrases are presented in pairs below.

#### 835.1 Dative - Temporal/Locative

/no-k-naḥ ha-tix-ʔ + R hi palatiku/ noknaḥ atixḥi'

ipalatiku 'I'll go [to] the alkalai beds [at]  
 palatiku (in the San Joaquin Valley)'

/ma-takak ha s-am-axšiš ha-maxalamiš hi 'asaka/ 'they  
 invite Quail to the fiesta at 'asaka: quail / they  
 invite / [to] fiesta / [at] 'asaka'

### 835.2 Object - Temporal/Locative

/no-k-asay ha-haxwi-? ha-poñ-? + R/ nokasay ahaxwi?  
 aponpoñ 'I'll dry the clothes [on] the fence (lit.  
 the sticks, boards)'

/s-iy-sinay ha-malak liyik ha-tomol/ sisinay amalak liyik  
 atomol 'they put tar inside the boat'

### 835.3 Subject - Temporal/Locative

/?ini-s-mik-Vn ha-tiyik-mu? ha pakas ha-qsi/ ?inismikin  
 atiyikmu? apakas aqsi 'a buggy does not go far in  
 a day: does not go far / buggy / one / day'

/s-iy-ali-nax-c-?apam ha-ku ha-?ilesiya/ siyalinaxcapam  
 aku ha?ilesiya 'the people are kneeling in church  
 (Span. iglesia): they are kneeling / people / church'

### 835.4 Object - Subject

/s-eqen-wun yila? hi xuxaw/ seqenuwun yila? ixuxaw  
 'Coyote took them all: he takes them / all / coyote'

/s-wakay ha-poñ ha-yasis/ 'poison oak covers the tree:  
 it covers / tree / poison oak'

Object nouns clearly have a closer constituency with the  
 verb than do subject nouns. Not only may the object noun  
 be copied onto the verb as an object suffix, but even those

rare cases where both subject and object nouns have been transposed to preverbal position (cf. 852 on transposition) show the object noun closer to the verb.

/noʔ hi katu hi k-al-aqšiyik/ 'I want a cat: I / cat /  
I want'

### 835.5 Dative - Object

The relative ordering of object and dative phrases, and even the distinction between them, is not easy to determine. In one story, for example, two parallel sentences occur in which the order differs; it is object - dative in

/ka s-su-tap ha-s-ic'is ma-ʔoʔ/ kashutap asi'is maʔoʔ

'she puts her little sister into the water: she puts  
in (lit. causes to enter) / her younger sibling /  
water'

and dative - object in

/s-su-tap ha-s-ʔik ha-s-oxmolon/ s<sup>h</sup>utap ašik asoxmolon

'she puts her plug of pespibata into her mouth:  
she puts in / her mouth / her plug of pespibata'

Given the order dative - object in

/s-am-axik'in-us hi kulilaw' ha-s-sa/ samaxik'inus ikulilaw'

asha 'they offer the tooth to the kulilaw': they  
offer to 3rd sg. / kulilaw' / tooth'

it appears that the order of the two noun phrases is determined by the object ending -us on the verb: whichever noun has been copied onto the verb as an object suffix must immediately follow the verb.

Clear examples of the order dative - object:

/k-su-wayi-net ha-s<sup>h</sup>ewu ha-pox/ 'I splice the line to  
the awl: I splice / [to] awl / line, cord'

/s-am-nu-nañ ha-s-<sup>?</sup>ap ha-woť ha-čiči<sup>?</sup>/ samnunañ ašap awoť  
ačiči<sup>?</sup> 'they take the child to the chief's house:  
they take / [to] his house / chief / child'

#### 835.6 Subject - Dative

There are no completely unambiguous examples of dative and subject noun phrases in the same sentence, but the few examples which might be analyzed in this way usually do not follow the expected order dative - subject; they show the opposite order subject - dative.

/ka s-tap hi kiwičiči<sup>?</sup> ha-<sup>?</sup>o<sup>?</sup>/ kaštap ikiwičiči<sup>?</sup> a<sup>?</sup>o<sup>?</sup>

'Raccoon gets into the water: enters / R. / water'

/s-kitwon ha-l-yul-wil hečiči<sup>?</sup> ha-s-iy-<sup>?</sup>amiñ<sup>?</sup>/ skitwon

ayuwil eč asiya<sup>?</sup>miñ<sup>?</sup> 'the heat leaves their bodies:

it emerges / what is hot / [from] this / their body'

It is possible that dative and locative functions partially overlap, and that the dative noun phrase is more strongly identified with the locative in such constructions. Thus, in another example,

/no-<sup>?</sup>ini-s-maniš-in ha suku ha-p-<sup>?</sup>ap/ no<sup>?</sup>nišmaniš<sup>?</sup>in asuku  
a<sup>?</sup>pap 'nothing will be missing from your house: will

not be missing to you / something / [from] your house'

an alternative gloss is 'nothing will be missing to you at your house.' This example also brings up the question of whether the same sentence may contain two occurrences of the same case, if used in different senses (i.e. -in '[to]

you' and /ha-p-ʔap/ hapap '[from] your house'). It is at this point that the labelling of noun phrases as being in such-and-such a relation to the verb must be recognized as a somewhat arbitrary excursion into case grammar, not particularly well suited to Chumash.

#### 840 Word Order in the Simple Sentence

The simple sentence (other than predications lacking a finite verb, q.v., 810) may consist of as little as a single verb, or it may be more fully expanded with various particles and noun phrases. Most particles precede the verb, while noun phrases generally follow it. Word order in the simple sentence is not fixed, although the favored, neutral order is

Particle Verb NP<sub>dat.</sub> NP<sub>obj.</sub> NP<sub>subj.</sub> NP<sub>temp./loc.</sub>

The preverbal position may be occupied by more than one particle (cf. 790 on the relative ordering of particles).

/paku kɪpɪʔ k-iy-kum-li/ paku kɪpɪʔ kikumili 'we arrive  
right now: immediately / now / we arrive'

/moqɛ muteɣ hi s-wayan/ 'he is already flying near:  
already / near / he flies (lit. hangs)'

Conjunctive particles linking simple sentences into complex sentences naturally precede the particle of the simple sentence.

/no-ʔini-k-čʰoʔ kača nonoʔ k-uxniwin/ noʔnikčʰoʔ kača  
nonoʔ kuxniwin 'I won't stop because I'm in a big  
hurry: I will not stop / because / much / I hurry'

Some particles may either precede or follow the verb,

although this possibility is not reflected in the schema above. Particles usually follow the verb only when there is no noun phrase in postverbal position. When a noun and particle do cooccur in postverbal position, which is rare, their relative ordering seems to be determined by the case relation of the noun to the verb. A particle follows a subject noun,

/s-iy-aqhay ha-wic' hi 'al-apay/ 'the birds are up there:  
they are (in a place) / bird / up'

/s-'al-aq-sisin ha-xus ha nono'/ 'salaqsisin axus anono'  
'the bear is very mean: is a mean one / bear / much'

/suku ha-l-qunun-pi heki ha-'ihiy-' hi 'iti'/ suk' aqunump  
ek' a'ihiy' eti' 'what is that man doing here?: what /  
what he does / that / man / here'

and precedes an object noun. This ordering is unexpected; the particle interrupts the sequence of verb with object suffix and the object noun with which the suffix agrees.

/k-aqni-wil-us ha nono' ha-'eneq/ 'I think a lot about  
the woman: I think about her / much / woman'

/ka s-sinay-us hi 'iti' ha-s-šoxš/ kash'inayus eti' ašhoxš  
'he puts down on him here (i.e. on Raccoon's shoulders  
so that he can fly): he puts on him / here / down'

#### 850 Word Order Transformations in the Simple Sentence

Word order in the simple sentence is not fixed, although the favored or neutral word order (cf. 840) is

Particle Verb NP<sub>dat.</sub> NP<sub>obj.</sub> NP<sub>subj.</sub> NP<sub>temp./loc.</sub>

A few transformations, mostly optional, change word order

and delete or insert morphemes in the underlying string. A recurrent theme in these transformations is the emphasis of phrase-initial position. Thus, many lexical items may optionally be transposed into phrase-initial position, with corresponding changes in the rest of the sentence, while many nouns and pronouns which have not been transposed for emphasis may be deleted. The last of the transformations is the insertion of the connective particles *hi* and *ha* (q.v., 710), which preface many words in non-initial position.

The importance of phrase-initial position can be seen morphologically as well as syntactically. The nominal marker *ma-/ha-* (q.v., 521 and 540) has two distinct forms: *ha-* occurs only in non-initial position, while *ma-* is usually phrase-initial. Nearly all of the demonstrative pronouns have distinct initial and non-initial forms (cf. 431), of which the non-initial forms nearly all begin with /h/ just as with *ma-/ha-*. In addition, when the verb occupies non-initial position because some item has been transposed to precede it, it may be marked with *hi*, *ha*, *ka*, or *al-*, or a combination of these, to stress the fact that it is non-initial.

#### 851 Interrogative Transposition

When some noun phrase in the simple sentence is being questioned, the noun is replaced with the appropriate relative-interrogative pronoun, which is automatically transposed to initial position.

[[kuti + R kay + Interrogative]] ->

/kune? ha s-kuti + R/ kun askutkuti 'who is watching?'

The relative-interrogative forms involved are kune? 'who,'

/kune? ha s-is-ti?/ kun ašišti? 'who found it?'

suku ~ sukiku 'what,'

/sukiku ha s-iy-tepu? ha-?ihiy-?-? + R/ sukik asitepu?

a?ihiyhiy 'what [game] are the men playing?: what /

they gamble, play a game / men'

and tikali? 'which one(s); how much, how many.'

/tikali? ha s-axmay/ tikal asaxmay 'how much does he owe?'

More commonly, interrogative transposition is accompanied by relativization of the verb (cf. 875).

/suku ha-l-uni-yiw/ suk aluniyiw 'what is he looking

for?: what / what he looks for'

The few examples of a relative-interrogative pronoun used in apposition with a noun, in this case an object noun, show the noun transposed along with the interrogative.

/tikali? ha-takak no-k-uliš/ tikal atakak nokuliš

'which chicken (lit. quail) shall I catch?'

The other relative-interrogative forms, ?ašnim 'when,' taka? 'where,' taku 'how,' and /ti-s-neč/ tišneč 'why,' which do not occur in close constituency with a particular noun phrase in the sentence, also take initial position.

/?ašnim ku-p-nan/ 'when will you go?'

/taka? ha s-sinay ha-k-skiniť/ tak aš<sup>h</sup>inay akiskiniť

'where has he put my rope?'

/taku k-net-us/ 'how do I do it?'

/ti-s-neč ha p-miš/ tišneč apmiš 'why are you crying?'



## 852 Transposition of Nouns and Pronouns

The unmarked position of nominal elements in the sentence is postverbal, both for full noun phrases and for pronominal forms. A nominal form may be transposed into phrase-initial position for emphasis, either a noun

[[ʔuw šow ponoja] →

/šow ha s-ʔuw hi ponoja/ šow ašuw iponoja 'Ponoja eats  
pespibata (šow): pespibata / eats / ponoja'

or a pronoun.

[no--kuy yilaʔ noʔ] →

/noʔ hi no-k-kuy yilaʔ/ noʔ inok<sup>h</sup>uy yilaʔ 'I will take  
it all'

## 852.1 Position of Transposed Nouns and Pronouns

A transposed nominal form precedes any preverbal particles which happen to occur in the phrase.

/noʔ šup no-k-naŋ/ 'maybe I will go: I / maybe / I'll go'

/xuxaw<sup>h</sup> hi moqe s-mik-Vn/ xuxaw<sup>h</sup> imoqe smikiŋ 'Coyote is  
already far away: coyote / already / is far away'

But the topicalizing particle kša often introduces transposed nouns and pronouns.

/ha kša ha-čičiʔ pa koloʔ s-naxaliw/ hakšačičiʔ pakoloʔ  
šnaxaliw 'the boy sits right there in the corner:

and / as for / child / just / there / is in a corner'

/ha kša hi kay-wuŋ ka nonoʔ ha s-iy-wayan/ hakšikayuwuŋ  
kanonoʔ asiwayan 'they fly a lot: and / as for /  
they / very much / they fly (lit. hang)'

## 852.2 Pronouns Subject to Transposition

The options of transposition differ between personal pronouns and other pronominal forms. A transposed personal pronoun is nearly always a subject pronoun.

/noʔ hi k-čamin/ 'I know: I / I know'

The transposition of a personal pronoun in a dative or object relation to the verb is extremely rare; a complex example involving a dative pronoun in a relative clause is

/ka s-wil ha-uni-łeqen-pi-Vě piʔ ka ha-l-uti-kuyupi-in/  
 ka-wil aʔuni-łeqen-piyaš piʔ kalutikuyupiyin 'here is  
 the inheritance that comes to you: it exists / inher-  
 itance / [to] you / what is willed to you'

Other pronominal forms, in any case relationship to the verb, are all subject to transposition. These include demonstratives, quantifiers, and numerals,

/keʔ s-ʔal-ati-kuy/ keʔ šalatikuy 'this man heads toward  
 it: this / is one who heads toward'

/yilaʔ hi no-k-ʔuw/ yilaʔ inokuw 'I will eat it all:  
 all / I will eat'

/pakas' ha s-yux-wowon/ 'one [of them] is tall'  
 optionally in apposition with a noun.

/yiti-pakas' ha-s-axi-yiʔ ʔini-s-am-weʔ/ '[for] five  
 nights they do not sleep'

Given the alternative initial and non-initial forms of demonstrative pronouns (cf. 431), the demonstrative may change in transposition. From the usual order

/s-exlelen + R<sub>2</sub> heñi ha-čičiʔ/ sexlelexlelen eñ ačičiʔ  
 'this child is crying: cries / this / child'

with the non-initial demonstrative *heñi*, this transposition requires the initial equivalent *keñi*.

/keñi ha-čiči? ha s-exlelen + R<sub>2</sub>/ keñ ačiči? asexlelexlelen  
'this child is crying'

### 852.3 Noun Phrases Subject to Transposition

Noun transposition may occur when the sentence consists of only a noun and a verb, although it is more likely when more than one noun is present. Transposition may even be obligatory for one noun phrase when the sentence contains three of them.

/ma-takak ha s-am-axšiš ha-maxalamiš hi ?asaka/ 'they  
invite Quail to the fiesta at ?asaka: quail / they  
invite / [to] fiesta / [at] ?asaka'

The noun transposed is often the subject noun.

/?oxtokow-? hi s-axš-vey nañi/ ?oxtokow išexšvey nañi  
'the ice melts too'

/ma-?ihñy-? ha s-kuti + R ha-kawayu-? + R/ ma?ihñy  
askutkuti akawkawayu? 'the man watches the horses'

A locative or temporal noun phrase is even more likely to be transposed than is the subject noun.

/pakaš ha-qsi ?ini-s-mik-Vn/ pakaš aqsi ?inismikñ  
'[in] one day it does not go far'

/ma-s-?ik ha-likuyi k-nowon + R/ mašik alikuyi knownowon  
'I am standing at the mouth of the canyon: its mouth  
/ canyon / I am standing'

In a broader interpretation of the locative noun phrase, prepositional particles, with or without nouns in immediate

constituency, are nearly always transposed.

/mi-koy' (ha-mam') ha s-iy-iwo-Vn ha-huču/ mikoy' (amam')  
asiyiwon ahuču 'the dogs are barking outside (the  
house): outside / (house) / they sound / dog'

It is relatively rare for the object or dative noun to be transposed, especially when other nouns are present in the sentence, but examples include

/ma-s-šuš hi p-kuy/ mašhuš ipkuy 'you take the fuzz:  
fuzz (lit. fur, hair) / you take'

/kalawašač' ha s-am-nañ ha-ku/ 'the people go to  
kalawašač': [to] kalawašač' / some go / person'

/peta na peta ha s-piw' ha-s-ti-kot-Vš/ peta napeta aspiw'  
aštikotuš 'her hair-band cost sixteens and sixteens:  
sixteen / and / sixteen / costs / her hair-band'

#### 852.4 Double Noun Transposition

Examples of two nouns transposed into preverbal position are quite rare, but they agree in showing the transposed subject preceding the object; just as in normal word order, the object noun is closer to the verb than is the subject.

/no? hi katu k-al-aqšiyik/ 'I would like a cat: I / cat /  
like'

/ha kša hi kay-wuñ ha-?aqiwo s-iš-eqwel-šaši/ hakši  
kayuwuñ a?aqiwo šišeqwelšiš 'and they (dual) turn  
into stars: and / as for / they / star / they (dual)  
make themselves'

A more unusual example shows an object and a dative or locative noun (exactly which is indeterminate) both transposed,

with the object noun further from the verb. This might imply that the second noun is in a dative relation to the verb, since in normal word order the dative noun is usually closer to the verb than is the object (cf. 835.5).

/yila<sup>?</sup>-pi <sup>?</sup>iti<sup>?</sup> ha-s-<sup>?</sup>oqwo<sup>?</sup> s-sinay/ yilap it a<sup>?</sup>soqwo<sup>?</sup>  
 shinay 'he puts it all here on his (i.e. Raccoon's)  
 head: all / here / his head / he puts'

#### 852.5 Treatment of Verbs with Noun Transposition

The verb rendered non-initial by noun transposition may take one of the markers of subordination and/or non-initial position: hi, and less often, ha (q.v., 715.3), ka (q.v., 723.5), or al- (q.v., 671.2), or a combination of these.

/no<sup>?</sup> hi k-su-<sup>?</sup>inu/ 'I believe it'

/paka<sup>?</sup> ha s-yux-wowon/ 'one [of them] is tall'

/ma-qsi ka s-su-yul-wil/ maqsi ka<sup>h</sup>uyuwil 'the sun heats  
 it up, makes it warm'

/katu hi k-al-aqšiyik hi no<sup>?</sup>/ 'I would like a cat: cat /  
 I like / I'

With ka and al-, noun transposition is often involved in the cleft-sentence transformation (q.v., 854), in which the verb appears in a relativized form.

/ma-cyiw<sup>?</sup> ha-l-uliš<sup>?</sup>/ 'he grabs the edge; the edge is what  
 he grabs: edge / what he grabs'

#### 853 Emphasis of Nouns and Pronouns

There is a special set of emphatic constructions for stressing nouns and personal pronouns: subject nouns and

pronouns with verbs (but not nominal elements in other case relationships to the verb), and possessor nouns and pronouns in possessive noun phrases. These constructions are more common with pronominal forms than with full noun phrases. They often occur with forms which have undergone transposition to phrase initial position (cf. 852).

### 853.1 Emphasis of Subject Pronouns

Personal pronouns as subjects are suffixed with the intensive formative *-kš* (cf. 413 on free pronominal forms), often glossed with a reflexive, such as /noʔ-kš/ *nokš* 'I, I myself.'

[[kuy-waš noʔ + -kš]] ->

/k-kuy-waš noʔ-kš/ *k<sup>h</sup>uyuwaš nokš* 'I took it myself'

These intensive forms may either follow the verb,

/pa ku-s-kuti + R kiʔ-kš/ *pakuskutkuti kikš* 'she will see for herself: just / will see / she herself'

/ušta-aqša-Vn-pi-šaši-ʔay piʔ-kš/ *ʔuštalaqšanpišašay pikš*  
'you take better care of yourself!: take care of yourself more / you yourself'

or precede it.

/noʔ-kš k-čamɪn/ *nokš kčamɪn* 'I myself know'

/piʔ-kš ku-p-ʔip/ *pikš kupip* 'you yourself will say...'

Presumably there is a hierarchy of emphasis from the plain verb with its subject pronoun deleted

/k-čamɪn/ 'I know'

through forms with the pronoun in postverbal position

/k-čamɪn hi noʔ/ 'I know: I know / I'

and with the pronoun transposed

/noʔ hi k-čamɪn/ 'I know'

to forms with the intensive pronouns.

/noʔ-kš k-čamɪn/ nokš kčamɪn 'I myself know'

### 853.2 Emphasis of Subject Nouns

The subject noun may be emphasized with the intensive third person form /kiʔ-kš/ kíkš, pluralized by -wunʔ.

[[ka kuti ha-ʔeneq + -kš]] ->

/ka s-kuti kiʔ-kš ha-ʔeneq/ kaskuti kíkš aʔeneq 'the woman saw it herself: sees / she herself / woman'

The emphatic form, which precedes the noun, may be prefaced with pa 'just, merely,'

/mík s-xil-wašlik-li pa kiʔ-kš ha-tomol/ mík sxiwašlikli pakíkš atomol 'the boat itself came to the surface far away: far / it surfaces / just / itself / boat'

and the entire emphatic sequence may be transposed.

/kiʔ-kš hi xuxaw s-uxnik-us-wun/ kíkš ixuxaw suxnikuswun 'Coyote himself got away from them: he himself / coyote / escapes from them'

### 853.3 Emphasis of Possessor Pronouns

The emphasis of possessor pronouns does not rely on the use of the intensive forms with -kš, but instead is accomplished by the transposition of the pronoun to precede the possessed noun.

[[čičiʔ noʔ]] -> /noʔ k-čičiʔ/ 'my child: I / my child'

This construction occurs primarily in nominal predications (q.v., 813); where the possessed noun may be prefaced with

ka or hi, usually ka.

/no? ka k-?ap/ no? kakap 'it is my house: I / my house'

/kay hi s-kiyi? hi no?/ 'I am his (a dog's) master:

he / his master / I'

This same construction is used in questioning possession.

/kune? ka s-?ap he?/ kune? kasap e? 'whose house is this?:

who / his house / this'

#### 853.4 Emphasis of Possessor Nouns

The few examples of emphasized possessor nouns show the noun transposed to precede the entire phrase, rather than just the possessed noun.

/ma-?al-wil + R hi yila? s-wil ha-s-iy-ni-su-tap/

ma?awilwil iyila? swil asinisutap 'all of the hunters have stuffed deer head decoys: the hunter / all / exists / their stuffed decoy'

/ma-iy-al-kume + R ha-s<sup>h</sup>ol ha-qweleqweł ha-s-čwin/

mayakumkume as<sup>h</sup>ol aqweleqweł ašičwin 'poor people's aprons are of poplar bark: who are poor / (its) bark / poplar / his apron'

As with emphatic possessor pronouns, possessor nouns may be emphasized in disjunct possessive predications lacking a finite verb (q.v., 812).

/ma-iy-al-aqi-mow-Vn + R ha-s-iy-swanan'/ mayalaqlaqimowon

asiyiswanan 'it is the custom of the stylish ones: who are stylish / their custom'

#### 854 The Cleft Sentence Transformation

The cleft sentence transformation is optional when the



simple sentence consists of a verb and at least one other element, such as a noun, pronoun, locative particle, or some other form. Here, from an underlying string with the verb in initial position as usual (cf. 840 on word order),

X does Y (where 'does' is a pro-form for any verb)

the verb is shifted to non-initial position, in relativized form with the nominal prefix ma-/ha- (q.v., 521 and 662.1). The copula is implied between the relativized or nominalized verb and the initial transposed item:

Y [is] what X does

Such sentences are nearly always glossed in their simple non-cleft form.

[[u<sup>1</sup>liš ha-cyiw<sup>1</sup>] → /ma-cyiw<sup>1</sup> ha-l-u<sup>1</sup>liš/ 'he grabs the edge:  
the edge [is] what he grabs'

The predicative particle ka frequently augments the nominalized verb with ma-/ha- (cf. 723.6 on ka with nominalized verbs).

/k-iš-ki<sup>7</sup> ka ha-k-iš-al-uni-yiw/ kiški<sup>7</sup> kakišaluniyiw  
'we (dual) look for it: we (dual) / we who look for'

#### 854.1 Position of the Verb in the Cleft Sentence

Transposition of the verb to non-initial position may not be an obligatory feature of the cleft sentence transformation: there are a few examples in which the verb remains in initial position, although it is nominalized. But such examples are also open to interpretation as noun-noun predications (q.v., 813) in which the first noun happens to be a nominalized verb form.

/ka ha-l-aqwiŋy-š heki/ kalaqwiš eki 'that is worthless:  
 what is worthless / that'

/ma-k-al-su-ʔinu hi ma-qsi/ makasuʔinu himaqsi 'what I  
 believe in [is] the sun'

#### 854.2 The Scope of the Cleft Sentence Transformation

In the third person, where relative and non-relative subject markers are distinct, there may be a clear contrast in otherwise parallel sentences between simple noun transposition and the cleft sentence transformation. An example, based on the underlying string

[[axwil [ha--niʔ noʔ] ha-ʔoʔ]]

shows both noun transposition with a non-relative verb

/ma-k-niʔ s-axwil ha-ʔoʔ/ 'the water reaches to my neck:  
 my neck / reaches / water'

and the cleft sentence with both noun transposition and relativization of the verb.

/ma-k-niʔ ha-l-axwil ha-ʔoʔ/ 'my neck is where the water  
 reaches to: my neck / what reaches / water'

Given the fact that first and second person relativized forms in context are often indistinguishable from their non-relativized equivalents, this transformation is probably much more common than it seems at first. It may be that most of the constructions in which ka and al- (and even ha alternatively analyzed as nominalizing ha-) mark non-initial first and second person verbs are actually cleft sentences.

#### 854.3 Items Subject to Transposition in Cleft Sentences

The item which is transposed to initial position in

the cleft sentence transformation may be a noun, pronoun, a locative particle or a locative expression of any sort, and various other forms as well.

Locative expressions of any sort are quite often subject to the cleft sentence transformation, especially when the verb is *wil* 'to be, exist.' Such locative expressions include locative and prepositional particles,

/ʔitiʔ ha-l-wil ha-k-ʔap/ ʔitiʔ awil akap 'here is my house: here / what is / my house'

/mi-koy' ha-l-wil/ mikoy' awil 'it is outside'

demonstrative pronouns used locatively,

/koloʔ ha-l-ati-kuy/ kol alatikuy 'he is heading over there: over there / what he heads for'

and place names and nouns used locatively.

/ʔopnow ka ha-k-iy-al-aq-šuč/ ʔopnow kakiyalaqšuč 'we are headed for ʔopnow: ʔopnow / what we head for'

/ma-čayaš ha-l-nowon hi kay/ mačayaš anowon ikay 'he is standing in the road: road / who stands / he'

Nouns subject to the cleft sentence transformation may be in any case relationship to the verb.

/ma-s-šuš hi kay ka ha-l-ʔihiy/ mašhuš ikay kalihiy 'his hair is long: his hair / he / what is long'

/pa kša ha-ʔoʔ ka ha-l-kuti/ pakšaʔoʔ kakuti 'all he sees is water: just / as for / water / what he sees'

With pronouns, this transformation most commonly applies to personal pronouns. Personal pronouns transposed in the cleft sentence are always subject pronouns.

/noʔ ka ha-k-al-qunun-pi/ noʔ kakaqunumpi 'it is I who

am doing it: I / I who do'

Other pronominal forms—demonstratives, numerals, and quantifiers—are less commonly subject to this transformation, but they may be in any relationship to the verb.

/pakaš' ha-iš-al-neč-pi/ pakaš' ašanečpi 'the two of them are alike: one [is] what they (dual) are like'

/kani pa suku ha-iy-al-su-tap hi mam/ kanipasuku ayasutap imam 'they put something or other inside: whatever / something / what they put in / inside'

/keñi-wuñ ha-l-aqulu-ni-yiw/ 'these [are the ones] that he chooses'

#### 854.4 Special Forms of the Cleft Sentence

The cleft sentence transformation occasionally occurs in unusual or specialized constructions.

A construction which seems to have comparative force is /ma-wak' ka ha-l-utišič ha s-iš-yila? ha-štayit/ mawak' kalutišič ašičyila? aštayit 'the wak' is tougher (as wood) than the štayit (two willow spp.): wak' / what is tough, hard / both / štayit'

Just as with simple noun transposition (cf. 852.4), more than one item may occur in preverbal position, either a preverbal particle as well as the transposed noun,

/kipi? ?o? ha-k-al-uni-yiw/ 'now [it is] water that I am looking for'

or perhaps even two nouns (although /?al-apay/ here is open to interpretation as either a noun or a particle).

/ma-?aqiwo ?al-apay ha-iy-al-aq<sup>h</sup>ay/ ma?aqiwo ?alabay

ayalaq<sup>h</sup>ay 'the stars are in the sky: the star /  
sky (or 'up above') / which are (in a place)'

There are a few cases in which the cleft sentence lacks a transposed head. In the simplest cases, the predication is simply a relativized verb

/pa ka ha-l-uti-kumu<sup>?</sup>/ pakalutikumu<sup>?</sup> 'it is enough:  
[it is] what is enough'

or a verb with a particle which is normally preverbal in any case.

/m<sup>h</sup>k ka ha-k-iš-al-nana<sup>h</sup> + R/ m<sup>h</sup>k kakišanannana<sup>h</sup>

'we two have far to go: far / we (dual) who go'

A more complex example involves a relativized verb with a following noun, in a construction which is not prone to interpretation as a noun-noun predication (cf. 854.1).

/ʔini ka ha-l-tap-ʔay ha-s-ʔapay<sup>h</sup>k/ ʔinikata<sup>h</sup>pay a<sup>h</sup>sapay<sup>h</sup>k

'he did not go back into the sweathouse: not / what he enters again / his sweathouse'

#### 855 Deletion of Nouns and Free Personal Pronouns

Nouns and free personal pronouns which have not been stressed in some way (i.e. by transposition, emphasis, or the cleft sentence transformation) may be deleted; this deletion is optional in most environments, but obligatory in one. This deletion follows person-number concord (as discussed in 821 and 822) by which nouns and free pronouns are copied as object suffixes and subject and possessive prefixes.

## 855.1 Noun Phrase Deletion

Any noun phrase in the sentence may be deleted, particularly if it has been referred to earlier in the discourse. There is no explicit pattern of pronominalization in Chumash, so that a given noun phrase in a certain stretch of discourse is not later referred to in a free pronominal form (e.g. xuxaw' 'Coyote' referred to as kay 'he' subsequently), but is simply deleted. An example with a subject noun phrase:

/ka s-uni-exmeš hi xuxaw', s-ʔal-aq-sisin, s-mixin + R<sub>1</sub>/  
 kašunexmeš ixuxaw', 'salaqsisin, emixixin 'Coyote gave  
 up; he was mad; he was hungry: gives up / coyote /  
 is one who is mad / is hungry'

With an object noun phrase:

/s-tak-tiʔ-wun ha-qolol, s-si-ni-weʔ-wun/ štaktiwun aqolol,  
 šhiniwewun '[my cat] gets mice, kills them: it gets  
 them / mouse / it kills them'

## 855.2 Deletion of Possessor Pronouns

In possessive constructions, free first and second person pronouns as possessors are retained only when they have been transposed for emphasis (cf. 853.3) to precede the possessed noun.

/noʔ k-čičiʔ/ 'my child: I / my child'  
 /piʔ p-kokoʔ hi noʔ/ 'I am your father: you (singular) /  
 your father / I'

Otherwise, first and second person pronouns are obligatorily deleted.

A third person pronoun as possessor may be retained even when it has not been transposed, although this construction is quite rare.

/ma-s-šuš hi kay ka ha-l-ʔihíy/ maš<sup>h</sup>uš ikay kalíhíy  
 'his hair is long: his hair / he / what is long'

### 855.3 Deletion of Subject Pronouns

Free personal pronouns as subjects are frequently deleted, if they have not been transposed to initial position (cf. 852.2 and 854.3) and/or suffixed with the intensive formative -kš (cf. 853.1).

[[ax-sumuʔ k-iy-kíʔ]] -> /k-iy-ax-sumuʔ/ 'we (pl.) suffer'  
 [[no--kuti [wahač ha-ku] piʔ]] -> /no-p-kuti wahač ha-ku/  
 'you will see many people'

One construction in which pronouns are retained is where a non-singular subject is expanded as two distinct pronouns.

/k-iš-ʔiškoḿ-Vč noʔ na hi kay/ kišiškoḿič noʔ nikay  
 'she and I are together (as a pair): we (dual) are  
 two / I / and / she'

A special case of subject pronoun deletion is imperative constructions lacking the second person marker p-. Here, the free pronoun may be retained, but only rarely.

/ašín-ʔ hi piʔ/ ʔašín ipiʔ 'eat, you!'  
 /eqmelew-ʔ + R ha-xíp hi piʔ/ ʔeqʔeqmelew axíp ipiʔ  
 'lick the stone(s), you!'

It may be in an intensive form.

/ušta-aqša-Vn-pi-šaši-ʔay piʔ-kš/ ʔuštalaqšanpišašay pikš

'you take better care of yourself!': take care of  
yourself more / you yourself'

#### 855.4 Deletion of Object Pronouns

Free personal pronouns in a dative or object relation  
to the verb are nearly always deleted,

[ikš- pi? no?] -> /k-ikš-in/ 'I give it to you'

but rarely they may be retained for emphasis. Of the few  
examples of free object and dative pronouns, nearly all  
remain in postverbal position,

/s-itaq-it hi no?/ 'he hears me: he hears me / I, me'

/k-kuti-in + R hi pi?/ k<sup>h</sup>utk<sup>h</sup>uti<sup>y</sup>in ipi? 'I see you:

I see you / you'

but the pronoun is transposed in one example occurring with  
a relativized verb.

/ka s-wil ha-uni-<sup>l</sup>eqen-pi-Vš pi? ka ha-l-uti-kuyupi-in/

kaswil a<sup>?</sup>uni<sup>l</sup>eqenpiyaš pi? kalutikuyupiyin 'here is  
the inheritance that comes to you: it exists / inher-  
itance / [to] you / what is willed to you'

As in other constructions, the third person pronominal form  
kay is less likely to be deleted than are first and second  
person forms.

/p-aq-pey-us hi kay/ peqpeyus ikay 'you resemble him'

/moqe s-si-ni-we? hi kay hi puluy/ moqe šhiniwe? ikay

ipuluy 'Crane woman has already killed him: already  
she kills / he, him / crane'

/no? ?ini-k-tišik hi kay/ 'I do not recognize him:

I / I do not recognize / him'



## 856 Disjunction

Another optional transformation is the disjunction of two words which are constituents of a single phrase, such as a quantifier and a noun in apposition with it. Disjunction evidently is a stylistic option.

A relative clause may be disjunctively ordered with respect to the head noun, as in

[[kič ha-wulewu [maniš ha-wulewu] noʔ] →

/kič ha-wulewu hi noʔ ha-l-maniš/ kič awulewu inoʔ amanış

'I am like a lost sheep (Span. borrego 'lamb'):

like / sheep / I / one that is lost'

or, with a quantifier as head, in

/yilaʔ yasis ha-l-aqlil/ 'all that shows is poison oak:

all / poison oak / that shows, is visible'

The quantifier yilaʔ 'all' is frequently disjunct from the noun with which it is in apposition.

/yilaʔ s-am-nañ ha-ku/ 'all the people go: all / some  
go / person'

/s-iy-yilaʔ ha s-iy-poñ-Vč ha-ʔeneq-ʔ + R/ siyilaʔ  
ašipnoč aʔeneqneq 'all the women have sticks:  
all / they have sticks / women'

Two conjoined object nouns are disjunct in

/ʔuw-Vš ha-l-am-hik-Vn na wewey/ ʔuwaš alamhiken nawewey  
'they use a pipe and sage: pipe / what they use /  
and / sage'

An intensive pronoun and its referent are disjunct in  
/kiʔ-kš ku-s-kuti + R heʔ/ kš kš kuskutkuti heʔ 'this one  
will see for himself: he himself / will see / this'

## 857 Insertion of Connective Particles hi and ha

The connective particles hi and ha (q.v., 710) are inserted into the phrase by a low-level rule. After the application of all of the other transformations which shift word order or delete morphemes, certain lexical items non-initial in the phrase are prefaced with hi or ha. For example, given an underlying string such as

[[moqe mɪk-Vn xuxaw]]

hi would be inserted before xuxaw 'Coyote' (a proper noun here) to give the neutral word order

/moqe s-mɪk-Vn hi xuxaw/ moqe smɪkɪn ixuxaw 'coyote is already far away: already / is far away / coyote'

As this sentence actually occurs in context, the subject noun has been transposed to initial position, and the particle moqe 'already' is prefaced with hi.

/xuxaw hi moqe s-mɪkɪn/ xuxaw imoqe smɪkɪn 'Coyote already is far away'

In other cases, the connective particle ha may be inserted; ha is actually more common than hi. For example, from the underlying string

[[aqšiyik nono? no?]]

ha is inserted before the particle nono? 'very much' (along with deletion of the subject pronoun no? 'I') to give

/k-aqšiyik ha nono?/ 'I like it very much'

This same sentence occurs with the particle in preverbal position, in which case the verb takes hi.

/nono? hi k-aqšiyik/ 'I like it very much: much / I like'

For specific details on which forms take hi and ha, and

in which constructions, see section 710.

### 860 Embedded Constructions

In embedded Constructions, the embedded verb nearly always follows the matrix verb, usually with the connective particle *ha* (more rarely *hi*) linking the two. The only overt sign of subordination here is word order; it is quite rare for the embedded verb to take the subordinating prefix *al-*. The embedded verb is usually the object of the matrix verb, but may also be the subject. Embeddings in which the subjects of the matrix and embedded verbs are identical may have an auxiliary force.

### 861 Object Embedding

The simplest cases of embedding are those in which the embedded phrase is the object of the matrix verb.

/k-ʔal-paŋ ha s-am-tal-memen + R/ kapaŋ asamteltememen

'I don't want them to touch it: I am unwilling /  
they touch'

/s-iy-čamɪn ha s-ičtɪŋ-Vč ha-xus/ šičamɪn ašičtɪŋič axus

'they know that the bear has cubs: they know /  
it is with young / bear'

/ʔini-p-aqni-čho ha k-uliš heki ha-čoyini/ ʔinipaqničho

hakuliš ek ačoyini 'you don't want me to grab that  
other one?: you don't want / I grab / that / other'

/moqe ʔini-s-pošhon-Vn-us ha s-mal-čiwikɪn/ moqeʔnispošhon-

inus asmalčiwikɪn 'she is no longer aware of being  
tired: already / she is not aware / she is tired'

The embedded sentence may lack a finite verb, the copula

being implied,

/s-ʔal-niwileʔ ʔini ka kič heki-mu-wuñ/ saniwileʔ ʔinika  
kič ekimuwuñ 'he insists [that they are] not like  
those'

/k-aqni-wil pa šup lunes hi kipiʔ/ 'I think maybe today  
is Monday (Span. lunes): I think / maybe / Monday /  
today'

or the matrix sentence itself may lack a finite verb, in  
what amounts to a single noun predication (q.v., 811) with  
an embedded sentence.

/ka s-eqwel-muʔ ha s-aqniʔ/ kaseqwelumuʔ asaqniʔ 'it is  
her job to make baskets: her work / she makes baskets'

## 862 Subject Embedding

Embeddings are fairly rare in which the embedded sen-  
tence is the subject of the matrix verb. In some of these  
cases, the matrix verb seems to belong to a small idiomatic  
subset with a roughly auxiliary force.

/s-uqni no-k-al-atik/ 'it seems that I will recover:  
it seems / I recover'

/ʔini-s-nithoy hi s-iy-mik-Vn/ ʔinišnit<sup>hoy</sup> isimikiñ  
'they can't get far away: it is not possible / they  
go far away'

/s-uti-kumuʔ ha s-su-uti-pše?-in + R ha-s-ikmen/ sutikumuʔ  
ašhutšutipšelin asikmen 'the waves are enough to  
knock you over: it is enough / it causes you to fall  
/ surf, waves'

Other verbs with embedded subjects might belong to a larger

set which would probably easily admit other verbs on the same pattern.

/s-oq<sup>1</sup>tok ha s-am-ni-k<sup>1</sup>ot/ 'it is difficult to break it:

it is difficult / they break it'

/s-č<sup>h</sup>oho s-am-<sup>2</sup>uw/ šč<sup>h</sup>oho sam<sup>1</sup>uw 'it is good to eat:

it is good / they (indefinite) eat'

/s-šuy<sup>h</sup>uwač-šaši ha s-axi-kum/ š<sup>h</sup>uy<sup>h</sup>uwač<sup>h</sup>iši asaxikum

'his dancing is formidable: it is formidable /  
he dances'

/s-su-eqen-š ha k-oqš<sup>o</sup>?<sup>o</sup>/ š<sup>h</sup>eqeč akoqš<sup>o</sup>?<sup>o</sup> 'my thirst

is gone: it is gone, removed / I am thirsty

### 863 Identity of Matrix and Embedded Subjects

With certain verbs, the embedded construction generally shows an identity between the subject of the matrix and embedded verb; such verbs often correspond to English modals and auxiliaries.

/k-aqni-č<sup>h</sup>o ha k-nañ/ 'I want to go; I would like to go:

I want / I go'

/s-č<sup>h</sup>o<sup>2</sup> ha s-qunun-mu<sup>2</sup>-vč/ šč<sup>h</sup>o<sup>2</sup> ašqununumuč 'he quits

working: he quits, stops / he works'

These verbs refer to attitude,

/<sup>2</sup>al-pič<sup>1</sup>/ <sup>2</sup>apič<sup>1</sup> 'to be reluctant to, unwilling to...'

/aqni-č<sup>h</sup>o/ 'to want to, like to...'

/aqni-wil/ 'to intend to... (lit. to think)'

/aqni-yiw/ 'to want to...'

aqšiy+k 'to like to, love to...'

ability,

čamín 'to know how to... (lit. to know)'

/čamín-pí/ 'to be used to, accustomed to...'

/ní-sín/ 'to be able to...'

or temporal complementation.

ap<sup>h</sup>ik 'to stop, finish...'

čho? 'to stop, quit...'

/su-nañ/ 'to begin, start to...'

/su-uqwa-čuč/ šuqwašuč 'to begin, start to...'

Such verbs differ from, say, nithoy 'to be possible that...', which takes only a third person singular subject marker s- whatever the subject of the embedding.

/s-nithoy ha k-eqwel/ šnithoy akeqwel 'I can do it:

it is possible / I do'

#### 864 Embedding by Prefixes

With the frequent desiderative and causative constructions, a deep-structure embedding is accomplished within the bounds of a single verb. The embedded verb is prefixed with the desiderative sili-, the causative su-, or (less commonly) the transitive ni-, and the resulting verb form takes as object the original subject of the embedded verb.

[[su- [aq-sumu? no?] kay]] ->

/s-sus-aq-sumu?-it/ s<sup>h</sup>usaqsumulit 'he has me taste it:

he causes me to taste'

Other examples:

/ʔini-k-sili-<sup>ʔ</sup>pow ha-k-pa/ 'I don't want my staff, cane

to be crooked: I don't want to be crooked / my staff'

/k-su-tikay ha-kawayu ha-čiči?/ 'I put the child on the

horse: I cause to be on / horse / child'  
 /s-ni-qelen hi mi-šup ha-xus/ šniqelen imišup axis  
 'the bear is ripping up the ground: he makes it  
 ripped up, shredded / ground, earth / bear'

865 Agreement of Object Markers and Embedded Subjects

The matrix verb often takes an object suffix in agreement with the subject of the embedded verb, parallel to the agreement of object suffixes and possessive markers of object nouns discussed in 824.

/k-is-ti?-wun s-iy-kep/ kištīwun sikep 'I found them  
 bathing: I find them / they bathe'

/pa s-kuti-wun + R ha s-iy-ašīn/ paskutkutiwun ašiyāšīn  
 'he just watches them eating: just / he watches them  
 / they eat'

/ʔini-s-iy-ʔaxay-in ha p-weʔ ha piwiʔ/ ʔinisiyaxayin apweʔ  
 apiwiʔ 'the mosquitoes don't let you sleep: they do  
 not allow you / you sleep / mosquito'

With verbs of communication, the presence of the object suffix depends on whether the communication is directed to the subject of the embedded verb,

/ka k-saqnip-us ha s-kuyam-it/ 'I reply to him [that] he  
 [should] wait for me'

/s-am-ʔip-it k-aq-pey-us heki ha-ʔihīy-ʔ/ samīpit keqpeyus  
 ek aʔihīy 'they tell me [that] I resemble that man'  
 or not.

/s-am-ʔip s-pil-wayan/ samīp spiwayan 'they say [that]  
 it moves'

## 866 Word Order in Embedded Constructions

The embedded construction is one in which a noun phrase in some relationship to the verb is rewritten as an embedded sentence; just as with regular noun phrases, the position of such embedded sentences is postverbal. The order of noun phrases in constituency with the embedded verb generally remains unchanged.

[[čamɪn [-ičtɪn'-Vš ha-xus] kay-wun'] →  
 /s-iy-čamɪn ha s-ičtɪn'-Vč ha-xus/ šičamɪn ašičtɪnič axus  
 'they know that the bear has cubs: they know / it  
 is with young / bear'

A rare example of an embedded verb transposed to precede the matrix verb, in this case a subject embedding, is

/wa-s-tapɪn ha p-naɪ-iy hi s-č<sup>h</sup>o/ waštapɪn apnaɪiy išč<sup>h</sup>o  
 'it is good that you went again last night: last  
 night / you go again / is good'

The position of a nominal subject of the matrix verb varies. In the underlying string, the subject of the matrix verb would theoretically follow an object embedding, and this order is actually seen in

[[ʔini--ʔaxay [weʔ piʔ] ha-pɪwiʔ] →  
 /ʔini-s-iy-ʔaxay-in ha p-weʔ ha-pɪwiʔ/ ʔinisiyaxayin apweʔ  
 apɪwiʔ 'the mosquitoes don't let you sleep: they do  
 not allow you / you sleep / mosquito'

When the subject of the matrix verb is identical to that of the embedded verb, one of the two identical forms is deleted. This may leave the subject in final position,

[[čamɪn [aqɪwiwɪn noʔ] noʔ] →



/k-čamín ha k-aqwiwiwín hi no?/ 'I know how to swim:

I know / I swim / I'

but more often, after deletion of one of the identical nominal forms, the other is transposed to precede the embedded verb.

[[?ip-waš [no--?uw yila? no?] no?] →

/k-?ip-waš hi no? no-k-?uw yila?/ kípwaš ino? no'kuw yila?

'I thought that I would eat it all: I thought / I /  
I will eat / all'

Another example:

/pa šup s-?ip ha-k-tík no-s-kuti-iyuw-iy/ pašup šip aktík  
noskutiyuwiy 'maybe my mother thinks she'll see us  
again: maybe / thinks / my mother / will see us again'

When some other noun follows the embedded verb, transposition of the matrix subject is obligatory.

/ka s-axu-kumu? hi puluy moqe s-akti-na? ha-?ihiy-?/  
kasaxukumu? ipuluy moqe saktina? a?ihiy Crane woman  
figures that the man is already coming by: figures /  
crane / already / comes / man'

The subject noun of the matrix verb may even be transposed to precede the entire construction.

/kay hi s-čamín-pi ha s-wali-kí?-kš/ kay iščamínpi  
ašwalikikš 'he is accustomed to being alone: he /  
he is accustomed to it / he is alone'

Another possibility with embedded constructions is that the object of the matrix verb is identical to the embedded subject, in which case the second of the two identical nouns is deleted; one noun is left, apparently in

constituency with both verbs.

[[ka xil-al-ti<sup>?</sup> ha-<sup>?</sup>ihiy-<sup>?</sup> [akti-na<sup>?</sup> ha-<sup>?</sup>ihiy-<sup>?</sup>] kay-wun]] ->  
 /ka s-iy-xil-al-ti<sup>?</sup> ha-<sup>?</sup>ihiy-<sup>?</sup> hi s-akti-na<sup>?</sup>/ kasixilati<sup>?</sup>  
 a<sup>?</sup>ihiy<sup>?</sup> isaktina<sup>?</sup> 'they see a man coming: they see /  
 man / he comes'

When the relationship of the matrix and embedded verb is complicated in this way by the presence of an intervening noun phrase, the subject of the matrix verb is transposed to initial position.

/pi<sup>?</sup> p-kuti ha-p-tata<sup>?</sup> ha s-axi-kum/ 'you see your uncle  
 dancing: you / you see / your maternal uncle / dances'

#### 870 Relativization

Relativization is a common process in Ineseño, far more pervasive than it seems at first inspection. Various relative constructions occur, usually based on the relativizing and nominalizing prefix ma-/ha- (q.v., 521 and 662.1). Other relativizing prefixes and particles have temporal and locative force. In addition to straightforward relative constructions such as

/no-k-monus ha-k-eqwel/ 'I will decorate what I make'  
 /s-kuti + R ha-iy-al-nukumpi/ skutkut ayanukumpi 'he  
 watches the nukumpi dancers: he watches / those who  
 do the nukumpi'

there are idiomatic usages of relativization: following interrogative pronouns, with *wil* 'to be, exist' in some constructions, and very commonly in the cleft sentence transformation (q.v., 854).

## 871 Relativization with ma-/ha-

The prefixation of ma-/ha- to the verb is by far the most common mode of relativization. The non-initial ha-form (as explained in detail in 521.3 and 662.1) is superficially identical with the connective particle ha. Third person relative forms have special subject markers (cf. 650),

singular	/ma-l-/
dual	/ma-iš-al-/ mašal-
plural	/ma-iy-al-/ mayal-
indefinite	/ma-l-am-/

as seen in

/s-sus-kuti-it ha-l-tiyək/ s<sup>h</sup>uskutiyit atiyək 'he shows me what is inside'

/suku ha-iš-al-hik/ suk ašalik 'what are they (dual) doing?: what [is it] that they two are doing?'

/ma-iy-al-tap ha s-iy-aqwāc'in/ mayatap asiyaqwāc'in 'those who are coming in are shouting: who enter / shout'

First and second person relative forms may be ambiguous in context, given the superficial identity of ha- and ha. This ambiguity is partially resolved by the prefix al- (q.v., 671.2) which optionally accompanies first and second person relativizations.

/ʔini-s-wil ha-k-al-kuti/ ʔinsil akakuti 'I am not looking at anything: does not exist - what I look at'

/ka k-itaq-in ha-p-al-ʔip-us/ kakitaqin apalipus 'I hear what you are saying: I hear you / what you say'

But al- is not a sure sign of relativization; it also occurs in non-relative constructions with embedded verbs

/s-uqni no-k-al-atik/ 'it seems [that] I will recover'  
and even more often with non-initial verbs.

/katu hi k-al-aqšiyik hi no?/ 'I would like a cat: cat /  
I like / I'

The potential ambiguity with first and second person relative forms is compounded by the existence of inalienably possessed derivatives with zero derivational markers (q.v., 523.2). Thus, a form such as /ma-k-ackaw/ 'my error' could be interpreted either as a nominalized verb 'the error that I make' or as a possessed noun with the article ma-. This form is shown to be a noun only by the existence of a non-possessed form in -VŠ (i.e. /ackaw-VŠ/ 'ačkawiš 'mistake, error') and by the fact that third person forms take the s- possessive marker rather than the l- relative subject marker (i.e. /ma-s-ackaw/ 'his error'). In context, of course, many such cases are simply ambiguous. A typically ambiguous example, cited in the discussion of embedding, is

/s-su-eqen-š ha k-oqšo'o?/ š<sup>h</sup>eqeč akoqšo'o? 'my thirst  
is gone: it is gone, removed / I am thirsty'

The phonetic sequence [akoqšo'o?] could be analyzed as a verb plus connective particle /ha k-oqšo'o?/ 'I am thirsty,' as above, or as /ha-k-oqšo'o?/, either a relativized verb 'I who am thirsty' or a zero derivative noun 'my thirst.'

## 872 Relativizations with ka

The predicative particle ka commonly occurs in relative constructions, where it is elided with non-initial ha-. It usually occurs with non-initial relativized verbs in the

cleft sentence construction (q.v., 854).

/moluš ka ha-l-č<sup>h</sup>oho/ moluš kač<sup>h</sup>oho 'juniper [is] what  
is good [for it]'

/kay-wuñ ka ha-iy-al-expen-š/ kayuwuñ kayalexpeč 'they  
are singing: [it is] they who are singing'

/noʔ ka ha-k-al-qunun-pi/ noʔ kakaqunumpi '[it is] I who  
am doing it'

More rarely, the verb with ka may be initial in such cleft constructions.

/ka ha-l-aqwɨy-š heki/ kalaqwɨš eki 'that is worthless:  
what is worthless / that'

Outside of the cleft sentence construction, ka may sometimes introduce relativized forms occurring non-initially.

/no-k-ułiš ka ha-l-is-tik-Vn/ nokułiš kalištik<sup>h</sup>in

'I will grab the first one (the one that is first)'

/ma-k-ʔuw-muʔ ha ka ha-k-al-aqšiyik/ makuwumuʔ

akakalaqšiyik 'the food (lit. my food) that I like'

Initial relativized forms, if not in a cleft sentence construction, take ma- rather than ka plus ha-.

/ma-k-uqwa-nañ no-k-sinay/ 'I will put it on what I am  
making: what I make / I will put it'

### 873 Relativizations with a Nominal Head

In the string underlying relativizations, two kernel sentences with a noun phrase in common

[[kuti suku [axunušpi suku kay] kay]]

are collapsed to give a single surface string

/s-kuti ha suku ha-l-axunušpi/ skut asuku alaxunušpi

'he sees something that he is afraid of'  
 in which the second of the two identical nouns (i.e. *suku*)  
 is deleted, and the subordinate verb appears in a relativ-  
 ized form.

The noun upon which relativization is based is seldom  
 expressed, just as most transitive verbs have an implied  
 third person object which is seldom expressed. Of the  
 examples showing clearly that relativization hinges on a  
 noun phrase, most are based on pronominal forms rather than  
 actual nouns: usually *suku* ~ /*suku-?* + R/ *suksuku?* 'some-  
 thing,' as in the example above, or *yila?* 'all, everything.'

/s-ti-yep-us ha-s-ti<sup>k</sup> yila? ha-l-aqta-qen-us/ štiyepus  
 ašt<sup>k</sup> yila? aleqteqenus 'she tells her mother  
 everything that happens to her'

But when the noun does appear, it precedes the relativized  
 verb whether it is the subject of the main verb

/pa s-ki-timay ha-k-?uw-mu? ha ka ha-k-al-aqšiyi<sup>k</sup>/  
 paskitimay akuwumu? akakalaqšiyi<sup>k</sup> 'the food that I  
 like is just a little salty: just / it is a little  
 salty, spicy / my food / that I like'

or the object.

/s-kuti ha-?i<sup>h</sup>y-? ma-l-ti-Vč xwakin/ skut<sup>i</sup> a<sup>?</sup>i<sup>h</sup>y<sup>i</sup> matič  
 xwakin 'he sees the man who is named Joaquin'

An exception to this general pattern is

/no-k-ik<sup>h</sup>l ha-k-ti-lokin ha-tomati/ 'I will bring the  
 tomatoes (Span. tomate) that I cut: I will bring /  
 what I cut / tomato'

A more complex example, based on the idiomatic expression

/s-wil/ plus possessed noun 'to have N,' is

/p-iy-kuti ha-s-ʔopxon-waš-ʔ + R ma-ʔini-s-wil

ha-s-iy-kokoʔ/ pikuti ašopšopxonowaš maʔnisil asikokoʔ

'you (pl.) see the orphans who have no fathers: you  
(pl.) see / orphans / which does not exist (i.e. of  
whom does not exist) / their father'

#### 874 Relativizations with Adjectival Force

A special case of relativization with a nominal head involves stative verbs with adjectival force: these are glossed as noun plus adjective.

[yul-čĭ ha-ʔoʔ] → /ma-l-yul-čĭ ha-ʔoʔ/ mayič aʔoʔ

'hot water; water that is hot: what is hot / water'

In isolation, it is tempting to analyze such phrases as noun-noun appositive constructions (q.v., 582) parallel to

/ʔas ha-štapan/ 'a tule mat: a mat [of] tule'

/ni-šot-Vš ha-wĭ/ nišotuš awĭ 'a skinned deer: something  
skinned / a deer'

Both in isolation and in context, usage is about equally divided between the alternative orderings of noun followed by relativization (the obligatory order in non-adjectival constructions)

/ti-yep-Vš ha-l-ʔikĭmin/ tiyepēš alikĭmin 'news: report,  
tidings / which is new'

/s-kuti-waš ha-kawayu ha-l-maniš/ škutiwaš akawayu amaniš  
'he saw a lost horse: he saw / horse / which is lost'

and of relativization followed by noun.

/ma-l-yul-čĭ ha-ʔoʔ/ mayič aʔoʔ 'hot water: what is hot /

water'

/k-mexweʔ-š-pi ha-l-čí + R ha-xíp/ kmexwešp acícč haxíp

'I whet [my knife] on a rough rock: I whet on /

what is rough (lit. sharp) / rock'

### 875 Relativization with Relative-Interrogative Pronouns

The verb following one of the relative-interrogative pronouns is usually relativized, whether the pronoun is used in a relative sense or an interrogative sense. In addition, kuneʔ 'who' and suku 'what' used pronominally in the sense of 'someone' and 'something' respectively may occur as the nominal head of a relative clause.

#### 875.1 With Relative Force

Relative clauses are introduced by kuneʔ 'who,' suku 'what,' tikaliʔ 'which one,' and takaʔ 'where' (cf. 420); the following verb is relativized with non-initial ha-.

/qulu-wašlík-ʔ kuneʔ ha-l-aqta-qen/ quluwašlík kun

aleqteqen 'peek [to see] who is passing by!'

/no-k-itax-sín suku ha-iy-al-qunun-pi/ nokitaxsín suk

ayaqunumpi 'I will find out what they are doing'

/ʔini-k-čamín tikaliʔ ha-l-axuti-wil/ ʔinikčamín tikal

alaxutiwil 'I don't know which one is speaking'

/s-kuti + R takaʔ ha-l-wil haʔoʔ/ skutkuti tak awil aʔoʔ

'he sees where [there] is water'

Relativization is suspended, of course, when the relative clause introduced by a relative-interrogative pronoun has a zero copula.

/ʔini-k-čamín suku hi wič/ ʔinikčamín suk iwíč 'I don't



know what [kind of] bird [it is]'

/ʔini-k-čam̩n tikaliʔ ha-s-xulxul-Vš/ ʔinikčam̩n tika  
 ašxulxulaš 'I don't know how much it weighs:  
 I don't know / how much / its weight'

#### 875.2 With Interrogative Force

The verb following this same set of relative-interrogative pronouns, *kuneʔ*, *suku*, *tikaliʔ*, and *takaʔ*, is usually relativized even when they are used interrogatively,

/kuneʔ ha-l-ɪlɪk̩n hi maṃ/ kun alɪlɪk̩n imaṃ 'who is  
 inside?: who [is it] who is inside?'

/suku ha-l-uni-yɪw/ suk aluniyɪw 'what is he looking  
 for?: what [is it] that he is looking for?'

/takaʔ moq̩e ha-iš-al-kum/ takaʔ moq̩ ašakum 'where have  
 they two come from?: where / already / two who come'

although relativization is not obligatory here.

/kuneʔ ha s-is-tɪʔ/ kun ašitɪʔ 'who found it?'

/suku ha s-iy-tepuʔ/ suk asitepuʔ 'what [game] are they  
 playing?'

This use of relative forms in interrogative constructions is similar to the French

qu'est-ce que c'est?

qu'est-ce qu'il dit?

The other relative-interrogative pronouns do not take relativized forms of the verb when used either interrogatively or relatively.

/ʔašniṃ ku-p-naṃ/ 'when will you go?'

/taku k-net-us/ 'how do I do it? how am I to do it?'

## 875.3 With Nominal Force

The relative-interrogative pronouns *kune?* 'who' and *suku* 'what' may be used nominally in the sense of 'someone' and 'something' respectively; they may be the nominal head of a relative clause. This construction is especially common for *suku*, which sometimes occurs in a reduplicated form /*suku-?* + R/ *suksuku?*.

/moqe *ʔini-s-wil ha kune?* ha-l-am-esqen-us/ moqe<sup>ʔ</sup>nisil  
akune<sup>ʔ</sup> alamesqenus 'there is no longer anyone to  
ask about it: already / does not exist / someone /  
whom they ask about it'

/*ʔini-p-su-kuta?* ha *suku-?* + R ha-l-su-uxštī-kuy-š/  
*ʔinipsukuta?* *asuksuku?* *ašuxštikuš* 'don't pick up  
something that is thrown away!'

## 876 Other Relative Constructions

Relative constructions may be based on the other relativizing prefixes, discussed in greater detail in 662: *ti-* 'what,' *wa-* 'if, when,' *hini-* 'when,' the sequence *ma-/ha-...-pi* 'where,' and a particle *moq* 'as, when.' None of these is as common as *ma-/ha-*.

876.1 The prefix *ti-* 'what' seems to be used with just a few verbs, especially *ʔip* 'to say, think' and *net* 'to do.'

/s-esqen-it *ti-k-ʔip*/ *sesqenit tikip* 'he asks me what  
I said'

/*ʔini-k-čam+n ti-k-net-us*/ 'I don't know what I did to  
him (that he should be offended)'

876.2 The prefix wa- 'if, when' can have either or both of these two senses in a given context.

/wa-s-wił hi s-aqway/ 'if/when he shoots, he hits it'

876.3 The prefix hini- 'when' is less common than wa-.

/k-kuti hini-s-tap/ khuti hiništap 'I saw [him] when he came in'

876.4 The sequence ma-/ha-...-pi 'where,' with the locativizing suffix -pi, shows ma-/ha- behaving just as in simpler relative constructions.

/s-lu-kumel ha-l-wil-pi ha-l-am-ašin/ šlukumel awilp  
alamašin 'he heads straight for where the food is:  
he goes straight / where it is / food'

/ma-iy-al-nañ-pi heki-mu-wuñ, nañi ku-k-nañ/ mayananpi  
ekimuwuñ, nañi kuknañ 'where those people are going,  
I will go too: where they go / those / also / I'll go'

876.5 The particle moq may be used in temporal relative constructions (cf. 770.13).

/moq pa s-uti-pše' s-xal-nowon hi kiškiš/ moq pašutipše'  
sxonowon ikiškiš 'just when [the tree] was falling,  
kiškiš flew away: when / just / it falls / flies / k.'

876.6 The particle kupa 'to see who/what...' (q.v., 770.12) is often involved in relative constructions, either with the relative prefix ti- 'what,'

/k-esqen-us kupa ti-s-ʔip/ kesqenus kupa tišip 'I ask  
him to see what he said'

or with one of the relative-interrogative pronouns.

/no-k-iš-alpat, kila kupa kune? ha-l-towič/ nokišalpat,  
 kila kupa kun atowič 'let's (dual) run, to see who  
 is faster! to see who is fast!'

### 877 Nominalized Forms with Relative Force

Nominalizations with the locative suffix -mu? (q.v., 523.5) and with the resultative suffix -Vš (q.v., 523.1) are often best glossed with relative clauses. Examples with -mu? are fairly common.

/ma-s-nan'-mu? ha-tow'/ mašnan'umu? atow' 'stove pipe, where  
 the smoke goes: its going place / smoke'

/kweki ma-k-nanan'-mu?-iwaš + R hini-k-čiči?/ kweki  
 maknannan'umu?iwaš inikčiči? 'there is where I went  
 when I was a child: there / my former going place /  
 when I [was] a child'

/'apšti? ha no-k-sinay ha-p-apin-mu?/ 'apšti? anoksinay  
 apapinimu? 'how many [smoldering juniper pellets]  
 shall I put on where you are being cauterized?:  
 how many / I will put on / your cauterizing place'

Less common are examples with the resultative -Vš, loosely translated as 'that which has been V-ed.'

/moqe s-aqawan ha-k-su-tap-Vš/ moqe saqawan akšutapiš  
 'what I dyed is dry already; my dyed thing is dry  
 already: already / is dry / my dyed thing'

The relative interpretation of such a sentence is not obligatory, and this pattern is largely unexploited, compared to the examples above with -mu?. After a sentence in the manuscript, atypical in that it shows the head noun after

the relativized verb,

/no-k-ik<sup>h</sup>±l ha-k-ti-lokin ha-tomati/ 'I will bring the  
tomatoes that I cut: I will bring / what I cut /  
tomato'

Harrington observed marginally that such sentences avoid  
-Vš forms, presumably referring to such a string as

\*/no-k-ik<sup>h</sup>±l ha-k-ti-lokin-Vš ha-tomati/ \*nokik<sup>h</sup>±l  
akti<sup>l</sup>okinaš atomati lit. 'I will bring / my cut  
thing(s) / tomato'

#### 878 Idiomatic Relativization with wil 'to be, exist'

Relativization is common in various idiomatic construc-  
tions with the verb wil 'to be, exist.'

Almost every occurrence of wil with a locative expres-  
sion is subject to the cleft sentence transformation (q.v.,  
854), by which the locative expression occurs in phrase-  
initial position and wil is relativized.

/mi-koj' ha-l-wil/ mi<sup>l</sup>koj' awil 'it is outside: outside /  
what it is'

/?al-apay ha-l-wil ha pakas' ha-?aqiwo/ ?alapay awil apakas'  
a?aqiwo 'there is one star in the sky: the sky (or  
up above) / what is / one / star'

The expression wil plus possessed noun 'to have N' is  
likely to occur in relative constructions. Given a simple  
sentence such as

/s-wil ha-s-sa ha-k-ya?/ swil as<sup>h</sup>a hakya? 'my arrow has  
a flint tip: there exists / its flint tip (lit.  
tooth) / my arrow'

a typical relativization is

/ikš-it-ʔ ha-k-yaʔ ha-l-wil ha-s-sa/ ʔikšit akyaʔ awil  
 aš<sup>ha</sup> 'give me my flint-tipped arrow!: give me /  
 my arrow / [of] which exists / its tooth'

The negative form /ʔini-s-wil/, with its irregular contraction to [ʔinsil], or [-ʔnisil] after prefixes and some particles (cf. 286.44), is often used idiomatically in the sense of 'no, none; nothing, no one.' Any verb is relativized following [ʔinsil].

/ʔini-s-wil ha-l-ni-aqša-Vn-Vn/ ʔinsil anaqšanin 'nothing  
 affects him: does not exist / what affects, harms'

/ʔini-s-wil ha-k-al-kuti/ ʔinsil akakuti 'I am not look-  
 ing at anything: does not exist / what I look at'

/ʔini-s-wil ha-l-aqni-wil-us hawala ha-ʔeneq-ʔ + R/  
 ʔinsil alaqnawilus hawal aʔeneqneq 'he thinks of  
 nothing but women: does not exist / what he thinks  
 of / only (except) / women'

### 879 Word Order in Relative Constructions

The relative clause usually follows the main verb, whether it is the object of the main verb

/k-itaq-in ha-p-al-ʔip-us/ kitaqin apałipus 'I hear what  
 you say: I hear you / what you say'

or even the subject.

/s-xili-wayan ha-ʔini-s-č<sup>ho</sup>/ sxiliwayan aʔnišč<sup>ho</sup> 'the  
 impurities float: it floats / what is not good'

An example with a relativization as subject shows the usual simple sentence word order: verb - object - subject.

/s-ušmuw-it ha-k-aqšiw-? ma-k-al-?uw-waš/ šušmuwit akaqšiw'  
 makaluwuwaš 'what I ate turned my stomach: it churns  
 to me / my stomach / what I ate'

For occasional stylistic emphasis, the relative clause may be transposed to phrase-initial position; here it consists of only a single relativized verb, nothing more complex. Relativization in this position is clearly marked with the full ma- form of ma-/ha-, rather than with the more ambiguous elision of ka plus ha- (cf. 872).

/ma-k-uqwa-nañ no-k-sinay/ 'I will put it on what I am  
 making: what I make / I will put it'

/ma-k-al-aqni-wil hi k-wala-tamay/ 'I forget what I was  
 thinking: what I think / I forget'

As already discussed in 873 on relativization with a nominal head, when the noun upon which relativization hinges is actually expressed, it nearly always precedes the relativized verb.

/s-kuti ha suku ha-l-axunušpi/ skut asuku alaxunušpi  
 'he sees something that he is afraid of'

Any other noun in the relative clause follows the relativized verb.

/s-sus-kuti-it ha-l-tiyik ha-s-poñ/ s<sup>h</sup>uskutiyit atiyik  
 aspoñ 'he shows me what is in his trunk'

Only adjectival relativizations with head nouns (q.v., 874), freely ordered with respect to one another, are exempt from the rule that head nouns precede the relativized verb. Such constructions may follow either the standard order

/ha-kawayu ha-l-maniš/ hakawayu amaniš 'a lost horse:

horse / which is lost'

or the opposite order, where the relativization precedes the noun.

/ma-l-yul-čá ha-ʔoʔ/ mayíc aʔoʔ 'hot water, water that is hot: what is hot / water'

The subject of the main verb, if it is not part of the relative clause, is nearly always transposed to precede the entire predication.

/noʔ ka k-čámɛn suku ha-iy-al-aqšiyɛk/ noʔ kakčámɛn suk ayalaqšiyɛk 'I know what they want, what they like'

A rare example of such a subject noun appearing between the main verb and the relative verb, which are linked here by object agreement (cf. 824), is

/s-aq-šuč-it ha-xus ha-k-al-nowon-pi/ šaqšučit axus akanowonpi 'the bear heads for where I am standing: it heads for me / bear / where I stand'

## 880 Complex Sentences

Complex sentences are those constructions in which two or more simple sentences are conjoined and/or subordinated by some means other than embedding and relativization (q.v., 860 and 870). Accordingly, this is a rather miscellaneous collection, including coordinate verbs and temporal coordination, conjunction with the conjunctive particles and sentential prefixes, and the treatment of parallel sentences.

## 881 Coordinate Verbs

Pairs of coordinate verbs are a common construction,



in which two verbs with the same subject are juxtaposed much as appositive nouns are (cf. 582). The relationship between the two verbs ranges from synonymy through adverbial modification through a loose subordination. The two verbs are generally linked by the connective particle *ha*.

### 881.1 Synonymous Coordination

The coordinate verbs may be more or less synonymous, in which case coordination is purely a stylistic device.

/k-su-ata-apay k-ni-su-wal-tun/ ksatalapay knisuwatun

'I put it on top [of something]: I cause to be above  
/ I put one over another'

/k-aqsik ha k-qal-naqal-momon/ kaqsik aq<sup>h</sup>onoqomomon

'I tie it by all fours: I tie / I tie by all fours'

/ka s-ašɨn ka s-ʔuw/ kašašɨn kasuw 'she eats: she eats  
(a meal) / she eats'

### 881.2 Adverbial Coordination

The most common coordinate construction has an adverbial force. One verb has a primarily adverbial force (e.g. *towič* 'to be fast; to do quickly'), while the other verb denotes some action with no adverbial qualification. The qualifying verb is subordinate here, and usually follows the main verb. Such coordinate verb pairs are glossed as a verb plus some adverbial qualifier; the high frequency of this construction may stem from the relative paucity of adverbial particles per se in Chumash (cf. 730 and 740). Specific qualifying verbs may be purely adverbial, or also temporal. Examples of strictly adverbial coordination:

/s-towič ha s-wala-tepet/ štowič asweletepet 'it turns  
fast: it goes fast / it turns'

/s-kum ha s-wali-kí?-kš/ skum ašwalíkikš 'he comes alone:  
he comes / he is alone'

/s-max-k<sup>h</sup>it-us ha s-maq-su-wol + R<sub>3</sub>/ smaxk<sup>h</sup>itus asmaqsu-  
wolowol 'he swings a rope hard: he does it vigor-  
ously / he swings a rope, line'

/k-su-ackaw ha k-ap<sup>h</sup>tí-iq<sup>h</sup>im/ ksackaw akap<sup>h</sup>tíq<sup>h</sup>im 'I crush  
it by mistake: I cause an accident / I crush'

Examples of temporal coordination:

/s-nu-tapin ha s-axi-kum/ šnutapin asaxikum 'he dances  
all night: he spends the night thus / he dances'

/k-axš<sup>h</sup>š ha k-axi-pakaš/ 'I call to him one: I call /  
I do it once'

/no-k-esqen-us ha k-kimiy/ nokesqenus ak<sup>h</sup>imiy 'I will  
ask him again: I will ask him / I repeat, do again'

### 881.3 Coordination with Two Action Verbs

Both verbs in a coordinate construction may be action verbs, with one making a more specific statement of the action involved in the other. Such coordinate pairs, as in

/s-nañ ha s-aqiwiw<sup>h</sup>n/ šnañ asaqiwiw<sup>h</sup>n lit. 'he goes /  
he swims'

may be translated variously with English participles

'he goes swimming; he goes [there] swimmingly'

or with 'as' or 'when' supplied between the two verbs.

'he swims as he goes'

Although this construction is simple in Ineseño, its English

translation seems to imply more complex underlying relationships. Other examples:

/s-aqta-qen ha s-aqta-paxalan + R<sub>1</sub>/ seqteqen asaqtapaxalan  
lalan 'he struts by: he passes by / he struts'

/s-wala-welen ha s-akti-na? ha-?al-xil/ swelewelen  
asaktina? a?alxil 'the fat man waddles up; he sways  
as he comes: he sways / he comes / fat one'

/s-wati-wey ha s-tepu?/ swatiwey aštepu? 'he lost in  
gambling: he loses / he gambles'

/k-lu-šuč-pi ha k-su-kilamu-š/ klušučpi akšukilamuš  
'I grew up to be a cheat: I grow up to it / I take  
them for fools (lit. cause many to be foolish)'

#### 881.4 Ambiguity with the Coordinate Construction

The exact limits of the coordinate construction are indeterminate, since it may be a neutralized form of more distinct constructions.

First, there is a particle ha (q.v., 770.01) which is evidently glossed 'and' when phrase-initial in a few sentences, such as

/ha kip<sup>1</sup>? hi swe?/ 'and now he is asleep'

/ha kša hi kay-wuñ hi s-iy-wayan/ hakšikayuwuñ isiwayan  
'and as for them, they are flying'

It is indeterminate to what extent this particle may influence coordinate constructions. But certainly there are many coordinate constructions which involve a sequential relationship implying the presence of 'and.'

/ka s-exen ha ka s-kimiy/ 'she ate it [and] did it again

(i.e. ate another one)'

/k-uti-loq ha k-pili-koyin/ 'I bumped my head [and]  
fell over backward'

Second, the particle ha? 'in order to' (q.v., 770.02) may influence coordinate constructions. Given ha? linking two verbs, as in

/towič-? ha? p-ašín/ towič a? pašín 'come quick so that  
you [can] eat!'

it is possible that the phonetic [ha ~ a] in some coordinate sentences may actually reflect ha?.

/kitwon-? ha p-xoslo?-š/ kitwon' apxošloš 'go outside  
to blow your nose!: go out / you blow your nose'

/no-k-i-pa? ha k-aqsik ha-k-waka/ 'I will drive a stake  
for tying my cow: I will drive a stake / I tie /  
my cow'

### 882 Temporal Coordination with Unlike Subjects

Temporal coordination with unlike subjects is a construction similar to regular coordinate verbs (q.v., 881.3) with identical subjects, such as

/s-nañ ha s-aqiwiwin/ šnañ asaqiwiwin 'he goes swimming;  
he swims as he goes: he goes / he swims'

A loose temporal coordination may be read into this construction in the gloss 'he swims as he goes,' but it is not inevitable. However, when the subjects of two coordinate verbs differ, then a temporal interpretation of the coordination is obligatory.

/s-wala-wil-waš ha k-kum-li/ šwalawiliwaš ak<sup>h</sup>umili 'it

started just as I got there: it started / I arrive'  
 These two verbs are conjoined only with the connective particle *ha*, which is not obligatory here; there is no overt sign of temporal subordination such as one of the temporal relativizing prefixes *wa-* or *hini-* or the particle *moq* 'as, when.' However, the subordinate verb in this loose temporal construction does take second position. Other examples:

/tini s-uni-sumu' ha k-yal-qil-hik'in/ tini sunisumu'  
 akyaqihik'in 'it is still dark when I go to take my  
 morning bath: still / is dark / I go for morning bath'  
 /k-pil-aqway' s-ax-al-ti'/?/ kpilaqway' saxati' 'I arrived  
 just as the man was paying him: I arrive in time /  
 he pays'

### 883 Coordination with the Conjunctive Particles

Simple sentences may be conjoined with one of the conjunctive particles (q.v., 770) and with certain of the sentential prefixes (q.v., 663). Depending on the nature of the conjunctive particle or sentential prefix, the sentence introduced by the particle or prefix may either precede or follow the main sentence; usually it follows. The particles vary according to whether the sentence which they introduce may occur in either initial or non-initial position or must obligatorily occupy non-initial position.

With only a few of the conjunctive particles is the sentence which they introduce freely positioned vis-à-vis the main sentence, occurring either before or after it. These include *haku* 'if,' *'iyapa* 'even if, even though,'

kača 'because,' and moq 'as, when.' Others may belong in this class, but may accidentally not be attested in any initial clause. A pair of examples with ha<sup>1</sup>ku 'if' illustrating its free position is

/ha<sup>1</sup>ku ?ini-s-wil ha ti-s-neč, hi s-iy-wo<sup>o</sup>?/ ha<sup>1</sup>ku ?insil

atišneč, isiwo<sup>o</sup>? 'if nothing happens, they are

lying: if / exists not / what happens / they lie'

/s-al-ax-sumu<sup>o</sup>-waš ha nono<sup>o</sup> ha<sup>1</sup>ku ?ini no<sup>o</sup> k-qil-hik/

šalaxšumuwaš anono<sup>o</sup> ha<sup>1</sup>ku ?nino<sup>o</sup> q<sup>h</sup>ilik 'he would have

suffered much if I had not taken care of him: he

suffered / much / if / not / I / I take care'

With most of the conjunctive particles and sentential prefixes, the sentence which they introduce obligatorily follows the main sentence. These include

ha 'and'

ha<sup>o</sup> 'so that, in order to...'

hi<sup>o</sup> ~ /hi<sup>o</sup>-k<sup>h</sup>u/ hik<sup>h</sup>u 'but'

?itwa- 'before'

k<sup>h</sup>m '(and) then'

na 'and'

na<sup>1</sup>ku 'or'

Of these, na 'and' occurs in the most common and the least complex of the conjunctive constructions, linking individual lexical items as well as clauses.

/swey na xutaš s-uš<sup>1</sup>i-tap, na s-mol ha ?eneq/ swey naxutaš

šušitap, nasmol a<sup>o</sup>eneq 'swey and xutaš are mixed,

and the woman toasts them: swey / and / xutaš / it

is mixed together / and / toasts / woman'

## 884 Parallel Constructions and Deletion of Redundancies

When complex or conjoined sentences of any sort are parallel in construction, there are stylistic options to reduce redundancy. Where the verbs of the two sentences are identical, the change is in word order; where the two sentences are identical in some other respect, the change is the deletion of some redundant feature in the second sentence.

When the verbs of the two parallel sentences are identical, including the subject marker (e.g. third person singular for both), the primary means to reduce redundancy is a change in word order between the two sentences, since Ineseño has no pre-verb form like English 'do.' Thus, the order of verb and noun phrase is reversed in the second sentence.

/s-tiš ha-s-noxš na s-ʔapam̄ hi s-tiš/ štš ašnoxš našapam̄  
 ištš 'his nose is swollen and his knee is swollen  
 too: is swollen / his nose / and / his knee / is  
 swollen'

/s-sili-kuy ha pakas̄ na čoyini ha s-sili-kuy/ shilikuy  
 apakas̄ načoyin ashilikuy 'one wants to take it and  
 the other one does too: wants to take / one / and /  
 other / wants to take'

When the verbs of the parallel sentences are identical but differ in subject markers, the verb itself is deleted as redundant, leaving a free form of the personal pronoun subject for contrast.

[[s-weni-waş ʔuw piʔ na s-weni-waş ʔuw noʔ] ->

/s-weñi-waš ha p-al-ʔuw na s-weñi-waš hi noʔ/ šweñiwaš  
 apaluw našweñiwaš inoʔ 'you eat half and I eat half:  
 half / you eat / and / half / I'

A combination of deletion and change of word order can be seen in

/s-weñi-waš ha p-hik na hi noʔ s-weñi-waš/ šweñiwaš ap<sup>h</sup>ik  
 ninoʔ šweñiwaš 'you have half and I have half:  
 half / you have / and / I / half'

As discussed in more detail in 855.1 on the deletion of nouns, a noun which occurs in constituency with two or more successive verbs is generally deleted after its first occurrence.

/s-kuy ha-cayaʔ hi s-iqmay/ 'she took her cayaʔ (a kind of basket) and covered it: she takes / cayaʔ / covers'

/s-wil ha-s-pa hi ponoja, s-č<sup>h</sup>oho ha-s-pa, s-šalpan + R  
 hi mi-šup/ swil aspa iponoja, šč<sup>h</sup>oho aspa, š<sup>h</sup>alšalpan  
 imišup 'Ponoja has a staff, a good staff; she sticks it into the ground again and again: exists / her staff / ponoja / is good / her staff / she pierces / ground'

### 890 Sample Derivations

A few examples of transformational derivations from underlying to surface strings follow. These derivations include not only the principal word order transformations (q.v., 850), but also person-number concord (q.v., 820), and the specific transformations discussed informally under the topics of embedding and relativization (q.v., 860 and 870).



The first example focusses on noun transposition.

[[is-ti<sup>?</sup> ha-s-se kay <sup>?</sup>coyini ha-qsi]] 'the next day he  
found the bones'

- 1) Subject and object concord (822):

s-is-ti<sup>?</sup>-wun ha-s-se kay <sup>?</sup>coyini ha-qsi

- 2) Transposition of the temporal noun phrase (852):

<sup>?</sup>coyini ha-qsi s-is-ti<sup>?</sup>-wun ha-s-se kay

- 3) Deletion of the free personal pronoun kay (855.3):

<sup>?</sup>coyini ha-qsi s-is-ti<sup>?</sup>-wun ha-s-se

- 4) Insertion of the connective particle hi (857):

/<sup>?</sup>coyini ha-qsi hi s-is-ti<sup>?</sup>-wun ha-s-se/

Phonological rules (286):

[<sup>?</sup>coyin aqsi i<sup>?</sup>šišt<sup>?</sup>wun as<sup>he</sup>] 'next (lit. another) / day /  
he finds them / bone'

The next example focusses on relativization.

[[ti-yep [ha--ti<sup>?</sup>k kay] yila<sup>?</sup> [aqta-qen kay yila<sup>?</sup>] kay]]

'she tells her mother everything that happens to her'

- 1) Deletion of the identical noun phrase yila<sup>?</sup> 'all' in  
the relative clause (873):

ti-yep [ha--ti<sup>?</sup>k kay] yila<sup>?</sup> [aqta-qen kay] kay

- 2) Subject, object, and possessive concord (822), with a  
relative subject marker in the relative clause (873):

s-ti-yep-us ha-s-ti<sup>?</sup>k kay yila<sup>?</sup> ha-l-aqta-qen-us kay

- 3) Deletion of the free personal pronoun kay (855):

/s-ti-yep-us ha-s-ti<sup>?</sup>k yila<sup>?</sup> ha-l-aqta-qen-us/

Phonological rules (286):

[štiyepus ašt<sup>?</sup>ik yila<sup>?</sup> aleqteqenus]

The last example focusses on embedding with the causative prefix su-.

[[moqe mɨk su- [oqtok piʔ] k-iy-kɨʔ]] 'we have already caused you much trouble'

1) Embedding with the causative prefix su- (864):

moqe mɨk su-oqtok piʔ k-iy-kɨʔ

2) Subject and object concord (822):

moqe mɨk k-iy-su-oqtok-in piʔ k-iy-kɨʔ

3) Deletion of free personal pronouns (855):

moqe mɨk k-iy-su-oqtok-in

4) Insertion of the connective particle ha (857):

/moqe mɨk ha k-iy-su-oqtok-in/

Phonological rules (286):

[moqe mɨk akisoqtokin] 'already / far / we cause it to be difficult to you'

## 900 Text with Analysis: Woodpecker and the Flood

The following text, the story of Woodpecker and the flood, is presented with translation and morpheme by morpheme analysis. As in other sections, following the free translation, the literal translations of individual Chumash words are set off with slashes. Some of the sentences from this story have been used in previous sections to illustrate various grammatical points. The text is somewhat abridged by the omission of repetitious elements, and the grammatical analysis is similarly compacted by the omission of certain forms after their initial occurrence (especially the article ma-/ha- and the connective particles hi and ha).

1) /s-ti-moloq-Vn-š ha-ʔanaxiʔ ha s-am-neč-waš + R

hini-s-pleʔ hečaʔ ha-šup/

[štímoloqič aʔanaxiʔ ašamnečnečwaš hinispleʔ eč ašup]

'The old man tells of how it was when this world perished:  
tells / old man / it was like / when perishes / this / world'  
/s-ti-moloq-Vn-š/ s- '3rd sg. subj.,' ti- 'of a speech act,'  
moloq 'long ago,' -Vn 'process verbalizer,' -š 'intrans.';  
/ha-ʔanaxiʔ/ 'old man'; /s-am-neč-waš + R/ s- '3rd person,'  
am- 'indefinite subj.,' neč 'to be like,' -waš 'past,' Redu-  
plication with continuative force; /hini-s-pleʔ/ hini-  
'when,' s- '3rd sg.,' pleʔ 'to perish, be lost'; hečaʔ  
'this (non-initial)'; /ha-šup/ 'earth, world, land'

2) /ma-l-is-tik-Vn ha-ku yilaʔ heki ka ha-l-wil-waš/

[malištik<sup>h</sup>in aku yilaʔ eki kawiliwaš]

'This was all about the first people; the first people are

all that that was about: that which is first / person /  
all / that / what was'

/ma-l-is-tik-Vn/ ma- 'relative (initial),' l- '3rd sg. rela-  
tive subj.,' is-...-Vn 'process verbalizer,' -tik 'tip,  
point' (/is-tik-Vn/ 'to go first'); /ha-ku/ 'person'; yila?  
'all, everything'; ka 'predicative'; /ha-l-wil-waš/ ha-  
'relative (non-initial),' l- '3rd sg. rel. subj.,' wil 'to  
be, exist,' -waš 'past'

3) /tini ?ini-s-uš-qen-š-waš heča? ha-šup, hini tini

ku-? + R ha-?alqapač-? + R/

[tini?nišušqečwaš eč ašup, hini tini kuhku? a?al?alqapač]

'This world had still not come to an end, when the animals  
were still people: still / it was not gone, extinct / this /  
world / when / still / people / animals'

tini 'still'; /?ini-s-uš-qen-š-waš/ ?ini- 'neg.,' s- '3rd  
sg.,' uš- 'out, away,' qen 'to use up, be gone,' -š 'in-  
trans.,' -waš 'past'; heča? 'this'; /ha-šup/ 'world'; hini  
'when'; tini 'still'; /ku-? + R/ ku 'person,' -? 'feature  
of CVC reduplication in nouns,' Redup. with plural force';  
/ha-?alqapač-? + R/ ?alqapač 'animal,' -? + Redup. 'plural'

4) /ke? ka s-iy-aspaxan-šaš ha kič hi k-iy-ki?/

[ke? kašiyašpaxač<sup>h</sup>iš akič ikiki?]

'So they were beings like us: so, thus / they [are] a thing  
/ like / us'

ke? 'this (initial); so, thus'; ka 'predicative';

/s-iy-aspaxan-šaš/ s- '3rd person,' iy- 'plural,' aspaxan  
'to teach,' -šaš 'nominalizer' (/aspaxan-šaš/ 'teaching,

thing'); kič 'as, like'; /k-iy-kí?/ k- '1st person,' iy-  
'plural,' -kí? 'pronominal formative'

5) /hini-s-ple? heča? ha-šup, s-iyam-š ha-?o?/

[hinisple? eč ašup, šiyamš a?o?]

'When this world perished, it was full of water: when it  
perishes / this / world / is full of / water'

/hini-s-ple?/ hini- 'when,' s- '3rd sg.,' ple? 'to perish';  
heča? 'this'; /ha-šup/ 'world'; /s-iyam-š/ s- '3rd sg.,'  
iyam 'to be full, filled with,' -š 'intrans., sustained  
action'; /ha-?o?/ 'water'

6) /hawala hi maquti-kok' ka ?ini-s-aqša-Vn/

[hawal imaqutikok' ka?nišaqšan]

'Only Woodpecker did not die: only / W. / does not die'  
hawala 'only'; /maquti-kok'/ maquti- 'unanalyzable prefix,'  
kok' '[bird] to peck'; ka 'predicative'; /?ini-s-aqša-Vn/  
?ini- 'neg.,' s- '3rd sg.,' aqša 'to die, be ill,' -Vn  
'process verbalizer, augment'

7) /ma-s-kuna? nañi ha-qsi/ - [maskuna? nañ aqsi]

'He was the nephew of the sun, too: his nephew / too / sun'  
/ma-s-kuna?/ ma- 'article (initial),' s- '3rd sg. possessor,'  
-kuna? 'niece, nephew (on brother's side)'; nañi 'too, also';  
/ha-qsi/ 'the sun'

8) /hawala hi maquti-kok' ka s-kina-kat/

[hawal imaqutikok' kaskinakat]

'Only Woodpecker survived: only / W. / survives'  
hawala 'only'; /maquti-kok'/ 'W.'; ka 'predicative';

/s-kina-kat/ s- '3rd. sg.,' kina- 'of dying,' kat 'to remain'

9) /s-tuhuy, s-taya-nox-Vn, s-elew ha-ʔułam/

[štuhuy, štoyonoxin, selew aʔułam]

'It rained; it rained hard; the flood came down: it rains /  
it rains hard / comes down / flood (lit. creek)'

/s-tuhuy/ s- '3rd sg.,' tuhuy 'to rain'; /s-taya-nox-Vn/  
s- '3rd sg.,' taya- 'of rain,' nox 'a big one,' -Vn 'process  
verbalizer'; /s-elew/ s- '3rd sg.,' elew 'to come down';  
/ha-ʔułam/ 'creek'

10) /s-iyam-š hečaʔ ha-šup, s-am-aqša-Vn ha-ku/

[šiyamš eč ašup, šamaqšan aku]

'The world was filled [with water]; the people died: is  
full / this / world / they die / person'

/s-iyam-š/ s- '3rd sg.,' iyam 'to be full,' -š 'intrans.';  
hečaʔ 'this'; /ha-šup/ 'world'; /s-am-aqša-Vn/ s- '3rd  
person,' am- 'indefinite subj.,' aqša 'to die, be ill,'  
-Vn 'augment, process verbalizer'; /ha-ku/ 'person'

11) /s-xil-lumen hečaʔ ha-šup/ - [sxilumen eč ašup]

'The world sank: sinks / this / world'

/s-xil-lumen/ s- '3rd sg.,' xil- 'of, in water,' -lumen  
'to disappear'; hečaʔ 'this'; /ha-šup/ 'world'

12) /ʔini-s-wil ha-wašla-lomol, ʔini-s-wil ha-kuw/

[ʔinsil awošlolomol, ʔinsil akuw]

'There were no hills, no oak trees: exists not / hill /  
exists not / live oak'

/ʔini-s-wil/ ʔini- 'neg.,' s- '3rd sg.,' wil 'to be, exist';

/ha-wašla-lomol/ -wašla- 'of terrain,' -lomol 'to be piled up' (/wašla-lomol/ 'hill'); /ha-kuw/ 'live oak'

13) /pakaš ha-poň ha-l-aqlii + R, nox ha s-aqlii/  
[pakaš apon alaqlaqlii, nox asaqlii]

'One tree was all that showed, a big one: one / tree / what is visible / a big one / is visible'

pakaš 'one'; /ha-poň/ 'tree'; /ha-l-aqlii/ ha- 'relative,' l- '3rd sg. rel. subj.,' aqlii 'to show, be visible'; nox 'a big one'; /s-aqlii/ s- '3rd sg.,' aqlii 'to be visible'

14) /maquti-kok hi ?al-apay ha-poň s-ilikin/  
[maqutikok i?alapay apon silikin]

'Woodpecker sat up in the tree: W. / up / tree / sits'  
/maquti-kok/ 'W.'; /?al-apay/ ?al- 'agentive,' -apay 'to be up, above' (/?al-apay/ 'up, above'); /ha-poň/ 'tree'; /s-ilikin/ s- '3rd sg.,' ilikin 'to sit, be established'

15) /ke? ka s-tuhuy/ - [ke? kaštuhuy]

'It was raining like this: [like] this / it rains'

ke? 'this; so, thus'; ka 'predicative'; /s-tuhuy/ s- '3rd sg.,' tuhuy 'to rain'

16) /moqe kice? ha s-ali-wašlik + R ha-poň/  
[moqe kice? ašalšaliwašlik apon]

'Already only a little of the tree was sticking out: already / a little bit / sticks out / tree'

moqe 'already'; kice? 'a little one, little bit';  
/s-ali-wašlik + R/ s- '3rd sg.,' ali- 'continuative,' Redup. with intensive force; /ha-poň/ 'tree'

17) /s-tuhuy ha-nono<sup>?</sup>/ - [štuhuy anono<sup>?</sup>]

'It was raining a lot: it rains / very much'

/s-tuhuy/ s- '3rd sg.,' tuhuy 'to rain'; nono<sup>?</sup> 'very much'

18) /moqe s-<sup>?</sup>o<sup>?</sup>-Vč ha-s-<sup>?</sup>īl hi maquti-kok<sup>?</sup>/

[moqe šoč ašīl imaqutikok<sup>?</sup>]

'Woodpecker's feet were already wet: already / is wet / his foot / W.'

moqe 'already'; /s-<sup>?</sup>o<sup>?</sup>-Vč/ s- '3rd sg.,' <sup>?</sup>o<sup>?</sup> 'water,' -Vč

'stative verbalizer' (/<sup>?</sup>o<sup>?</sup>-Vč/ 'to be wet'); /ha-s-<sup>?</sup>īl/

s- '3rd. sg. possessor,' -<sup>?</sup>īl 'leg, foot'; /maquti-kok<sup>?</sup>/ 'W.'

19) /ka s-miš hi maquti-kok<sup>?</sup>/ - [kašmiš imaqutikok<sup>?</sup>]

'Woodpecker weeps: weeps / W.'

ka 'predicative'; /s-miš/ s- '3rd sg.,' miš 'to weep, cry';

/maquti-kok<sup>?</sup>/ 'W.'

20) /s-<sup>?</sup>ip k-tata<sup>?</sup>, taka<sup>?</sup> ha-p-al-nañ, k-tata<sup>?</sup>/

[šip ktata<sup>?</sup>, tak apanañ, ktata<sup>?</sup>]

'He said "Uncle, where have you gone, Uncle?

my uncle / where / you who go / my uncle'

/s-<sup>?</sup>ip/ s- '3rd sg.,' <sup>?</sup>ip 'to say, think'; /k-tata<sup>?</sup>/ k-

'1st person possessor,' -tata<sup>?</sup> 'maternal uncle'; taka<sup>?</sup>

'where'; /ha-p-al-nañ/ 'ha- 'relative,' p- '2nd sg. subj.,'

al- 'subordinate, relative marker,' nañ 'to go'

21) /tani-kuti-it-<sup>?</sup>, moqe k-aqša-Vn ha k-toxom<sup>?</sup>/

[tanikutiyit<sup>?</sup>, moqe kaqšan aktoxom<sup>?</sup>]

'Please look at me! Already I'm dying of cold: please look at me / already / I die / I am cold'



/tani-kuti-it-?/ tani- 'please; a little bit,' kuti 'to see, look at,' -it 'me,' -? 'imperative'; mođe 'already';  
 /k-aqša-Vn/ k- '1st person subj.,' aqša 'to die, be ill,'  
 -Vn 'augment, process verbalizer'; /k-toxoṃ/ k- '1st person subj.,' toxoṃ '[person] to feel cold'

22) /na k-mixin + R<sub>1</sub>, no-k-aqša-Vn/ - [nakmixin nokaqšan]  
 'And I'm hungry; I'm going to die!': and / I am hungry /  
 I will die'

na 'and'; /k-mixin + R<sub>1</sub>/ k- '1st person subj.,' mixin 'to be hungry,' Redup. with intensive force; /no-k-aqša-Vn/  
 no- 'future,' k- '1st person subj.,' aqša 'to die, be ill,'  
 -Vn 'augment, verbalizer'

23) /ka-s-?ip-us ha pakas' ha-s-šay': ho, ti-s-?ip/  
 [kasipus apakas' ašhay': ho, tišip]

'One of the sun's daughters said to him "Oh, what did he say?": says to him / one / his daughter / oh / what does he say?'

ka 'predicative'; /s-?ip-us/ s- '3rd sg.,' ?ip 'to say, think,' -us '(to) 3rd sg. obj.'; pakas' 'one'; /ha-s-šay'/  
 s- '3rd sg. possessor,' -šay' 'daughter'; ho 'exclamation';  
 /ti-s-?ip/ ti- 'what,' s- '3rd sg.,' ?ip 'to say, think'

24) /ka s-itaq hi ?anaxi?, s-?ip kume/  
 [kasitaq i?anaxi?, sip kume]

'The old man (i.e. the sun) heard; he said "Poor thing":  
 hears / old man / says / poor'

ka 'predicative'; /s-itaq/ s- '3rd sg., itaq 'to hear';

ʔanaxiʔ 'old man'; /s-ʔip/ s- '3rd sg.,' ʔip 'to say, think'; kume 'poor [thing]; a verb stem used as an exclamation'

25) /ka s-šuč ha-ʔanaxiʔ, s-nu-nañ ha-s-syiyiw/  
[kašhuč aʔanaxiʔ, šnunañ asisyiyiw]

'The old man started out; he took his torch: starts out / old man / takes / his torch'

ka 'predicative'; /s-šuč/ s- '3rd sg.,' šuč 'to start, head out'; /ha-ʔanaxiʔ/ 'old man'; /s-nu-nañ/ s- '3rd sg.,' nu- 'concomitant action,' nañ 'to go' (/nu-nañ/ 'to take'); /ha-s-syiyiw/ s- '3rd sg. possessor,' syiyiw 'torch' (/s-yul-yiw-ʔ/? s- 'nominalizer,' yul- 'of heat,' -yiw 'to face, seek,' -ʔ 'nominalizer')

26) /na hi maquti-kok ha s-kimiy, k-tataʔ, kuti-it-ʔ/  
[nimaqutikok askimiy, ktataʔ, kutiyit]

'And Woodpecker repeated: "Uncle, look at me!": and / W. / does again / my uncle / look at me'

na 'and'; /maquti-kok/ 'W.'; /s-kimiy/ s- '3rd sg.,' kimiy 'to do again, repeat'; /k-tataʔ/ k- '1st person possessor,' -tataʔ 'maternal uncle'; /kuti-it-ʔ/ kuti 'to see, look at,' -it '(to) me,' -ʔ 'imperative'

27) /s-su-kitwon ha-s-uqštay-ʔiʔ, s-kili-ni-apay ha-qsi/  
[shukitwon ašuštayiʔ, skilinapay aqsi]

'He took out his light; the sun suddenly came out: he takes out / his torch, light / suddenly rises / sun'

/s-su-kitwon/ s- '3rd sg.,' su- 'causative,' kitwon 'to

come out'; /ha-s-uqštay-ʔiʔ/ s- '3rd sg. possessor,'  
 uqštay 'to be light, bright,' -ʔiʔ 'instrumental nominal-  
 izer'; /s-kili-ni-apay/ s- '3rd sg.,' kili- 'of rapid  
 motion,' ni- 'transitive,' -apay 'to be up, above'  
 (/ni-apay/ 'to rise, ascend'); /ha-qsi/ 'the sun'

28) /s-yul-wil ha nonoʔ, s-max-k<sup>h</sup>it-us ha s-yul-wil/  
 [syuwil anonoʔ, smax<sup>h</sup>itus asyuwil]

'It was very hot; it was intensely hot: it is hot / very  
 much / it does so vigorously, intensely / it is hot'  
 /s-yul-wil/ s- '3rd sg.,' yul- 'of, with heat,' wil 'to  
 be, exist'; nonoʔ 'very much'; /s-max-k<sup>h</sup>it-us/ s- '3rd  
 sg.,' max- 'vigorously, intensely,' -k<sup>h</sup>it 'to come near,'  
 -us '(to) 3rd sg. obj.' (/s-max-k<sup>h</sup>it-us/ 'it does so vigor-  
 ously, intensely')

29) /ka s-yul-mon hi maquti-kok'/  
 [kasyulumon imaqutikok']

'Woodpecker warmed himself: warms himself / W.'  
 ka 'predicative'; /s-yul-mon/ s- '3rd sg.,' yul- 'of, with  
 heat,' -mon 'uniquely-occurring stem (/yul-mon/ 'to warm  
 oneself')'; /maquti-kok'/ 'W.'

30) /na ka s-yik-us ha-s-ʔuw-muʔ, poš/  
 [nakasyikus asuwumuʔ, poš]

'And the sun gave him food, pinon nuts: and / he gave him /  
 his food / pinon nut(s)'

na 'and'; ka 'predicative'; /s-yik-us/ s- '3rd sg.,' yik  
 'to give,' -us '(to) 3rd sg. object'; /ha-s-ʔuw-muʔ/ s-

'3rd sg. possessor,' ?uw 'to eat,' -mu? 'nominalizer'  
 (/?uw-mu?/ 'food'); poš 'pinon nut(s)'

31) /ka s-kuy ka s-?uw, moqe ka s-atik hi maquti-kok/  
 [kaskuy kasuw, moqe kasatik imaqutikok]

'Woodpecker took it and ate; he had recovered already: he  
 takes / he eats / already / recovers / W.'

ka 'predicative'; /s-kuy/ s- '3rd sg.,' kuy 'to take (hold  
 of)'; /s-?uw/ s- '3rd sg.,' ?uw 'to eat'; moqe 'already';  
 /s-atik/ s- '3rd sg.,' -atik 'soul, spirit; to be alive,  
 recover'; /maquti-kok/ 'W.'

32) /na ka s-qiwin ha-?o?, s-su-towic ha s-qiwin/  
 [nakasqiwin a?o?, šhutowic asqiwin]

'And the water subsided; it subsided quickly: and / subsides  
 / water / it does it quickly / it subsides'

na 'and'; ka 'predicative'; /s-qiwin/ s- '3rd sg.,' qiwin  
 '[water] to go down, subside'; /ha-?o?/ 'water';  
 /s-su-towic/ s- '3rd sg.,' su- 'causative,' towic 'to be  
 fast, do quickly'

33) /?ini-s-wil ha-ku, yila? s-am-aqša-Vn/  
 [?insil aku, yila? šamaqšan]

'There were no people; they had all died: exists not /  
 person / all / are dead'

/?ini-s-wil/ ?ini- 'neg.,' s- '3rd sg.,' wil 'to exist';  
 /ha-ku/ 'person'; yila? 'all', /s-am-aqša-Vn/ s- '3rd person  
 subject,' am- 'indefinite subject,' aqša 'to die, be ill,'  
 -Vn 'augment, process verbalizer'

34) /hawala hi maquti-kok' s-atik, hawala hi kay/

[hawal imaqutikok' satik, hawal ikay]

'Only Woodpecker was alive, only he: only / W. / is alive /  
only / he'

hawala 'only'; /maquti-kok' / 'W.'; /s-atik/ s- '3rd sg.,'

-atik 'to be alive, to recover'; kay '3rd sg. pronoun'

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