# A GRAMMAR <br> 0 F <br> RESÍGARO 

by

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Bound in three volumes

## VOLUME I

# A GRAMMAR OF RESIGARO 

 byTrevor Reginald Allin

I declare that this thesis has been composed by me on the basis of work done by ae in $s t$. findrevs and Peru, and that it has not been acoepted in any previous apolication for a higher degree. I was admitted under General Ordinance No. 12 in october 1970 and enrolled in May 1971. under the Fh.D. Rem solution.

## Candidate

[^0]
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1. Abbreviations

In the abbreviations that follow, capital letters are used to indicate tegnenes, levelis, and major word clesses, while lower case letters are ueed to indicate morphemes. Abbreviations indicating neither morphenes nor tagmenes or major word classes follow hormal practice with regerd to capitalisation or otherwise (e.e., Spe for Spanioh). Whore no norm appears to exist, that form has been chosen which it is believed will be easiest to recoenize (e.g., Orel for Coject rolativization).

| , | Adjunct tagmeae | Den | Denonstrative |
| :---: | :---: | :---: | :---: |
| A-R | Axis-relator phrase | der | derivator |
| phrase |  | desid | desiderative clitio |
| adct | Adjunct Phrase narker | din | dininutive suffix |
| Adv | Adverb | dir | directional manter |
| Adv | Adverbial Emphatic | ditr | ditransitive |
| Erph | tagneme | dl | ducl |
| adv | adverbial emphatic | DO | Dative object tamene |
| emph | norphene | DOP | Dative Object Phrase |
| Aj | Adjective | DP | Directional Phrace |
| $A P$ | Adjunct Phrase | dub | dubitative clitic |
| att | Ittributive tagnene | Draph | Emphatic tagmene |
| aug | augmentative suffix | emph | emphatic norphene |
| Aux | Auxiliary | excl | exclucive |
| aux | auxiliary indicator | extrap | moved by extraposition feainine |
| B | Base | frus | frustrative clitic |
| bas | basic filler of periph | fut | future clitic |
|  |  | H | Head tagnone |
|  |  | I | Instrumont tagmene |
| Ben | Benefactive tagreme | Ig | Intorrogetive tagno |
| ben | benefactive narier | - | interrogative norpheme |
| BP | Bonefactive Phrase | IfCl | Interrogative Glause |
| C | any consonant | IrapCl | Inperative Clause |
| C.L. | complete list | inpty | imperative |
| Cl | Clauce | incho | inchoative |
| $6]$ | class | incl | inclusive |
| clsfr | classifier suifix | incorep | incompletive clitic |
| CO | Causative object tag- <br> meme | instr | instrunent marker |
| Conc | Concomitant tagmene | Int | Intonsifier tagme |
| Cond | Conditional tagmeme | int | intensifier morphene |
| CondP | Conditional phraso | Inton | Intonation Contour |
| conn | connector | intr | intransitive |
| CP | Concomitart Pirase | IP | Instrutient Phrace |
| $\mathrm{Ctv}^{\text {cst }}$ | Cousative | I. | Locative tagneme |
| CtvP | Comparative Phrase | Lim | Limiter tagmene |
| D | Disectional tagmerae | LP | Iocative Phrase |
| Dat | Detive tagneale | M | Modinier tagmene |
| dat | dative mariser |  |  |
| DoclC | Declerative Clause | H.O.C. | may onit cla |




SOIIE RES AGAROS
From left to right: Adelina, Rosa, and Pablo Andrade Ocagane, ond Alicia Ocagene (their mother), with two of Adelina Andrade's children.

SKETCH MAP NE I



SKETCHMAP NO II
0.1. The language and the people.

Resigaro is spoken by a handful of people living on the banks of a northern affluont of the inazon in north-astern Peru. These remonts of the Resigaro tribe live anongst the Ocaina and tho Bora in the villages of Puerto Isango and Brillo Ivuevo, respectively, on the banks of the Yaguasyacu river, a tributary of the Arpiyacu, which flows into the Amazon at Pebas. The location of these villages in $1972^{1}$ is indicated in sisetch nap II.

In 1915, Thiffen estimated that there were about 1,000 Resigaros between tho Muenane, the Nonuya and the Boro (sic. -- for Bora), along the banks of the Japura (= Caqueta), to the north of the Kahuinari (= Cahuinari) river, in Colombia (cf. sketch map I).

In 1971-72 I found four adult speakors (Alicia Ocagane and her two daughters, Adelina and Rosa, and son Pablo) and six children in Puerto Izango. The children had Rosigaro mothers and Ccaina fathers. There were also somo Ocaina speakers (e.g., the teacher, Jose Androde) who said that they were Resigaros, but

[^1]no Ionger spoke the languago.

In Brillo Nuevo I fowd one wonan (Cecilia) of about fifty years old who was Resigara, but was rarriod to a Bore, and had not gpoken the lenguage for years, except on occasional aeetings with the Resigaros from Puerto Isango. There were also several other Bora spealrors (e.g. Jihkyepa?) who said that they were Resigaros, but had lost their paronts when chijdren, and had been brought up by Boras. They now spoke no Resigaro, but understood sono of it.

Fron a cormarative study of published vocabularies and gramaticel descriptions, it is obvious that Resfgaro is related historically to Bora, though the two languages are not at all mutually intolligible. Inasmuch as others affirm that Bora is related to Ocaina and Huitoto, Resigaro must be related to those, too, although theso latter two langueges sound totally different from Resigaro, and very few cognates between Huitoto and Resi.. earo are to be found in a conparison of approximately 370 words basod on the Rowe Standard Comparative Vocabulary (tropical forest area) and tho Swadesh list. A far more extensive comparison was made between Ocaina and Resigaro, involving nearly 2,000 words (including those on the above-mentioned lists), and sinil.arly few cognates were found.

Appendix II lists tho Ocaina, Bora and Huitoto words fron the Rowe and Swadesh Iists, alongside the Resigaro, for compar-
ative purposes.

The present study provides conclusive evidence for the first tine based on data gathered by a phoneticallym and Inguistically-trained invostigetor to confira the place of Resfgaro in the Arawakon fanily of languges, and this obviously has implications with regard to Bora, hithorto classified meroly as "Huitotoan", along with Ocaina and Huitoto. The "Iuitotoan" group is unclassified. If the relationsidp between Ocaina and Resigaro, and Euitoto and Resigaro, is viewed as confirmed -- which would appear to be the case, as indicated in Appendix II (though the rolationship is more distant than with Bors) -- then these Ianguegea, too, are clearly to be classifiod as irawalean.
Q.2. Previous referencos to the Rusigaros, and work on the Ianguere.
O.2.1. Casement and Hardenbure.

Two reports by "Consul" (later Sir Roger) Casornent appeer in Hardenburg's book of 1912. Casement had been sent to the Putumayo area to invostigate roports of savage treatmont of Indians amployed to collact rubbor for the peruvian amazon Company, which had a number of British mhareholdere.

Casenent's first report (subisitted in Jenuary 1911) rofers to the "Ricigaros", Andokes and Boras as tribos of comon origin with the Huitotos, "but wholly differing today in speech
fron the Huitotos, as also frow each othor" (pp. 269-270).

The second report (subuitted two months lator) again refers to the sane tribes, as well as to the ocainass, and states that of the smaller tribes, "the Ricigaros and the Muinanes are frequently mentioned" (p. 290).

The Huitotos are said to have bcen, according to accounts, the largost tribe, possibly numbering 30,000 before the first "Colombian invasion of the Putumayo regions took place, .... about 1886" (pp. 290, 294). Howevor, by the tine of Casenent's investigations, they arounted to "nothing lise that figure" (p. 290).

Further references describe a "Recigiro [sic] Indian boy" who was in the service of whites and half-breeds, and who oxecuted several Boras, in obodience to ordors from his masters (pp. 319-320).

Hardenbure (1912), who paints a vivid picture of brutal savagery against the Indians by the whites, also refers to the "Rocfgaros", which he says is roroly one of many "sub-tribes" (aloneg with "ithe Maynanes, Aifugas, ... the Yabuyanos, etc.") of the Huitoto tribe.
"Each of these sub-tribes has its own chiof, called a capitan or tuchoua, and appears to be quite independent of the rest A sub-tribo may vary in size fron 25 to 500 individuals and often nore." (p. 150)

This soens to contradict Cascnent's statcnent of the previous year (reproduced in the sane book), and the next paragraph goes even further:
"all these suk-tribos speak more or less the sarne lariguage -.. Huitcto, of which I give a few specimen words".

These words were gathered from "racionales" (p. 144), who, according to Casenent, were so callod "to distinguish then from the Indios" (onaphasis nine). "Racionalos" are doscribed by Casement as "haif-broeds nostly who can read and write" (p. 295).

Considering Hardenburg's natvete in using these people as informants, ospecially when he recognized that not all of then had a full comand of the languge ( $p$. 144), it is not surprising that ho should go on to say:
"It is a very simple language, with but little gramazr,
employing neither conjunctions nor axticles" (p. 150).

This insight into the nethod of gathering language data is inportant, though it in this case refers to the Huitoto tribe, since it would appoax that othor travellers in the region during the first two or three decades of this century often used similar procedures.

### 0.2.2. Whitfon.

Thiffen's book of 1915 gives ono the improssion of being far loss caotive and more factual in its approach than that of Hardenburg.

However, its main emphasis is anthropological, with a similar naivete with regard to language questions:
"To sinplify transliteration, though at the sacrifico of the finer distinctions of the language, the orthographic systen of tho Royal Geographic Socioty has beon used in this work.... It consists in civing to the vowels in native words their Italian aignificance, and to the consonants that which thoy have in the English longuage.
"This syston ordains that an aporoxiuation to the sound bo ained at only, as any systen which attenpted to represent the rore delicate inflexions of sound and of accent would bo so complicated that it would neroly defeat itself" (p. 249 -- emphasis nino throughout).

It is a pity that Whiffen and the other writers who had contact with the tribes of the putumayo-Anazon area were unfamiliar with the International Phonetic Alphobot, first published in ${ }^{2}$ fonetik tifcer in August 1888. Other concents by miffen make it abundantly clear that data gathered by such explorers must be rugarded with a critical eye indeed:
"The endeavour to reproduce the gutteral expressions of the Indion in Roman letters is rondered the nore complox by the uncertainty of his utterance and the aural variations of his European interproters. The sane word phonetically transcribed by an Englishnan, a German, a Frenchman, and a Spaniard boars little or no resenblance to a comon inspiration. Each European observer conveys to his written word the error of his national idiosyncrasy of inpression and pronunciation" (p. 248 -m emphasis mine).

Even though Whiffen gives few examplos of language, and none of Resigaro, these coments are reproduced here in detail, since they help us to evaluate more accurately the data for Resigaro produced by Wavrin, who was active in the area only a fow years after Whiffen (though his data was published much later, cf. 0.2.4., below).

Whiffon does, however, nake frequent references to the "Resiggro", who are listed in his indox (p. 318), and he includes two photographe, one of ten Rosfgaro wonen, and another of eloven Rosigaro women and girls (flato XII, facing pe 78). He also lists the "Rochegeroi under isome Titoto Tribes of the Issamapora Watorshed" (p. 297), though he elsewhere states that
'Tho 'Marrares,' 'Recegaros,' and 'Yabuyanos' nontionod by Hardenburg as Witoto 'sub-tribes or nacioncs', are not Witoto at a12" (p. 62).

Concerning the langeges of theso and other groups, ho says, "Tribos divided by the broadth of a narrow river spealr languages that are mutuolly unintelligible. On the other hand, tribes distant by sone hundreds of milee frod oach other possess a language with a comin root, which is fundanontally different from those in use among tho intorvening peoples" (pp. 246-7).

These tribal migrations have continued since the tine of thiffen's explorations, influsnced usually by the domands of white colon※zers.
nccording to Whirfon,
"of the thirteon languages tabulatod ... one of the noet difficult, and the most gutteral, is tho tonguo spoken by the Resigoro group of tribesil (p. 48).

Whiffen contests the clein that the Witotos wore
wrthe largest and nost important tripe,' as ... many othox languagengroups aro decidedly more inportant in both the sccial and scientific scalell (p. 62).

He produces his own estinete of the size of the tribes, rbased roughly on the nuwbox of houses and the extent of country", though he adds that

```
"these figures nust be taken as very approxinate, and
probably overestinated in sone casus" (p. 59).
```

The statistics are as follows:

| Witoto group of tribes | 15,000 |
| :--- | ---: |
| Boro group | 15,000 |
| Dukaiya or Okaina group | 2,000 |
| Muenane group | 2,000 |
| Nonuya group | 1,000 |
| Resigero group | 1,000 |
| Andoke group | 10,000 |
| Menimehe group | 15,000 |
| Karahone group | 25,000 |

An early indication of the decreasing sizo of these tribes is to be found in Whiffen's statenent,
"The Boro and Resigero also internarry -- at least cases of such marriages are known".

This, in spite of the fact that
"The Boro, Resjgero and Okaina may not love each other, but they agree in their detestation of the Witotol (pp. 60-61).

This detestation was shown by fighting and camibalisn:
"Most, if not all, of the Indians of the upper rivers are indisputably cannibals, especially the Boro, Andoke, and Resigero groups" (p. 120).

Whiffen also recounts the unual case of a Reslgaro chicf who collected a band of warriors to punish those rombers of his own tribe who subritted to the whites, in order to deter others fron subaitting. He states that in one place he found 38 dead

```
Resigaros -- nen, woren, and children -- killed by this group
(pp. 63-64).
```

0.2.3. Tessiann.
In his book published in 1930, Tessmon states,
"Ufber die Ressigaro ist nichts Näheres beiannt. Sie ge-
hören kulturell aicher zu der Uitoto-Boragruppe und sprach-
lich viclleicht in der Nohe der Bora. ... Es ist cin kleiner
Stam zwischen den Olsina, Bora, Nonuya und Muinane" (p. 583).

Tessman's map (facing p. 816) shows the Resigaro further south than in Whiffen, just ruaching down as far as tho banks of the Putumayo, apparentiy along the banks of the Igarh-parana.

### 0.2.4. Rivet and Wavrin.

The only publishod article containing original data on the Rospgaro language is that by Rivot and Wavrin (Paris 1951). Rivot needs no introduction. Wavrin was a French marquis who explored the Amazon region in the twenties and subsequent years, and prow duced a series of travel books of a popular nature. ${ }^{2}$

None of these books rofer to tho Resigaro, though frequent references are made to
"Les Boros [sic], les Huitotos, les Ocainas, los Andoques

2e.g. Mocurs ct coutunes des indions sauvages de I'Anerique du Sud, Payot, Paris, 1937;
 Payot, Paris (ot Mayenne), 1943;
Les indiens sauvages de limerique du Sud; vie sociale, Payot, Paris (et Poitiers), 194§; L'Amazonje et ses indiens, Los Editions du Soleil levant, Nanur (ot Bruxelles), 1958.
ot diverses tribus du bessin du Putumayo ot du Caqueta" (e.g., 1948:43).

Infomation given is much the sane as that found in other books reforred to here. The presentation is according to subject natter, not tribe, and as there are no indices, references to specific tribes must be gleaned from the pages of tho toxt.

However, on one trip (the date of which is not given), Wavrin obtained a list of Resigaro words and a few phrases (Rivet and Wavrin, 1951:204). No infomation is given on the source of this data, and the only roferences to the tribe or its location are sumaries of the comments of othor writers (Whiffen, Igualada, otc.).

It is unfortunate that Wavrin was not linguistically or phonetically trained, and languages occupy a very peripheral place in his writings, with only vory occasional coments. It would regrottably appear thet rany of Whiffen's observations concerning the transcription of linguistic data apply in the case of Wavrin, as hinted at by the introductory coment "(ces) documents ... si insuffisants qu'ils soient ...'i (p. 204), and as borne out by a study of the data given.

Within the limitations consequent on the data supplied, Rivet has produced an excellent article, demonstrating the appurtenance of Resigaro to the Arawaic language block.

After a brief introduction, five pages are occupied by sone
superficial coments on the gramar, which amount to intelligent guessos linited by the absence of texts (p. 206). The Janguage data is contained in ten pages of vocabulary, which includes a small number of phrases. The article concludes with a 17-page corparative Resigarc-Arawakan vocabulary, which cites postulated cognates in 89 Arawaran languages. The map at the end is a simplification of that found in Whiffen (facing p. 58), thus showing the Resfgaros in a location earlier than that indicated in Tessnann (1930), and far from that obtaining imodiately prior to 1954 (data on files of sumer Institute of Linguistics, Peru Branch).

### 0.2.4.1. Gramar.

Rivet succeede in identifying some allomorphs of the pronouns (p. 204), though in the plural tho forms givon are confused and have been cleverly identifiod on the basis of Rivet's acquaintance with other Arawakan lenguages. Pronouns following or contained within the predicate aro not recognized, however. -. g.

vocab. iten 67: "court, tatapimg" for tuatula pi-ltha cut you-do "you cut"
vocab. i.tem 238: "il prend, okepi-ke" for eke? pi-kht grasp you-do "you grasp"

[^2]Rivet errs in suggesting that the prefix wa- may be the "article detemainatif" or "le prefixe personnel ou possessif de la $3^{e}$ personne du singulieri ( p . 206), but scores with a third guess that it right be the list person plural personal or possessive prefix (it is both personal and possessive).

He identifies several errors in the data and glosses given (pp. 205, 207), but it is inevitable that he should niss many others, particularly in the section on the vocabulary.

Rivet observes "me_, $n$ ni-" and says "l'on peut se denander si elles ne correspondent pas à un duratif" (p. 208). Here he is wrong, since this is the recent past clitic, which he unfort. unately fails to observe, in consequenco of the large number of phrases containing this clitic but glossed in the present (p. 207, etc.). He nerely states,
"Jos documonts ne nous permottent pas de decouvrir coment los Resigaro forment los differentis temps do leurs verbes" (p. 207).

A final "-k, -ka, -khe, -ki" is tontatively related to the augrentative or superlative of sone Arawakan languages (p. 208), and on the basis of a single word, a hypothetical morpheme "-tzani" is also identified as augmentative. Both of these are errors.
"-tzani" is not a separate morphene in the word in question, since the norphene breaks and gloss are not as indicated:

Rivet and Wavrin have
"kemotzani, avare" for gimotshani
he-be-stingy "he is stincy"

```
    "mm" appears to correspond to knt, "to do" (cf. 4.1.2.2.1.,
below).
e.g. tsa-me-kähe-ke "il tousse" for tsa-mi ehe? kha
                                he rec cough do
                        past
                                    "ho coughod"
    totəpi-ka "court" ("short") is an error for
                        tuutur pi-kht
                        cut youmdo
                            "you cut"4
```

This nay also be the case with "akhe", though the only exarple given is confused, since no part corresponds to tho second percon singular glossed (though "ne(he)-" nay be an allomorph of tho third person plural ma-). The nost probable origin of the phrase is given hereunder, and a conparison of the two forms oxemplifies the problens encounterod in chocking the accuracy of the data givon.
hanakoka(i)ne(he)-kha "tu blesses"
for anoget kainse[?] i - $\operatorname{kn} \mathrm{a}^{5}$
tapir kill you - do "(You (pI)) Kill the tapir!"

[^3]
#### Abstract

In this exanplo, the $i$ is the inperative form of the second person non-singular markor. The object nay be othor than that given, for instanco fongef "our father", though this particular possibility is less probable then that given above.


inother possible source of the phrase given is
khakeltivtitsi na-kht
fight-rocip they-do "rhey do bottle, thoy fight"

```
"-ki" and "登" may correspond to the Verb word order 3 Directional suffix \(\{-\mathrm{ki}\}\) "to come from" (cf. 3.1.2.4., below). e.E. tsaminkana-ki "il s'onivre" for tsa-mi kene-ki he rec get- cone-from past drunk
"He has cone fron getting drunk" no-note-k "il mange" for no?itoki \(\quad \begin{aligned} & \text { I-eat-cone-fron }\end{aligned}\)
"I cone frow eating"
```

It is inevitable that occasionally a fincl $-k(i)$ should be erroneously interpreted as this sane norphene. e.f. adr"owe(he)-k(i) "il vole" for adovigi "bird, ho who flies"

In none of those cases is the postulated suffix identifiable with the augnentative, which in Resigaro is -kobu.

### 0.2.4.2. Resigaro Vocabulary.

The vocabulary contains 301 entries, listed according to the alphabetical order of the French glosses. These entries form the basis for Rivot's gramatical coments, discussed above.

As the examples already given indicate, the semantic errors and irregularities of transcription make identification of the forms given often difficult and occasionally inpossible. The
transcription used is not specified, and appears to be of the "honemade" variety, as reconended in Wiffen. The inconsistencies are too numerous to list exhaustively, though anongst the most notorious are the following:-
a) Different symbols are used to indicato the sanc sounds. e.g. i) "tz" and "e" for ts -- even in the sane word:-
hīeatzǒ "bois" for itsitsb "firewood"
ii) "dz", "dr"A", "r^A" and "r" for $\underline{d}^{6}$
"dz": w(h)e-podzi "nombril" for verphbde "our navel" "dr^^": Udr"^ühüki "fourii curuinces for hudufgi "curuinse ant"
"r^^": hor^^ne "genou" for ho?donad "knee"
"r": kiorawedzowi "rouge" for kedsvis? jovi "that
which is rod"
iii) VhV, $\overline{\mathrm{V}} \mathrm{hV}, \mathrm{Vh} \overline{\mathrm{V}}, \overline{\mathrm{V} h}, \mathrm{~V}$, and $\overline{\mathrm{V}} \mathrm{V}$ for VV

If the - indicatos a tone, whother high or low, there is nothing to indicate this. It may indicate a longer vowel, winch would do away with the need for $V$ in Wavrin's transcription, unless throe or four degroes of length are clained.
"VhV": noho..to "fille" for nots "ay daughter"

[^4]| "V̄hV": | ew(h) oheki "etoile" | for | hiv1igi |  |
| :---: | :---: | :---: | :---: | :---: |
| "WhV": | tomehätsi "coton" | for | tehonastohs | "cotton" |
| "V̄h": |  | for | no?žáan | son" |
| "V": | hedr ${ }^{\text {a }}$ 号 "sang ${ }^{\text {a }}$ | for | ilda "blood |  |
| "V" | kowe "fleur" | for | giivi "fl | ri |
| "V̄V": |  | for | iitsha "cl | ud" |

b) The gane sywbols are used to indicate difforent sounds.
o.g. i) "h" for $\underline{n}$, $\underline{-}$ and vowel length (cf. above) -- even in the same word:-

c) The same word is written differently if it occurs more than once (except when copied under various headings, such as "chicha de banane", listed under "banane" and "chicha").
e.g. i) inā(a)r^o "fumelle", inahär^o "feme"

> for indads "woman, wife"
ii) hent (hi)es "herbe", hiniitzi "riz"

> for hinists "grass"

7cf. Bora [tsa?ohtsi?], "five".
iii) ëts夭 "nuage", hë(e)tsa "pluie" for istsh "cloud"
iv) kiheki, kine(he)ki "lune" for ketci "noon"

It rust be emphasized that only some of tho inconsistencies are given above, and only a few examplos in each case, sinco to treat this problen exhaustively would require reproducing alnost the entire Rivot-Wavrin vocabulary.

In spite of these problems of form and meaning, a thorough check of this vocabulary has been made in comparison with the lexicon $I$ have compiled (cf. Appendix $I$, below) and the grannatical doscription which forms the basis of this thesis. This has puraitted the positive identification of 201 entries, though in 59 cases the gloss given is substantianly or evon totally wrong. See examples above, and the following:
i) föghike "vent" for 560 gi-khk "he (it) blows"
ii) natsā(a)ka "haricot" for natshaske "poanut"
iii) ketsedzohini "feu" for ketshejovigl "that which burns" otc.

Of the renaining 100 itons, in 72 cases the Resigaro given is so totally different fron that which I have for tho sano or related glosses that one nust assune that a difforent word was given, the exact meaning of which is not yet clear. In many of these cases, toc, the gloss may be inaccurate, and this and the vagaries of the transcription may be hiding words which are known
but have not yet been recognized.

The 28 outstonding itoms are words for which I have no entry in my lexicon. Sone of those words were elicitod, but produced the reply that no such words existed (e.g. "bow [and arrow]", "nore" -- though "nore than" is attested --, "goodbye"). Others (such as "generous", "to accopt", etc.) nay be revealed by further rescarch.

### 0.2.4.3. Resigaro-Arawakan Comparative Vocabulary.

This is detailed and thoroueh, clearly placing Resigaro in the Arawakan phyluw, in spito oi some false cognates, and the presont data substantiates Rivet's clain in this regard.

The map has already boen comentod upon (cf. 0.2.4., above).

### 0.2.5. Kingsley Noble.

In his study published in 1965, Kingsley Noblo includes Resin garo data taken fron Rivet and Wavrin as part of his evidence concorning "Proto-Arawakan and its Descendents". He shows a score of cognates, and concludes that Resfegaro is "Proto-Northern" (cf. his diagrai: on p. 108) . No original data on Resigaro is produced, nor are any significant comonts mado, apart from the suggested classification.

### 0.2.6. Other Classifiors.

Most classifiers refer to each other, and to the early sources
> (Hardenburg, Whiffen, Tessann), and rarely is any new information produced.

The Handbook of South Anerican Indians (1950 et. al.) reproduces most of the data scen elsuwhere, and adds no new information as regards the Resifaro (cf. 3:750, 5:85, 404, 6:247). According to the Eandbook (6:247), Ortiz (1942 -- not seen) refers to the "Resigaro" and doubts their relationship to the Huitotos.

Murdock (1951) lists the "Witoto" fonily as being in Colombia, and in a nap on p. 14 shows an overlap into poru. He coments,

This group includos the Andoko, Bora (Miranya), Coeruna, Muenane, Monoya, Ocaina, Orejon, Resigero and Witoto (Uitoto) tribos, whose langueges are tontatively assigned to a single linguistic stock, the Witotoan."

McQuown (1955:537) lists "Resigero", with the suggostion that it may be extinct, and the coment that its classification is doubtful.

Girard (1958) refers once to the "Resigaro" (p. 131), roferring to Hardenburg (1912:150). He indicates that they cane with other groups to the region of the Yahuasyacu (sic) "hard unos 40 años" (p. 53).
de Castellvi and Espinosa Perez (1958) classify "Rosigearo" as Macro-Arawak, subclassification: Central, and rofer to correspondence with Fivet, who inforned then that

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"E1 Marques de Wavrin recogit en uno de sus viajes vi vocabulario de oste dialecto que, segtn nos inform el Prof. Rivet, se encuentra on su poder" (p. 247).
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Tovar (1961:16.4) says that Igualada and de Castellvi (1940 -- not seen) calculated about ton spearers of "Resigero" or "Resigaro" for the Anazon-Gaqueta region. His map no. 3. shows "Resfero" at location 32, apparently on the PeruvianColombian border on the Putumayo.

### 0.3. The basis of the prosent description.

The data on which this description of Resigaro is based was gathered by the author in Peru between July 1971 and July 1972. Three months were spent in the Bora village of Brillo Nuevo and the Ocaina village of Puerto Isango.

### 0.3.1. Informants.

Data was initially gatherod in Brillo Fuevo from Cecilia, but since other Resigaro speakors subsequently told ne that she made nistakes when speaking, and sho hersclf seencd to lack confidence in Resigaro, this data has not been included in the present study.

Thus, the present description is based on an analysis of various types of speech (and a saall amount of writing) by four adult Resigaro speakers in Puerto Isango.

Alicia Ocagane, who was Earried to on Ocaina, never spoke any Ianguage other than Resfgaro, which her husband had learnt
to understand. Likewise, she apparently maeretood Ocaina. In 1972 she wes about fifty yoars old.

Her two daughters, Adolina and Rosa Andrade ocagane, wore bilingual in Resigaro and ocaina, though thoy understood vory Iittle Spanish, and spoke ovon less. They both had Ocaina husbands, and in 1972 Adelina was 27 and Rosa, 23. Adelina had four children, and Rosa, two. Those children who were old enough to speak spoke some Resigaro, but most of the tire they commicated in ocaina.

Alicia's son, pabio marade ocagone, was the only one with a reasonably good mowlodge of Spanish (by local standards). He had attonded the bilingual school in the village, and had comm ploted the five-yoar primary course, learning to road ond write in Ocaina and Spanish. In 1972 he was 21 and was unuarried. He becase my nain infomment in Septenbor 1971 and worked with ne solidly until I left Poru in Tuly 1972. He was always helpful and enthusiastic, and soon learat to write ris owi larguage, using the alphabot I developed from ny phonenic analysis of the language. In Novenbor 1971 he accompaniod me to the Sumor $\operatorname{In}-$ stitute of Linguistics' jungle base at Yarinacocha, zear Pucallpa, on the Ucayali, whoro we worked on the larguage for the noxt oight-and-a-half months.
0.3.2. Corme.
Q.3.2.1. Iegence.

In Puerto Isongo, idelina Amdrado Ocegane told no twenty trad-
itional tajes, all of which I tapo-recordod. 8 subsequently transcribed these stories and traslated then roughly into Spanish, with Adelina's brother fablo, who dia a lot of the work. This fomed $3061 / 2$ quarto pages of toxt (handwritten), which were rupeatedly referred to in the course of language analysis and write-up. Seven of these talos (accounting for about $40 \%$ of the totel material) were subsoquently studiod in further detail, and part of onc of then is included in IT.9., below, with morphenemy-norphene ard froe translations and granatical anelysis.

### 0.3.2.2. other Storied.

Alicia Ocagane spole about tho recent history of the tribe, telling of the sufforing and killings oxperienced under the whitos. She also spoke of the antinals of the forest, and sang some of the traditional ficsta songs. $\Lambda 11$ this naterial was tape-recorded, transcribed, and translatcd, although the somes have not beon referred to in the present analysis, since they would appear to represent an oldor forn (and dofiritely a differerit style) of the language, which Pablo could not always fully

[^5]understand well enough to explain the meaning.

Rosa Andrade Ocagane was much less of a talker, though she did re-tell a fuw Bible stories she hed hoard frow miss ionarios. Those stories were rocorded, writton dow, and translated.

### 0.3.2.3. Conversation and Jetters.

When Pabln was in rrinacocha with me, ho decided to writo to his mother and sisters, in Resigaro. In Puorto Isango, the schoolteacher (hinsolf a Resfaro) was able to read this letter to ficia, Adolina, and nosa, ad he wrote down a ropiy from then in Resfarc. Pablo mindy lot me have copies of these lettors, havine comrectod the welline errors in the letter writton by the teacher. He also wrote on another occasion, and corroctod two lettors that I wrote in Rosigare.

In Tune 1972, G.I.I. monber Ilo Lech visited Puorto Isargo, and recordod mossages in Resigaro fron Pablo's nothor and sisturs, and conversation botween then. I heve a copy of this tapo and a tranecription and transiation of its contents.

## $0.3 .2 .4 \cdot$ Lexicon.

ha pert of the researeh undertaren in ferm, a tri-jingal loxicon was conpiled of all Resigaro words encountered, with Spanish and Ocaina equivalents. Approximately 2,000 ontries wore nade. (The Joxicon is included as Appendix I, with the ocaina deleted,
and English glosses substituted.)

### 0.3.2.5. Other naterial.

When I was busy with other work, Pablo translated St. Naris's Gospel fron the Ocaina, and completed this as far as the end of the fourth chapter. Subsequently, we checked this together, and translated it into Spanish.

All these above sources provided valuable insights into the language, and, supplenented by naterial elicited from pablo, foriz the basis of the description which follows.
0.4. Theoreticsl franework of the present description. The ain of the thesis is to provide a general description of the Reslgaro language. Thus, the emphasis is not theorotical, and a model has been chosen which will, it is believed, facilitate the comparison of this language with others, particularly those which may prove to be related to it. The model referred to is tagremics.

### 0.4.1. The Three Eiorarchies.

Tagmenics views languago as consisting of three independent but intor-locking hierarchies: phonological, gramatical, and lexical.

Each hierarchy consists of units at different levels, and a unit at any given level (excopt the lowest) consists nomally of units fron the level imediately below it, and functions (except in the case of the highest level) as an elenent in the level
imediately above it.

Thus, the phomological hiorarchy has at its lowest level the phoneme, which is distributed in the syllable, at the next levol in this hierarchy. This, in turn, noy bo distributed in a stressegroup or phonological word, which is distributed in a yet higher-level phonological unit.

The gramatical hierarchy has as its minimum unit the tegrene, wich is distributed in a higher-level unit celled a syntagnere (Iongacre 1964a:15n10).

A tagran is a slot-class correlative (Piko 1967:196, otc.) (= Longacre's "function-set correlation" (I965a:65n3)). That js to say, a slot (function) at a given lovcl is filled (manifestod) by a momber of a class (set). That which functions as a tagero at one level hay be a symtagneme at a lower level. Thus, the concopt of levels is fundanental to tagenics.

The loxical heraxchy has as its minimal unt the "lexeme" (Longacre 1964b), which is distributed in higher-level lexical units, called "I_syntarenes" by Longacre (1964b:20). The lexical hierarchy has not been developed in detail by taemomeists, though Wiso has sugeostod a possible approach in her 1968 Ph.D. thosis (written under Pilv's supervision) (Wise 197la).
0.4.2. The Three vodos.

In adition to the three hierarchies indicatod above, pike states
that language can be vieved as being "trinodally structurec". By this, he indicates a convenient framework within which langwage units of any hierarchy con be viewod and daecribod. The three Modes are Contrast Fode, Variation Mode, and Distribution Hode (oricinally naned Feature, Manifestation, and Distribution podes, reapectively, by pike). ${ }^{9}$

Hexe is an examplo from the phonological hierarchy, phoneme level:-

From the point of vigu of the Contrast mode, each phoneme of any given languag is describod in torms of its contrantiveidentificational monetic foatures.

Fron the point of view of the Variation node, the variont nanirostations, or allophones, of och phonone are doscribed. Tron tho point of view of the Distribution ado, the distribution of each phoneme in units of the next level "up" in the phonological hierarchy (the syllable) is described.

The sane doscriptive procedure can be repcatod at oach level of the hierarchy.

It is of fundarontal importance that Variation and Distribution iodos be distinguishod, a point which most tagenicists seen to have failed to realize, if one is to judge fron published

[^6]naterials. Likewise, the importance of levels must bo onphasizod.

### 0.4.2.1. Structure and Distribution.

In handing constructions at any lovel, it is clear that they can be viewed from two points of view:

1) In teras of their internal structure
2) In terns of their ("extemal") distribution.

In the ocrly forrulation of the theory, fike combined these two, by speaking of internal and external distribution, respectively. mhis lod to inconsistencies of the sort to be seen in Pickett (1060):
 cation have been applied to the data: extornal distribution and intomel structure. Frequently the two give the saie results."
-- but only as long as one remains at a very suporficial level of analysis.
"In other cases they result in different divisions, in which cose distribution is made prinary, with intomal atructure determining subsroupings or (in onc casc) hypereroupings not part of the primary division." (1. 18)

Weqees ind clasbes. Use has already beon mado of the torns 'types' and 'elasses' in reforenco to structuros at each level. Typos are eajcally contrastive atructures. ... Classes of structures are, in genercl, more inclusive than typos; i.e., they are groupe of struc-ture typos which havo sone feature of distribution, intomal composition [wh this?] or neanine in comon." (1.19)

Thus, "contrastive structures" or "comon features of internal composition" at one moment load to the ostablishnent of
types, and at another to the cstablishuent of classes. And sonetines classes are primary, wile on othor occasions, types are primary.

But this leads to a contradiction with Pike's establishnent of the threo rodes, as Crawford rightly pointed out (1963: 96, 179-180). So-called "interral distribution" (i.e., internal structure) is in fact part of the contrast (or feature) node, with the details of variant forms described under the variation (or anifestation) modo. Pire subsequently (1967:460) accepted this modification.

Extemal distribution, on tho other hand, has no placo in the variation mode, and should be described in the distribution mode (though it nay also be referred to in the contrast rode -- so lone as circularity is avoidod -- since distribution nay be a distinctive, contrastivo feature of a unit. ${ }^{10}$

Nevertheless, other tagnesicists havo continued to fail to

[^7]distinguish structure and distribution, with resultant contraw dictions in thejr work. Thus, in his gramar of Laneni, whore he ostomibly presente his naterial in terns of the throe modes throughout, Iraij first includes distribution wader the controst mode, then subchessifies units undor the manfestation (i.e., variation) mode on the basis of structure and distribution, and so finally, under the distribution iode itself, is roduced to a mere ropetition of what ho has already said -- onitting the details, at that, oven thongh thoy are more rolevant here than anywhore else.
fit Word level, for instance, he says:
Words are classifiod by their occurrence [i.e., distribution] in higher level structures, typicolly in phrasos, and aro sub-clabsifiod by their intemal structure." (ppe 133 -134)

In the Contrast :ode, he includes distribution:-
15.1. Ifouns.
5.1.1. Controst. Nouns have the following distinguishing features: h. They fill the head slot in noun pkroses or the locative or temporal slots on clause level..." (p. 134)

In tho Variation (his "ronifostation") node of tho nouri word he says:-
55.1.2. Nouns have been sub-divided on the basis of their extemal distribution $2 n d$ intemal structuro. These subdivisions and theis nañifestations are described in this section (1. 134 , omhasis mino).

Thus, on 239, Trail's description of the distribution mode of noun words is as follows (I quote the section in its entirety):-
"5.1.3. Distribution. Nows finl the head slot in noun phrasos ur the locative or temporal slot in clauses."

Much confusion can be avoided by distinguishing construct-
ion tyos and distribution classes, to use a valuable terminological distinction sugeosted by John Bendorisamel, though incorporatod by hiu into a different theoreticel frarework (1963:61). 11

## To give an example from Reslgaro:

Two tyoes of noun staz are set up on tho basis of (internal) structure, and ono of those types has three variant sub-typus, maling four structurally differont groups. Three sub-classos 12 are set up on the basis of distribution in units of the next level "up". Theorotically, at loast, both typos and all three sub-types can occur in two of tho three sub-classes, with ono type olso occurring in the third sub-class. If wo fail to dism tinguish botween structure and distribution, and furthor use the same tom -- "sub-classesir -- in both cases, as in grail (and others), wo havo the possibility of nine"sub-classes" of

[^8]noun stoms. This contributes nothing to our undorstanding of the structure and distribution of nom stens in Resigaro, on the contrary only sarvine to confunc the picture.

### 0.4.3. Lovelic.

Fundareatal to tho distinction between Structure and Distribution is the concept of levels, since structures typically consist of units that are mombors of sub-classes at the lavel below, and distributional sub-chasses typically occur in types at the mext level u.

To illustrate, again, from Robigaro: at word Ievel, two types and six sub-types of Houn word aro sot up on tho basis of intermal (structural) differonces. Traditional tagmenic practice would have ue trace back those six sub-types to root level. i.e., noum root sub-type i occurs in noun atem sub-type i, which occurs in noun word sub-type i, etc. This is a consequence of pike's original formulation of the nodel, as stated by Pickett (1960:90):
"... the original approach was spocifically designed to cut 'vertically' through all such lovels by a unit-mithinunit approach."
Fowever, this method introducos umecessary complexity and redundanoy thronghout tho description, by repeatine the sane inforwation many times.

In terrs of the Resigaro examplo given above, sub-classification according to word-level suffixes (which affect the struc-
ture of the word, and lead to the two types and six sub-types montioned above) is relevant at word level, but if this is carried down to root level, along with the confusion of structure and distribution which led to nine "sub-classes" at stom level (also, by the sane procedure, traced back to root level), then 54 "sub-classes" of Resfgaro noun roots are theoretically possible -- and this without sub-classifying the words according to their co-occurrence with one or nore of the 80 -odd classifice suffixes, which would yicld a theoretically-poseible 4,320 noun root sub-classes, at least.

A prine example of the consequences of this technique is to bo found in the ton gramatical doscriptions produced by nembers of the Bolivian Branch of the Sumer Institute of Jinguistics, under the direction of Esther Matteson (Natteson, 2967 a and b).

Thus, in the Eseejja Gremar by Shoonaker and Shoonaker (Vol. I, pp. 209-283) -- to tako a randon but typical case -sonewhat more thon 60 verb phrase classes are set up (I:230) on the basis of the distribution of 13 differont types of verb phrase in six clause types.

In the first place, the types and classes are confused, as in Trail. ${ }^{13}$

[^9]Secondly, the relevance of luvels is not recognizod. Thus, a pago-and-a-holf of formulae tell us that

```
VVb [i.0., VP] 1la = + Nuc:Vb nuc lla....
    Vb[i.e., VF] 13 = +INuc:Vb nuc 13 ...." (pp. 231-2)I4
```

This is followed through to verb nuclons luvel, where we learn that

```
rvb nuc lla = + H:vb ll
    Vb nuc 13 = + E:vb13 ...."
    etc. (p]. 237-8)
```

At word level, the formiae are repeated:

```
"vb \(11=+\) Base: vb ster 11 ....
    vb 13 = + Base: vb stem 11 [sic] ...."
        etc. (pp. 262-4)
```

The apparent "skewing" here and in other cases reinforces the fact that distinctions ostablishee at one level are not necessarily relevant at other levels. In the caso in question, this leads to a progrossive simplification of classes at lowor Levols. Thus,


The format is a barrior to conprohension. This is in part a consequonce of the above faults. In the midst of so

Transitive and Intronsitive classes to yield Quotativo Transitive and guotative Intransitive. All 13 types of vorb phrase cocur in the Ditransitive class, and sinilariy in the Transitive and Intransitivo classus, whilo only Indepeadent types occur in qutative Transitive and Intransitivo classes, and in the Btative class. The major part of this might bo statable in torms of a rostriction on tho comocurrence of quotative and Dependent matiolications, which in turn leads to the question as to whother quotative has been included in the right axis. Howover, it is not rolevant to explore those possibilitios hero. ${ }^{14}$ Other information in the fomulae but not rolevant to the prosent discussion is onitted.
ruch ropotition -- both by repoating details at all levels, and by failing to collapso formulae at any given level -significant details are easily overlooked by the reader, and goneralisations are ignorod by the writers. This is the case with all the gromars in the two volumes of this publication.

It is clear that Matteson recognized all these problems.
In the introduction to volure I she states,
"... the Ignacio gramar demonstrates devices for soparating distribution fron composition [i.e., structural] classes, introducing the former at the first level on which they are relevant, rather than carrying then through various levels for which they have no sifnificance as has sometincs beon done bocause of their correlation or partial correlation to composition classes." (I:9)

She adds tho coment that
"Such devices are not linitcd to use in the Ienacio gramar".

However, an examination of the "devices" by reference to the sections she nentions reveals that they amount to subdividing classes established higher up (and dubbed "super-tagmenes" -- cf. I: 108), and designating the sub-divisions by a combination of capital letters and numbers. But this technique conpletely misses the point, failing to soe the relation of construction types and distribution sub-classes to each other, and to specific levels of the gromatical hierarchy, and the relevance of the modal systen to the whole problen.

The concept of levels, whose importance has been enphasized
by Longecre, avoids such unrealistic sub-classifications, by Imiting the donain of sub-classification in any given case to tho level (or levels) at which it is relevant, ${ }^{15}$ while the concept of the throc modes of contrast, variation and distribution as devoloped by Pike providos a clear franework within which construction types and distribution classes and subclasses con bo consistontly hondled.

There is an interlocking betwoen levels, but it is betweon tho distribution sub-classos of one luvol and the variation (or monifestation) tynes at the next level up, and not between the sub-classes of one level and the sub-classes of the next level. This may be clarified in the following diagram:-
Sentence level types
Clause level (sub-classes
(types
Phrase level (sub-classes
(types

[^10]on up different sorts of relationships begin to appear (such as that betwoen subject and prodicate, etc.). Occasionally some sub-classes at a given level may be distributed in types of another class (as when the nembers of a sub-class of noun stens are distributed both in a type of noun word and a type of numoral word). Also, thero may be level-skipping, rocursiveness or backlooping, which is not included in the diagran. (The sub-lovels of Group and Piece are also onitted, as they only affect one class in Resfero.)

Thus, in this context, there are four relations that are not nornally relevant, and one that is:-
i) the grouping into construction types at one lovel is not relovant to the grouping into construction types at any othor levol;
ii) the grouping into construction types is not relevant to the classification into distribution sub-classes at the sane level or any other level except that inediately below it; iii) the classification into distribution sub-classes at one level is not rolgvant to the classification into distribution sub-classes at ony other level;
iv) the classification into distribution sub-classes is not relevant to the grouping into construction types at the sane level or any othor level except that inmediately above it. (Points ii) and iv) ignore the possibility of levol-skipping, etc., for simplicity of argunent.)
that between the classification into distribution sub-classos at one level and (typically) the grouping into construction types at the next level up. 16

This does not dony the fect that the major classes that are set up normally follow through fron phraso level down to root level. Thus, typically, a Noun Phrase has a noun word as its head, a noun word has a nown ston as its base, and a noun sten has a noun root as its bases etc. This followingthrough of the classification fron one level to another reflects the fact that such a procedure is relevant to the data in question (and exceptions to the general pattorm are indicated). When we say that sub-classes at a givon lovel aro distributed in types of the next level, we are not denying their distribution in units of a given class at the next level, since typos are no noro than structural variants of a class, at a given Ievel. However, to relate the sub-classes of a givon level to the sub-clesces of the next (or any other) levol is erroneous.

In consequenco of the distinctions made above, in the following description construction types are presented under
$\overline{16}$ HaIliday (1961:261) definos "class" in substantially the sane way, when he says,
"... a class is always defined with reference to the structure of tho unit next above, and structure with reference to the classos of the unit next below. A class is not a grouping of members of a givon unit which are alike in thoir own structure. In othor words, by reference to the rank scale, closses are derived "from above" ... and not "Iron belowi.."" (Emphasis Halliday's.)
the variation mode for the najor class and level in question (and are enumerated with Ronen nuiexals), while distributional sub-classes are presented under the distribution node for the class ond lovel in quostion (and are enurerated with Arabic nunerals). I have yet to see any other tagranic description that follows this fomat, and yet it saens the only way to present the data without doing violence to the concept of aodes. It seens to we that pike laid open the way for the sort of treatnent $I$ suggest (or, even wore than this, required it) in his developnent of nodes. As pickett says,
"Pike's definition of a distribution class is the list of forns (potentially ranging fron ono morphome to full sentencos) which occur in any one tagrenic slot. Such a distribution class coubines groups of very different internal structure." (1960:95, emphasis mine.)

### 0.4.4. Multizication.

Thus far, two techniquos for reducing the great tagnonics problen of repetition have bean discussed: the distinction between variation and distribution modes, and the related concept of levels.

A third, and complenentary, tochniquo is that of matrix multiplication, which has been developed by pike since about 1962 (Pike 1962, 1963. 1970). This combats the segmentation of earlier tagnemics which ofton obscured relations and led to avojdable repetition.

By neans of multiplication of a natrix by a given factor,
new natrices can be derived (1962:226-229). Thus, for exarple, English passive sentences can be derived froin ective sontonces. This dovelopment obviously owes a lot to the apm pearance of Iransformational-Gonerative gramax in the late 50:

In the present description, multiplication is used to derive Interrogative, Inperative, Moninalized and Relativizod clauses fron the basic Declarative clauso. 17

### 0.5. Scone.

In the present thesis, the botton two levejs of tho phonologe ical hierarchy are described (phonene level and syllable lovel), as an introduction to the description of tho gramatical hierarchy, which forms the main section of the theois. A description of the tones and tonal morphophonenics of Resignro is beyond the scope of tho prosent description, though tonea are indicatod throughout.

The eramaticai hierarchy is described fron root to sentenco, the levels being:

Root
Stem
Word
(Group)
(Piece)
Phrase
$\overline{17}$ cf. Longacre, 1965 b .

Clause
Sontonce
Group and Pioce are best considered as "sub-levels", since they are only relevant to the desoription of the verb. Since the Sentence is the highest level analysed, its distribution is not given, though a sonple text is analysed at the end of the gramar section.

As indicated above, the lexical hierarchy is the one on which least work has been done by tagrenicists. Iongacre has pointed out the inportance of soparating the lexicon from the Eramar:
"Lexicon is a third mode [i.e., hierarchy] of linguistic structuring. It is sufficiently separate from grarmar that the description of the interplay of itea and context, of idion formation, and of lexical strings ... is a study within itself. Attempts to incorporate the lexicon diroctly into the gramar will lead only to the oversimpli. fication of the formor or to the endess atomization of the latter" (1964a:8).

The size of the task is also recognized by hin:
"Po describe a language exhaustivoly (a task as yet soriously attempted by no one), three volunes are needed: a phonological statoment, a gramatical statement, and a highly sophisticated dictionary" (1964a:8).

A fulfillnent of Longacre's requirement that the dictionary be "highly sophisticated" would be beyond the scope of the presont worlg, since it would make the thosis overlong to go into the nocessary detail with some 2,000 entrics, and the alternative of prosenting merely a sample lexicon such as that in Loos (1969), where only 73 items are houdled, though
in considerable detail, or in the style of Katz and Fodor (1963:186) on the one word "bachelor", was considered unacceptanle. 18

Therefore, as in Trail, 1970, the complete lexicon conpiled during the research project is included. This consists of the basic lexical units only, and in this description the whole section form cn appendix, for reforence, and to form the basis of futuro analysis.

[^11]PART I:

PHONOIOGICAL

$$
\mathrm{HIXRARCHI}
$$

## O. Introduction.

In describing the three iodes, above (section 0.4.2.), an example was given from tho phonological hierarchy, phonene level. This indicated that phoneme contrasts are described wader the contrest mode, allophonic variation described under the variation node, and distribution under the distribution mode.

However, while this presentation night be thooretically satisfying, in practical terus it is at least inconvenient, if not inappropriate, and tagnemicists have gonerally described the phonological hiererchy without referonce to the three modes (e.g. Elson (ed.), 1967).

Even Kenneth pike has not followed this presontation completely. In the artiole he comathored with Rachel Saint in Studies in Ecuadorian Indiar Languages: I (EIson (ed.), 1962), though the doscription is in texrs of the three nodes, a concession is riade to convenience in that first consonants are described in terns of each of the three modes, and then vowels are described in tho sane way (cf. p. 2).

Other articles (by other authors) in the sane publication reduce theso six sections to five, by grouping consonents and vowels for distribution, though separating then for tho other hodes (see, for example, Boman (pp. 45-59).).

In the present description, it has been thought preferable to reduce this further to the original format of the three nodes (i.e., in three sections), by changing slightly the components of cach section.

Thus, on the phoneme lovel, for instance, contrast mode sunarizes the contrastive-identificational features of phonemes in two matrices and a short statomen (for suprasegmontals).

Detailed exenplification of the phoneaes, justifying their establishment as separate unite, is reserved for the variation node. This is considered appropriate since the variant manifustations of the phonenic unit (an abstract entity) are the phonemes, just as the variant manifestations of the Noun Phrase, for instance (in the gramatical hierarchy), aro different types of $\mathbb{N P}$. Inherent in the establishinent of different types -- in any hierarchy -- is their contrast with other types at the sane luvel.

In this, tho presentation of the phonology in this description parallels that of the gramar, where the contrast node nerely indicates briefly the contrastive characteristics of tho levels and units in question as a whole, in justification of the establishnent of that level (and, in the grannar, the particular class -- noun word versus verb word, etc.). It also has the advantage of peraitting the allophones of a
phonene to be described at the same timo that the phonene is duscribed, instead of in a totally different soction, as in the articles in Elson, 1962, referred to above.

## Chapter 1

PHOHEME LEVEL

The phonene level is set up as the lowest level in the phonological hierarchy. ${ }^{l}$ phonenes are distributod in units of the next level of the phonological hierarchy, the syllable. Types of phoneme are set up on a structural basis -m i.e., according to certain phonetic characteristics. Classes of phonene are set up on the basis of distribution in the syllable. ${ }^{2}$

### 1.1. Contrast.

The contrastive-identificational features of phonemes are best sumarised in two matrices (one for contoids and the other for vocoids ${ }^{3}$ ) and a short statenent (for suprasegmentals).

The distinctive feature, referred to in I.1.2., below, might be considered as constituting a lower level than that of the phonene. However, this approach is not adopted here, since the distinctive feature reprosents a greater degree of abstraction than the phonene, and has no independent status apart from its co-occurrence with other distinctive features in the phom nene. This description takes as starting point the distinctive feature as the basis for separating phonemes.
${ }^{2}$ It is worthy of note that the three types of phonere (Contoid, Vocoid, and Suprasegmental) are co-extonsive with the threo distribution classos (named Consonant, Vowel, and Tone). However, the sub-types of phoneme bear no noticeable correlation to the distribution of the nembers of each class, except in the few cases indicated in Part I, Chapter II, bolow.
$3^{\text {Pike's }}$ useful distinction betweon contoid/vocoid and consonant/ vowel is retained, since the membership of the classes Consonant and Vowel is clearly depondent on distributional features, which cannot determine the establishaent of types on the same level, as

| plosivos |  | Labiol | Alveolar | Palatal | Velar | Glottal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | vi.asp. | $p^{n^{4}}$ | $t^{\text {h }}$ |  | $k^{h}$ |  |
|  | v. | 2 | $t$ | $t^{\text {y }}$ | k | $?$ |
|  | vd. | b | d. | $d^{\text {y }}$ | G |  |
|  | vl.asp. |  | $t s^{h}$ | $c^{\text {h }}$ |  |  |
| Affricates | vI. |  | ts | č |  |  |
|  | va. |  | dz | 3 |  |  |
| Fricatives | v1. | f | $s$ | š |  | h |
|  | vd. | v |  | \% |  |  |
| Nasals | v1. | \# | ${ }^{\text {a }}$ | 2 |  |  |
|  | vd. | n | n | $n$ |  |  |

Table 1.1. Contoid Matrix.

Outside the systen: $/ x /$, /x/ (cf. 1.2.1.5., below)
indicatod in 0.4 .2 and 0.4 .3 ., above. The fact that in Rosigaro the nombership of the structural types of phonene is coextonsive with that of the distributional classos should not be allowed to underine this distinction, as othorwise one would ond up with circularity. cf. K.L. Pike, 1943:
"If the phonetician first delinits supposod articulatory
classes by phonenic features, how can he then describe the phoncmes with articulatory methods? Niny such attempt presente a vicious circle of phonemics to phonetics to
phonemics, with the phonetician startine at phonemics." (pp. 77-78) cf. also K.L. Pike, 1947:13bn-14an.
Contoids and vocoids are dofined in phonetic terus. A vocoid is a sound in which the air ascapes out of the nouth over the centre of the tongue, without pronounced or localized friction in the routh. (cf. K.I. Pike, 1947:4b-5a; 1967:332) A contoid is ony nonvocoid.
$4 / \mathrm{p}^{\mathrm{h}} /, / \mathrm{t}^{\mathrm{h}} /$, etc. are for convenience subsequently written ph, th, etc.

Front Certral Back

| High | i |  | u |
| :--- | :--- | :--- | :--- |
| (sproad) |  |  |  |
| Mid | o |  |  |
| (spread/round) |  |  |  |
| Low |  | a |  |

## Table 1.2. Vocoid Matrix.

Suprasegnentals: High tone:
Low tone: (Absence of ")

### 1.2. Variation.

Phoneqes are grouped into types on the basis of cortain charm actoristics of phonotic structure.

Phon $=$ Nll Contoids
Phon $=$ il $=11$ Vocoids
Phon ${ }_{i i j}=$ Suprasegrentals

In establishing the identity of phoneres, their contrastive nature is fundamental. Thus, each posited phonene is contrasted with all othor posited phonenes with which it might conceivably be in a non-contrastive relationship. This results in ropeated application of the comutation test on pairs of phoneres differing by one distinctive feature at a tiae. IdealIy, the words in which these phonenes appear in the examplos given are identical at all other points (i.e., mininal pairs). When such a clear mininal pair is available, only one example
is given. When the pairs are only nearly nininal, if there nay apear to be any doubt concorning the presence of an enic contrast, two or even threc examples are given.

### 1.2.1. Phonere type i: Contoids.

In Resigaro there are 30 contoid phonemes, which contrast
in four ways as to type and fivo as to point of articulation, and also as to presence or absence of voicine and aspiration. In this description, the articulation type is taken as primary, rosulting in four sub-types of phonene type i:-

$$
\begin{aligned}
& \text { Phon }_{\text {i.i }}=\text { Plosive } \\
& \text { Phon }_{\text {i.ii }}=\text { Affricate } \\
& \text { Phon }_{\text {i.iii }}=\text { Fricative } \\
& \text { Phon }_{\text {i.iv }}=\text { Nasal }
\end{aligned}
$$

In addition to these 30 contoia phonemes of four sub-types, there are also a fricative and a flap that are not part of the syston.

### 1.2.1.1. Phonenc type i, sub-type i: Plosives.

Thore are three series of plosives -- voiced, voiceless, and voiccless aspirated -- at four pointe of articulation: labm ial ${ }^{5}$, alveolar, palatal, and volar, with a hole in tho slot

[^12]whore a voiceless aspirated palatal might be expected. There is also a glottal stop.
1.2.1.1.1. /ph/ is an aspirated voiceless bilabial plosive. Its contrastive nature may be derivod fron the following aininal and near-ninimal pairs:-
$/ \mathrm{ph} /-/ \mathrm{p} / \mathrm{phiig}$ "anratto tree" / pifgi "anteater" $/ p h /-/ b /$ phoakhostsi "fan" / bo?otahi "plate" /ph/-/f/ phoogikht "ho agitates" / foogikhe "he blows" /ph/-/th/ hada?phostsink "song" / a?nithootsihk "kitchon" $/ \mathrm{ph} /-/ \mathrm{h} / \mathrm{hada?phostsig}$ "a singer (n)" / tho?khostsif "pestle" $/ \mathrm{ph} /-/ \mathrm{m} /$ noph分 "I tread" / nowh "I bite"
1.2.1.1.2. $/ \mathrm{p} /$ is an unaspirated voiceless bilabial plosive. Its contrastive nature may be dorived fron the opposition $/ p h /-$ $/ \mathrm{p} /$ (above), and from the following minimal and noarminimal pairs:-
$/ \mathrm{p} /-/ \mathrm{b} / \mathrm{po?v}$ (you are getting yourself wet"
$/$ bo?otshi "plate"
$/ p /-/ f /$ pini "your saliva" / fince "our lake" photsigh "frog" / foogivht "he blows"
/s/-/t/ po?vu "you aro getting yourself wet"
/ pito?ve "you tale (sthe) out"
$/ p /-/ k /$ gipabne "his house" / gikadni "his bitter yucca"
whoreas $/ \bar{c} /, / \overline{c h} /$, etc. are palatals. However, the contrast is again between purely alveolar phonenes and those in which a palatal position of the tongue plays an integrol part. (cf. Bloch, 1950:91 fn 13)

pa?ta "to lock" / ka?tadkb "(a species of bird)" (Sp.: chachalaca)<br>/p/-/m/ partornagi "a watchan" / marpack norpi "Without winnine, I go"

1.2.1.1.3. /b/ is a voiced bilabial plosive with optional onset of voice before the rolease, particularly in initial position or for elphasis. When realized, this rusults in the sound $\left[{ }^{[i z}\right]$. Its contrastive nature nay be derived fror the oppositions $/ \mathrm{ph} /-/ \mathrm{b} /$ and $/ \mathrm{p} /-/ \mathrm{b} /$ (above), and fron the following wininal and nearmininal paire:-

1.2.1.1.4. /th/is an aspirated voiceless alveolar plosive. Its contrastive nature may be derived frow the opposition $/ \mathrm{ph} /-/ \mathrm{th} /$ (above), and frow the following minimal aid nearminimal pairs:-
$/$ th/-/t/ tho?kho6tsiq "pestie" / todokbaki "toad" /th/-/d/ thorkhani "Fuinani Huitotos" / do ak6ns "she is dripping wet"
/th/-/ty/ tha?giža "he sinks (in a canoe)" / tya?dilo "grandatber" $/ t h /-/ \mathrm{ch} /$ thiithy8 "(a species of monkey)" (Sp.: sumileorcito) / khaigi "naternal uncle"
/th/-/tsh/ gi?e8th6 "he breaks (the shell of peanuts)" / girnotshe "he kills, hits (s.0.) i
/th/-/čh/ thoogikh "he shakes (sthg)" / čhoogikht "he spits" /th/-/a/ gi?q tha? ja "this one (n) sinks (in a canoe)"
/ na?pu "they win"
1.2.1.1.5. /t/ is an unaspirated voiceless alveolar plosive. Its contrastive nature nay be derived fron the oppositions $/ p /-/ t /$ and $/ \mathrm{th} /-/ \mathrm{t} /$ (above), and fron the following rinimal and near-nininal pairs:~
/t/-/d/ troou "the sea" / defen "troe bark" /t/-/ty/ tadye "grandiother" / tya?dilo "grandfather" $/ t /-/ k /$ gifotapa "he is frightening (s.0.) / gifokapa "he is frightened [progressive]" $/ t /-/ t s /$ gi?ta "he fasts" / gi?tsu "he scorns" /t/-/č/ toogilch "he breaks (sthg)" / čoo?gikht "he kisses" $/ t /-/ a /$ topvi "to get, to obtain" / a8?vu "I walk"
1.2.1.1.6. /d/is a voiced alveolar plosive with optional onset of voice before release, perticularly in initial position or for eaphasis. When realized, this results in the sound [ $\left.{ }^{n} d\right]$. The contrastive nature of this phonele may be derived fron the oppositions $/ \mathrm{b} /-/ \mathrm{d} /, / \mathrm{th} /-/ \mathrm{d} /$ and $/ \mathrm{t} /-/ \mathrm{d} /$ (above), and fron the following :aninal and nearminimal pairs:-
/d/-/dy/ doovt "(a type of alnond)" / dyoonka?b? "proud" hudukg "curuhuinse ant" / dyuši "(a man's nare)"
$/ d /-/ \mathrm{g} /$ dorke "he fells a tree" / gorkht "to put a stick in the ground"
/d/-/dz/ duugiža "he stays" / dzu?giž ${ }^{\text {a }}$ "it shrinlss" $/ \mathrm{d} /-\mathrm{J} / \mathrm{d}$ /na "it (a tree) falls" / jasn "to keop vigil, to wait"
/d/-/n/ do?mit "she eats" / nosmite "I eat"
1.2.l.1.7. /ty/ is a voiceless palatalized alveolar plosive, in which the initial josition of the tongue nay be slightly retracted fron the position for $/ \mathrm{t} / \mathrm{L}$. Its contrastive nature nay be derived fron the oppositions /th/-/ty/ and /t/-/ty/ (above), and fron the following minimal and nearminimal pairs:-/ty/-/dy/ tyugis?8 "parakeet" / dyuilšuģ "wooden battons for flooring and walls" tya:diso "grandfather" / gadya?noz̈a "I get angry" /ty/-/c/ tya?dío "grandfather" / čačhi "charcoal" tyo?ty"? "pretty" / čoo?khe "to kiss"
/ty/-/ts/ tyb?otybba "butterfly" / tsb?vs "(an animal something like a dog)" (Sp.: coradreja) tya?dico "grandfatiex" / tsa?q "armadillo"
/ty/-/a/ tya?diso "grandfather" / mataiatio "silcoce" tyoeds "sradl woodpecker"/ Ëeke? tsठ "sho gets better, stronger"

These last two pairs are not completely satisfactory, and an argunent (adnittedly, a rathor inprobable one) could be brought for environamtal conditioning here. Evon without such an argumont, it wight be claimed that the lack of examples of contrast

```
in identical environments is sufficient reason to justify the
uniting of the two phones in one phonere, porhaps with sone
such rule as the following:
/TY/ (the hypothesized phoneme) is realized
a) as [ty] in the context of another alvcolar stop in the
    next syllable; and
b) as [\tilde{H}] in the context of a nasal in a contiguous syll-
    able, or a velar stop in the next syllable.
```

This rather dubious rule does not, however, account for such cases as tyo?tyf? "pretty" or tyugis?8 "parakeet" (part (a)), nor does it account for cases such as $\tilde{\text { ne? }}$ ? "to make a hole" (part (b)). It would, perhaps, be possible to redcfine the rule iii such a way that these and other casos would be taken care of, but such expansion of the rule could only be made at the cost of furthor loss of credibility.

Lest an appeal to credibility and probability is considered insufficient reason for opposing the union of thoso two phones in one phonere, the following additional reasons are given:

1. The lack of clear minimal pairs for /ty/ and/n/would appear to be nonmsignificant and nerely a reflection of the low frequency of occurrence of these two phones, and the linits to the anourt of data gathored and analyzed to date.
2. The voiced countexparts (/dy/ and /n/) of these phones
are clearly separated, and to unito tho lattor would thus destroy the two-way pattorn of oppositions (voiccless/voiced and nasal/oral), giving

where the distinctive feature between/dy/ and/ã/ is nasality, while that between those two and /TY/ is voice and, depending on the allophone, presence or absence of nasality. The set of oppositions is seen much nore clearly if the two ollophones of the proposed phonene are set up in a matrix with the phonewes /ay/ and / $n /$ :

- Nasality + Hasality

| - Voice | $[t y]$ | $[\tilde{m}]$ |
| :--- | :--- | :--- |
| + Voice | $/ d y /$ | $/ \tilde{n} /$ |

Such a matrix lends strong woight to the interpretation of [ty] and [ $\tilde{\boldsymbol{u}}]$ as two soparate phonewes, $/$ ty/ and / $\mathrm{m} /$.
3. This natrix could be expanded by taking into account the labial and alveolar positions, where the sane sot of distinctive features is clearly emic (cf. examples in the relevant sentions of this chaptor). It is here clained that [ty] and [n] denonstrate the sane emic set of contrasts in palatal posm ition.

This argument, which owes a lot to Pike's preniss "sound systons havo a tendency toward phonetic symetry" (1947:59b, 116-121), has in rucent years received added support from anothor direction, nanely the concept of narkedness in generative
phonology as developed by Chonsky and Halle (1968), which in turn stens fron Prague School phonology and the subsequent theory of binarisa prowosed by Jakobson. 6

According to Postal (1968:178), if a narked value of a feature occurs, the unramked value must also occur. Taking [+ Voice] as the marked value of plosives in Resigaro ${ }^{7}$, in which $/ \mathrm{b} / \mathrm{s} / \mathrm{d} /$, /dy/ and $/ \mathrm{g} /$ are thus marked, and $/ \mathrm{p} / \mathrm{l} / \mathrm{t} /$ and $/ k /$ are attested 8 , the presence of narked / dy/ implies an unarked /ty/.

The argument for the nasal / $/ \pi /$ is less strong, since while the presence of a narked value inplies the presence of the unarked value too, the converse is not the case. In the case of nasals, the Naturalness Condition (Postal, op.cit., pp. 80-81) would preswably require that the narked value for nasals be [- Voice]. (This also follows fron Chonsky and Halle, op.cit., p. 413 and p. 405, (XV).) In Resigaro, /m/and /a/ arc thus narked, and unmarked/i:/ and/n/ (iinplied by the presence of the marked nasals) axe indeed attested. Unnarked $/ \tilde{n} /$ is also attested, though fron this alone the presence of narked/ $/ \pi /$ cannot be inferred. However, since narked nasals do occur at othor points of articulation,

[^13]this would strengthen the arguent for the presence of a narked palatal nasal / $/$ /.
4. Finally, though the only differonce between/ty/ and $/ \tilde{H} /$ is one of the position of the velun, the oral/nasal distinction is generally accepted as being sufficiont to prevent the union of consonant phones under the criterion of phonetic sinilarity, unless the structure of the phonenic systen of the language as a whole would justify such a union. The contrary is the case conceming the structure of the phonemic syster in Resqgaro, as has been denonstrated in 1-3, above, where it is seen that nasality is a distinctive foature of the language. On this point, Lounsbury says,
"It is gererally assured that the allophones of a phonene are in sone sense equivalent stinuli. They are defined so that they share the sawe distinctive features (features that function as cuos for differential responses in tho given language) and diffor fro one another only by nondistinctive foatures (those which do not function as cues)." (1963:569)
1.2.1.1.8. /dy/ is a voiced palatalized alveolax plosive in which the initial position of the tongue nay be sifighly rotracted fron the position for $/ \mathrm{d} /$. No early onset of voice such as would produce [ $\left.{ }^{n} d y\right]$ has been observed (possibly because of the infrequency of occurrence of this phonone). The controstive nature of / dy/ may bo derived frou the oppositions $/ \mathrm{d} /-/ \mathrm{dy} /$ and $/ \mathrm{ty} / \mathrm{m} / \mathrm{dy} /$ (above), and fron the following minimal and near-ainimal pairs:-
/dy/-/ラ/ dyoonte?6? "proud" / yobdi "parrot"

|  | gadya?gizta "he gots angry" / Yaksde "field" |
| :---: | :---: |
| /dy/-/dz/ | dyulisilis " (a species of pal: tree)" (sp.: huasal) / dzu?gilkh "he shrinks (it)" |
|  | gadya?giži "he gets angry" / dzaagicht "he throws |
|  | water on the fire" |
| /dy/-/n/ | dyoonta?6? "proud" / ño?huu? tsf "it is swooth" |
|  | gadya?giža "he gets angry" / ñaarne "their thing" |

1.2.1.1.9. $/ \mathrm{kh} /$ is an aspirated voiceless velar plosive. Its contrastive nature nay be derived from the oppositions $/ \mathrm{ph} /-/ \mathrm{kh} /$ and $/ \mathrm{th} /-/ \mathrm{kh} /$ (above), and fron the followine ininal and near-aniaal pairs:-
$/ \mathrm{kh} / \mathrm{m} / \mathrm{k} /$ nokht "I malse, I do" / noke "I cook" $/ \mathrm{kh} /-/ \mathrm{g} / \mathrm{khifg} \mathrm{g}$ "naternal uncle" / giivi "flower" /kh/-/čh/ khe?akhe? "later" / čhe?ke?8 "naraca" khiigi "maternal uncle" / čhíps "its outside"
1.2.1.1.10. $\mathrm{N} /$ is an unaspirated voiceloss volar plosive. Its contrastive nature nay be derived from the oppositions $/ \mathrm{kh} /-/ \mathrm{k} /$, $/ \mathrm{p} /-/ \mathrm{k} /$ and $/ \mathrm{t} /-/ \mathrm{k} /$ (above), and fron the following ninimal and nearminimal pairs:-
$/ k /-/ g /$ kaǰigi "yucca" / gajugihi "(a man's nane)" kuuhul "walking stick" / guupižh "you neet"
/k/-/č/ koo?pl?ţ "to abhor" / čoonkhobtsi "akiss" kaǰígi "yucca" / čačhikaa "to becone charcoal"
1.2.1.1.11. /g/ is a voiced velar plosive with optional onset
of voice before the release, particularly in initial position or for emphasis. When realized, this results in the sound [ $\left.{ }^{3} \mathrm{~g}\right]$. The contrastive nature of this phonece may be derived fron the oppositions $/ \mathrm{b} /-/ \mathrm{E} /, / \mathrm{d} /-/ \mathrm{B} /, / \mathrm{kh} /-/ \mathrm{E} /$ and $/ \mathrm{k} /-/ \mathrm{E} /$ (above), and frow the following noar-mininal pair:-/g/-/J/ godobhi "Boras" / Jodoo?figh "waterfall"
1.2.1.1.12. / / / is a glottal stop. Its contrastive nature may be derived fron its opposition to the other voiceless plosive phonenes, the voiceless glottal fricative, and zero, as show in the following minimal and notwininal pairs:-/?/-/p/ gi?1 "this one ( n " " / gipilgi "his anteater" $/ 8 / \mathrm{m} / \mathrm{t} /$ do?othe "that one (f)" / dotbkh "her (species of fruit)" (Sp.: shapaja)
$/ ? /-/ k /$ do?8 "this one (f)" / dokbo "towards her" $/ ? /-/ \mathrm{h} /$ do? 6 "this one (f)" / doh6 "for her" (bonefactive) $/ ? /-/ \phi /$ tsend "ho requests" / ts $6 ? \mathrm{~m}$ "he hears"

### 1.2.1.2. Phonene type i, sub-type ii: Afiricates.

There are three series of affricates _- voiced, voiceless, and voiceless aspirated -- in two points of articulation, alveolar and palatal.
1.2.1.2.1. /tsh/ is an aspiratod voiceless alveolar affricate. Its contrastive nature nay be derived fron the opposition $/$ th/m /tsh/ (above), and fron the following mininal and nearminimal pairs:-
/tsh/-/ts/ iftahe "swoke" / iftsh "to let go, to releasc"

```
/tsh/-/dz/ tshbedokhl "she scoops out" / dzoodožfi "she takes
            a quick dip (in the water)"(i.e., "she goes
    into the water, and cones out again quickly")
/tsh/-/čh/ tshfip1 "tail" / čhiqp% "its outside"
        tshorabtshl "cotton" / čhonl "bister" (vocative)
/tsh/-/s/ tsha?thoont "glue" / sk?oohe "one (tin, pot, etc.)"
```

1.2.1.2.2. /ts/ is an unaspirated voiceless alveolar affricate. Its contrastive nature may be dexived fron tho oppositions $/ t /-/ t s /$, $/ t y /-/ t_{s} /$ and $/ t_{s h} /-/ t_{s} /$ (above), and fron the following rinimal and near-mininal pairs:$/ t s /-/ \mathrm{dz} / \mathrm{tsaagiža} \mathrm{"he} \mathrm{shouts} \mathrm{for} \mathrm{joy"} \mathrm{/} \mathrm{dzaagixhu} \mathrm{"he} \mathrm{throws}$ water on the fire"
 "he will kiss (s.0.)"
/ts/-/s/ tsa?1 "arnadillo" / sa?1 "one (bunch of fruit)"
1.2.1.2.3. /dz/ is a voiced alvoolar affricate. No early onset of voice such as would produce $\left[^{n} d z\right]$ has been observed. The contrastive nature of this phonene nay be derived fron the oppositions $/ \mathrm{d} /-/ \mathrm{dz} /, / \mathrm{dy} /-/ \mathrm{dz} /$, /tsh/-/dz/ and $/ t s /-$ $/ \mathrm{dz} /$ (above), and fron the following near-wininal pairs:$/ \mathrm{d} z /-/ \mathrm{J} /$ dzaakhota "to cause to throw water on the fire"
/ Jatsovegi "life"
dzeeje "to get out" / Jetvi "wolf"
1.2.1.2.4. / Kh/ is an aspirated voiceless palatal affricate.

Its contrastive nature may be derived fron the oppositions $/ \mathrm{th} /-/ \mathrm{ch} /$, /kh/-/ch/ and /tsh/-/ch/ (above), and frow the following aininal and nearmininal pairs:$/$ čh/-/č/ čhbogithf "he spits" / čoo?gikht "hekisses"
 noñočhi "ny neck" / nono ${ }^{\text {hini }}$ "ny beard"

1.2.1.2.5. $/ c /$ is an unasirated voiceless palatal affricate. Its contrastive nature nay be derived frow the oppositions $/ t /-/ c /, / t y /-/ c /, / k /-/ c /$ and $/ c ̌ h /-/ c /$ (above), and from the following mininal and near-minimal pairs:-

/č/-/范 coo?gikha "he kisses" / šoogikhf "he pours water" čačh "charcoal" / šaajf "to disperse"
1.2.1.2.6. /y/ is a voiced palatal affricate, in which no early onset of voice prior to release has been observod. Its contrastive nature may be derived from the oppositions $/ \mathrm{d} /-/ \mathrm{J} /$,
 followine nearmininal pairs:-

gi=ogi?khobnahi "his spade" / ižo "ghost, spirit"
1.2.1.3. Phonene type i, sub-type iii: Pricatives.

There are two series of fricatives -- voiceless and voiced --
in four points of articulation -- labial, alveolar, palatal and glottal -. with holes in the slots where voiced alveolar and voiced glottal fricatives might be expected.
1.2.1.3.1. $/ \mathrm{f} /$ is a voiceless bilabial fricative. Ite contrastive nature nay be derived fron the oppositions /ph/-/f/ and $/ \mathrm{p} /-/ \mathrm{f} /$ (above), and from the following near-minimal pairs:$/ f /-/ v /$ fio?gikht "he whistles" / viogitht "he mixes (sthg)"

$/ f /-/$ a/ fepohi "our land" / mepols "pironha"
1.2.1.3.2. /v/ is a voiced bilabial fricative. Its contrastive nature nay bo derived fron the oppositions /b/-/v/ and $/ f /-/ v /$ (above), and fron the following nearminimal paix:-
/v/-/u/ vatsbogi "turikey buzzard" / matshabku "peanut"
It has two allophones:
[ $\beta$ ], occurring before $/ \mathrm{i} /$ and $/ \theta /$
[w], occurring elsewhere
e.g. i) [ $\boldsymbol{\beta}]:-$

Before /i/: nond aavs [nons?a:pi] "ny lip"
" /e/: vedseme [pede?ma] "clothing"
ii) [w]:-

Before /a/: vatsbogi[watş?gi] "turkey buzzard"
" / /: vonens [won/ne] "our teeth"
" /u/: nodo?phaava [nods?p ${ }^{h} a$ :wiw "I work"
/v/ connot be viewed as a vocoid merely functioning as a con-
sonant, because of its major contoidal allophone [8].
1.2.1.3.3. $/ \mathrm{s} /$ is a voiceless ${ }^{9}$ alveolar fricative. Its contrastive nature nay be derived from the oppositions /tsh/m/s/ and $/ t s /-/ s /$ (above), and fron the following nearmininal pairs:-
$/ \mathrm{s} /-/ \mathrm{s} /$ soorgikhe "he sucks" / Soogitht "he pours water" saborgikhu "he sinks (sthg)" / Geakoo?gi?8 "banana"
1.2.1.3.4. /s/is a voiceless palatal fricative. Its contrastive nature nay be derived from the oppositions /ch $/$ $/ \mathrm{s} /$, $/ \mathrm{c} /-/ \mathrm{s} /$ and $/ \mathrm{s} /-/ \mathrm{s} /$ (above), and fron the following nearminimal pairs:-

> /s/-/y/ gišakoo?g1:6 "his banana" / gižakovegi "his Iife" tsa gisota "he makes hin eat neat" / ižc "ghost, spirit" $/ s /$ has a series of palatalized allophones with varying degrees of palatalization, which occur in free variation with the nonpalatalized variant. The palatalization tends to be especially pronounced before $/ \mathrm{a} /$, and to a lesser extent before /o/ and $/ \mathrm{u} /$, in that order. Weak palatalization of $/ \bar{s} /$ is occasionally heard before /e/, but polatalization is rarely heard before $/ i /$,
 the strong palatalization is probably due to the influence of the palatal plosive in the noxt syllable. Exanples of palatal-

[^14]ized allophones of /s/follow, the presentation conmence with the cases of strongest palatalization and progrossine through to the cases of weakest palatalization:Before /a/: /Eakoo?gi?1/ [ $\int^{j}$ aks:?gi? 1$]$ "a bunch of banaras" " /o/: /Ěh $6 /\left[\int 5 h 6\right]$ "turkey"
 ( " /e/: /šed8/ [ 5 E?d 6$]$ "nother-in-law") ( $"$ /i/: /siince/ [fene:] "dawn"

But, with/ty/ in the next syllable:

1.2.1.3.5. /y/ is a voiced palatal fricative in which the degree of friction varios freely fron very pronounced to very light. In a frequently-occurring allophone, friction is totally absent, and the phonene is realized as [j]. ${ }^{10}$ The informant is completely unaware of this fluctuation, and readily produces and accepts all allophones in all contexts, even when the sane norpheme is pronounced several times in succession, sonetines with the sane allophone and sometimes with a different one.

The contrastive nature of this phonene nay be derived frow the oppositions $/ \bar{y} /-/ \bar{z} /$ and $/ \bar{s} /-/ \bar{z} /$ (above).

[^15]/z/ cannet bo viowed as a vocoid nercly functioning as a consonont, because of its frequently-occurring allophones with friction.
1.2.1.3.6. $/ \mathrm{h} /$ is a voicoless ${ }^{11}$ glottal fricative. Its contrastive nature nay be derived from the opposition $/ 7 /-/ \mathrm{h} /$ (above), and frol, its opposition to zoro in the following ajninal pair:-
$/ h /-/ \varnothing /$ haagižそ "it sinks" / aagiža "he is surprised"
1.2.1.4. Phonene type i, sub-type iv: Masals.

There arc two series of nasals -- voiceless and voiced -in three points of articulation: labial, alveolar, and palatal.
1.2.1.4.1. /m/ is a voiceless bilabial nasal with slight final onset of voice. Its contrastive nature ay be derived frow the oppositions $/ \mathrm{ph} /-/ \mathrm{m} / \mathrm{p} / \mathrm{p} /-/ \mathrm{m} /$ and $/ \mathrm{f} /-/ \mathrm{m} /$ (above), and fros the following minial and nearminial pairs:-/m/-/a/ now "I bite" / nowi "I sleep" $/ \mathrm{m} /-/ \mathrm{m} /$ nota "to try (tasto) (sthg) " / nopa "I answer" / nodappa "I sing"

1.2.1.4.2. /i/ is a voiced tilabial nasal. Its contrastive nature way be derived frow the oppositions $/ \mathrm{b} / \mathrm{m} / \mathrm{m} / \mathrm{h} / \mathrm{v} / \mathrm{m} / \mathrm{m} /$ and $/ E /-/ /$ (above), and fro: the following rininal and near-
$\overline{11}$ cf. footnote 9 to 1.2.1.3.3., above.
minimel pairs:-
$/ \mathrm{m} /-/ \mathrm{n} /$ makpa "bee" / nabpa "spotted cavy"
$/ \mathrm{m} /-/ \mathrm{n} /$ maa?me "cassava bread" / ñaa?ñe "their thing"
1.2.1.4.3. $/ \mathrm{m} /$ is a voiceless alveolar nasal with slight final onset of voice. Its contrastive nature may be derived from the oppositions $/ \mathrm{th} /-/ \mathrm{a} / \mathrm{h} / \mathrm{t} /-\mathrm{m} / \mathrm{m}$ and $/ \mathrm{m} /-/ \mathrm{m} /$ (above), and from the following minimal and near-minimal pairs:$/ \mathrm{m} /-\mathrm{n} / \mathrm{n}$ ? vu "I walk" / no?vu "I an wet"

1.2.1.4.4. $/ \mathrm{n} /$ is a voiced alveolar nasal. Its contrastive nature may be derived from the oppositions $/ \mathrm{d} /-/ \mathrm{n} / \mathrm{h} / \mathrm{m} /-\mathrm{n} / \mathrm{n}$ and $/ n /-/ n /$ (above), and from the following near-minimal pairs:$/ n /-/ \tilde{n} /$ nil? 8 "married wonan" / niii?geǵa "nightingale" nonojans "my beard" / noñočhi "my neck"
1.2.1.4.5. / $/$ / is a voiceless palatal nasal with slight final onset of voice. Its contrastive nature may be derived fron the oppositions /ty/-/a/ (cf. discussion under I.2.1.1.7., above), $/ m /-/ \pi /$ and $/ n /-/ \bar{n} /$ (above), and from the following near-minimal pair:-
$/ \tilde{m} /-/ \tilde{n} /$ mabintala "silence" / maana?o "iguanal"
1.2.1.4.5. /ñ/ is a voiced palatal nasel. Its contrastive nature may be derived from the oppositions $/ \mathrm{dy} / \mathrm{/} / \mathrm{n} /, / \mathrm{m} /-/ \mathrm{n} /$, $/ n /-/ n /$ and $/ \tilde{n} /-/ \tilde{n} /$ (above).
1.2.1.5. Outside the System. ${ }^{12}$
1.2.1.5.1. $/ \mathrm{r} /$ is a voiced alveolar flap which has been attested in only three forms:-
i) a person's nane: /mi?irehi/
ii) the onomatopoeic initation of a bird song: /vara?vara?/
iii) the modification of a Sparish word not yet fully incorporated into the language: /bibriaa/ from the Spanish Biblia, "Bible".
1.2.1.5.2. $/ x /$ is a voiceless velar fricative, contrasting with the voiceless glottal fricative $/ \mathrm{h} /$, which occurs throughout the language. $/ x /$ occurs only in the morpheme /xuu-/, constituent in the noun/xuvkhoftsi/ "Sundey" and the verb /xuuja/ "to rest" -- both of these words apparently coined recently to handle terms introduced by missionaries. 13

### 1.2.2. Phoneme type ii: Vocoids.

There are five vocoid phonemes in Reslgaro, distinguished by

[^16]three degrees of opening -- high, mid, and low -- and three areas of articulation -- front, central, and back. Three vocoids are pronounced with spread lips, one with rounded lips, and one with neutral lips. The vocoids are described with reference to the system of cardinal vowels developed and recorded by Daniel Jones (cf. 1960:31-39 and Cardinal Vowels (n.d.).), and adopted by the International Phonetic lissociation (cf. 1949:4-7). The vocoids are not sufficiently numerous or varied in form to merit tho establishment of types of vocoid.
1.2.2.1. /i/ is a high front vocoid pronounced with sproad lips. Its contrastive nature may be derived from the following minimal and near-miniaal pairs:-
/i/-/e/ pilgi ${ }^{14}$ "anteater" / peegi "yucca flour" /i/-/u/ náap1 "underneath" / naapt "spotted cavy" /i/ has two allophones: [i], a slightly lowered and retracted close front spread vocoid similar to Cardinal Vowel I;
[6], a sonewhat raised and retracted half-close front spread vocoid between Cardinal Vowel 2 and Cardinal Vowel 1.
[i] occurs word-finally, and [6] occurs elsewhere. e.g. /pismi/ [pc?mi] "hummingbird"
/adoviimi/ [adəvi?mi] "birds"
2.2.2.2. /e/ is a mid front vocoid pronounced with spread lips.

[^17]Its contrastive nature may be derived from the opposition $/ i /-/ e /$ (above), and from the following ninimal pairs:$/ \mathrm{e} / \mathrm{/a}$ / meegi "cassaval" / maagi "(a species of fruit)" $/ e /-/ 0 /$ none "my tooth" / non8 "my mouth" /e/ has two major allophonos: [e], a slightly lowerod half. close front spread vocoid similar to Cardinal Vowel 2;
[ $\varepsilon$ ], which is lower (close

## to Cardinal Vowel 3).

[e] occurs word-finally, and [E] occurs elsewhere. e.g. /hefils/ [hefir] "white" /vonene/ [wonent] "our teeth"
1.2.2.3. $/ a /$ is a low certral vocoid pronounced with neutral lips, with allophones ranging freely from slightly raised open to half-open position (I.F. $A$. [h]). The contrastive nature of this phoneme may be derived from the opposition $/ e /-/ a /$ (above), and from the following minimal pair:$/ a /-/ 0 /$ tha?gižt "it sinks" / tho?giž "he arrives"
1.2.2.4. /o/ is a mid back vocoid pronounced with roundod lips. Its contrastive nature may be derived from the oppositions $/ \mathrm{e} /-/ \mathrm{/} /$ and $/ \mathrm{a} /-/ 0 /$ (above), and from the following minimal pair:-
/o/-/u/ nifis 6 "no" / nisk" "fruit"
/o/ has two major allophones: [0], a slightly raised halfopen back rounded vocoid similar to Cardinal Vowel 6;
[0], a half-close back rounded
vocoid similar to Cardinal Vowel 7.
[o] occurs word-finally, and [0] occurs elsewhere.
e.g. /ona?k6/ [ona?kb] "snaire"
1.2.2.5. /u/ is a high back vocoid pronounced with spread lips. Its contrastive nature may be derived from the oppositions $/ i /-/ u /$ and $/ 0 /-/ u /$ (above). /u/ has two major allo-phones:-
[ui], a slightly lowered and fronted close back spread vocoid similar to Cardinal Vowel 16;
[i], a slightly lowered version of Cardinal Vowel 17. [ì] occurs when the preceding syllable contains an /i/. [ $\quad$ ] ] occurs elsewhere.

```
e.g. /sii?&/ [sc:?@] "others"
    /soookht/ [so:?kuru "to suck"
```

1.2.2.6. These five short vocoids are matched by another five vocoids with identical tongue positions and lip shapes that are approxinately twice as long as those described above (that is, are two moras ${ }^{15}$ long). These long vocoids are interpreted as a sequence of two identical short vocoids, as they parallel sequences of unlike (short) vocoids found in the language. ${ }^{16}$

15 To hande differences of vocoid length, it is useful to adopt
the term mora, which is defined as "usually comprising a short
vowel or half a long vowel" (K.L. Pike, 1947:144a). Vocoids (and
syllablos) can then be described as being one, two, or more, moras
long (cf. I. 2.2 ., below, and Bearth 197l:45), and the same term
proves useful in the description of tone (cf. I.l.2.3., below).
16 cf. Bearth: "Les noyaux syllabiques composes de deux voyelles

The interpretation of long vocoids as sequences of two short vocojds is also supported by the tone patteming of the language, as only high and low level tones occur on short (or single) vocoids, while gliding tones nay occur on sequences of two unlike vocoids and on long vocoids. Thus, to interpret long vocoids as sequences of two short vocoids simplifies the analysis and description of tones, and makos this more consistent. 17

In consequence of this interprotation, the eticelly long vocoids are handled together with other vocoid sequences undor Syllable structure, in I.2.2., below.
1.2.2.7. The above vocoids occasionally have nasalized allophones when occurring in the context of a nasal contoid.
 This nasality is not emic, and the infommont is unable to distinguish any differences when moxphomes are repeatedly pronounced, sometimes with nasalized vocoids, and sometimes with non-nasalized vocoids. Moreover, his pronunciation of vocoids

[^18]in the context of nasal contoids fluctuates freely between nasalized and non-nasalized, even when repeating the same norpheme several times.

### 1.2.3. Phoneme type iii: Suprasermentals.

There are two contrastive pitch levels in Resigaro, which are referred to as high and low tone. The emic nature of this opposition may be derived from the following mininal pairs:-

```
gi?1 "this one (m)" / gl?1 "meat, flesh"
```

non6 "my mouth" / n8n8 "I spear (a fish)"

> Glides only occur on sequences of two vocoids, and are handled as sequences of high + low or low + high tone (of. 1.3.3., below), and in consequence the system is one of register, not contour, tones. 18

### 1.3. Distribution.

Phonemes are distributed in the syllable. Classes of phoneme are set up on the basis of this distribution.

```
18cf. Pike, 1948:59: "In general, a pure register system is
ono in which onemora tonomes are level; a pure contour system
contains one-mora gliding tonemos."
i.e., the unit of pitch placement is one mora long, as in Bearth
(1971:52): "La definition de la more implique qu'un moneme a
deux voyelles comporte deux points do substitutions tonales."
    Thiesen and Thiesen (personal communication, and MS Phonemes
of Bora, Walton and Walton (1967), and Leach (1969) all ycopt
a similar solution in handling Bora, (Bora) Muinane, and Ocaina,
respectively.
```

1.3.1. Class 1, "Consonants".

This consists of all type i phonemes (i.c., all contoids), which are distributed in onset and coda of the syllable. The nembers of this distribution class are called "Consonants". Class 1 is sub-divided into two sub-classes. Sub-class 1.

This consists of all consonants, which may occur initially in the sylleble (in the onsct).
e.g. fa "wo" (lst p. pl. (incl))
ke "hand"

$$
\text { gi. } \underline{21}^{19} \text { "this one (II)" }
$$

## Sub-class 2.

This consists of $/ ? /$, which, in adaition to its possibility of ocurrence initially in the syllable, may also occur finally in the sylable (in the coda).
e.g. mi.po.kt? "thus, so"
1.3.2. Class 2, "Vowels".

This consists of all type ii phonemes (i.e., all vocoids), which are distributed in the nucleus of the syllable. The mombers of this distribution class are called "Vowels". Q.E. a. du "to fly"
1.3.3. Class 3, "Tones".

This consists of the type iii phonemes (i.e., the two supraseg-

$$
\begin{aligned}
& 19_{\text {The }} \text { full-stop indicates syllable division (cf. 2.2.3.1. } \\
& \text { below). }
\end{aligned}
$$

nental phonemes). The members of this distribution class are called "Iones". They occur on the vowel or vowels in the nucleus of the syllable. One tone phoneme occurs on each vowel, if two vowels are present in a syllable. These may be identical (both high or both low), or one may be high and the other low, resulting in a phonetically rising or falling glide. Such glides may not occur on a single-mora syllable (i.e., on one (short) vowel), and hence are interproted as high + low or low + high (cf. 1.2.3., above). The following examples illustrate some possible tone sequences:foogikh H "he makes a fire" / f5ogikh "he blows" peegi "sparrow-hawk" / peegi "starch" nagi "friend (m)" / natgi "anger"

The syllable level is set up as a level of the phonological hierarchy above the phonene and below the phonological word. The syllable may be described as
"the smailest unit of recurrent phonemic sequences" (Haugen, 1956:126).

### 2.1. Contrast.

In Resfgaro, the syllable has the following contrastiveidentificational features:-
i) It has an obligatory nucleus consisting of one or two members of phonene class 2 (vowels).
ii) It has an optional onset and coda, each consisting of one member of phonene class 1 (consonants).
2.2. Variation.

Syll $= \pm$ Onset: $C_{1.1}+N u c:(V \pm V) \pm$ Coda:Ci. $2^{1}$
This yields eight syllable types. To facilitate the description and comparison of these types, it is convenient to considor the two different vocalic nuclei possible as basic, and to describe the consonantal onset and coda as modifications of these basic types.
i.e. $S_{y l l}= \pm$ Onset: $C_{1.1}+$ Muc: $V \pm$ Coda: $C_{1.2}$ $S_{y l 1}{ }_{i 1}= \pm$ Onset: $C_{1.1}+N u c: V_{1} V_{2}^{2} \pm$ Coda: $C_{1.2}$

[^19]2.2.1. Syllable type i: $\pm$ Onset: $\mathrm{C}_{1.1}+\mathbb{N u c}: \mathrm{V} \pm$ Coda: $\mathrm{C}_{1.2}$

There are four sub-types of syllable type i:-

$$
\begin{aligned}
& \text { Syll }_{i . i}=+ \text { Inuc: } V \\
& \text { Syll }_{\text {i.ii }}=\text { + Onset: } C \text { +Nuc: } V \\
& \text { Syll }_{\text {i.iii }}=\text { + Nuc: } V \text { + Coda: C } \\
& \text { Syll }_{\text {i.iv }}=\text { + Onset: C + Nuc: } V \text { + Coda: C }
\end{aligned}
$$

Examples of the sub-types of syllable type $i$ are to be found in table 2.1., which follows the comants on each of the subtypes. In the discussion that follows, syllables are referred to in torns cf their fillexs only, for ease of comparison with the expmples given.

### 2.2.1.1. Syllable type $i$, sub-type i:/V/。

All vowels may occur in this sub-type.

### 2.2.1.2. Syllable type i, sub-type ii: /CV/.

All vowels may occur in this sub-type. All consonants may occur in this sub-type, but /?/ and/z/ may not occur when the syllable is word-initial.

### 2.2.7.3. Syllable type i, sub-type iii: /VC/.

All vowels except/u/ are attested in this sub-type. Only /?/ may close syllables in Resigaro.
2.2.1.4. Exinape type i, sub-type iv: 'CVC/.

All vowels may occur in this sub-type. As stated above, only /?/ may close the syllable. The non-occurrence of a few con-
sonants before some vowels would not appear to be significant (cf. discussion of this in notes on Table 2.1., below).

## Exariples of Syllable Type $i$, Sub-types i-iv.

|  | $\begin{gathered} \text { Sub-type i: } \\ / \mathrm{V} / \end{gathered}$ | $\begin{aligned} & \text { Sub-type ii: } \\ & \text { /CV/ } \end{aligned}$ | Sub-type iii: NC/ | $\begin{gathered} \text { Sub-type iv: } \\ \text { /CVC/ } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| i |  | "登eat" ${ }^{2}$ | $\frac{\frac{1}{?}+\mathrm{pi}}{\text { to }}$ | "your ${ }_{\text {giol }}^{\text {pi }}$ |
| e | $\stackrel{\text { "rainbow" }}{\stackrel{\text { ngu }}{ }}$ | $\text { "he } \frac{\text { hend" }}{}$ |  | "yot phr navel" |
| Q | $\begin{gathered} \text { a.p6 } \\ \text { "to be } \\ \text { awake" } \end{gathered}$ | $\frac{\text { za. da.te }}{\text { Then" }}$ | $\frac{a ? \cdot \operatorname{mi} \cdot t \mathbb{C}}{\text { tto eat" }}$ | $\begin{aligned} & \frac{\text { da? }}{\text { "beside }} \\ & \text { hin" } \end{aligned}$ |
| - | $\begin{aligned} & \text { o cochí } \\ & \text { "(apecies } \\ & \text { of plant)" } \\ & \text { (Sp. daledale } \end{aligned}$ | $\text { no.no }_{\text {no }}^{\text {no }}$ | $\begin{aligned} & \text { o? do.st } \\ & \text { with poison" } \\ & \text { with pois } \end{aligned}$ | go? <br> "to put a stick in the ground" |
| u | "Eni | $\underset{\text { phour sal- }}{\text { pyon }}$ ival | --- | $\begin{aligned} & \text { ka.šb.va?.- } \\ & \text { n@? } \\ & \text { "pretty" } \end{aligned}$ |

Table No. 2.1.

1. Syllables being exemplified are underlined.
2. The table gives an exarple of each sub-type for each of the five vowels (excopt/u/ in sub-type iii, which is not attested). In the case of sub-types ii and iv, the choice of initial consonant in the examples is non-significant. The vowels aro given this priority over the consonants since they fill the nucleus of the syllable, while the consonants fill the margins (onset and coda). However, it is appropriate to signal certain non-occurrences of sequences of consonants and
vowels. In some cases, such non-occurrences may be significant, while in others this would appear not to be the case.

A summary of the possible sequences of consonant plus vowel may be seen in Table 2.2. This is based on an exanination of all syllables beginning with CV-, regardless of whether this is followed by a further vowel and/or a consonant.

|  | i | e | $a$ | $\bigcirc$ | u |  | i | e | a | $\bigcirc$ | u |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ph | + | + | $+$ | $+$ | + | čh | + | $+$ | $+$ | $+$ | - |
| p | + | + | + | + | - | č | - | - | $+$ | $+$ | - |
| b | - | + | + | $+$ | + | j | $+$ | + | + | + | + |
| th | + | - | $+$ | + | - | f | + | + | + | $+$ | + |
| $t$ | + | $+$ | $+$ | $+$ | + | v | + | + | + | $+$ | - |
| d | - | + | $+$ | $+$ | $+$ | s | $+$ | - | $+$ | $+$ | + |
| ty | - | - | $+$ | + | + | ${ }_{3}$ | + | + | $+$ | + | + |
| dy | - | - | $+$ | + | + | 去 | - | - | + | $+$ | + |
| kh | $+$ | + | $+$ | $+$ | $+$ | h | $+$ | $+$ | 4 | + | + |
| k | $+$ | + | + | $+$ | + | m | - | + | $+$ | + | - |
| g | $+$ | - | + | + | + | $\underline{1}$ | $+$ | + | $+$ | + | + |
| ? | $+$ | $+$ | + | + | + | $\underline{n}$ | $+$ | + | $+$ | $+$ | + |
| tsh | $+$ | + | + | + | + | n | $+$ | + | + | + | + |
| ts | $+$ | $+$ | $+$ | + | $+$ | \% | - | + | 4 | - | - |
| $\mathrm{d} z$ | - | + | $+$ | $+$ | $+$ | ñ | + | $+$ | $+$ | $+$ | $+$ |

Table No. 2.2. Possible sequences of consonant and vowel in syllables with initial CV-

It will be noted that 15 of the 30 consonents occur before all vowels, and a further three before all vowels except/u/. This non-occurrence appears to be non-significant,
and merely a reflection on the lower frequency of occurrence of the latter phoneme.

Likewise, the non-occurrence of $/ \mathrm{b} / \mathrm{h} / \mathrm{d} / \mathrm{m} / \mathrm{dz} /$ and $/ \mathrm{m} /$ before $/ i /$, and of $/ \mathrm{th} / \mathrm{l} / \mathrm{g} /$ and $/ \mathrm{s} /$ before /e/, appear unsystematic and non-significant, in the Jight of the occurrence of other members of the sane sets (voiced plosives, voiced affricates, etc.) in these positions, and thus these sequences might be expected if the corpus were expanded.
$/ \tilde{m} /$ is the only consonant not attested beforo $/ 0 /$, which is again clearly non-significant. This phonene is not attested before $/ \mathrm{i} /$, eithor, and it might be questined whether this is significant, though the occurrence of $/ \tilde{n} /$ before/i/ would appear to undermine such a suggestion.
$/ \mathrm{t} y /$ / /dy/, /č/ and /z/ do not occur before/i/ or /e/, and this would appear to be the only potentially-significant co-occurrence restriction in CV sequences in Resigaro. It should be noted, however, that palatal/ch $/$, $/ \mathrm{J} /$ and $/ \mathrm{s} /$ all occur before /i/ and /e/ (as does /ñ/, while/n/ is only attested before $/ \mathrm{e} /$, to date). Thus undernines the possibility that the non-occurrence of sequences with /č/ and /z/might be significant, particularly since both phonemes are of quito infrequent occurrence.

But the non-occurrence of /ty/ and/dy/before/i/ and /e/ nay be sigmificant. These two phonemes appear to be al-
most marginal to the phonomic systen of Resigaro, and aro an incomplete set within the plosive series, lacking an asm pirated nember. They are, furthermore, of very infrequent occurrence.
2.2.2. Syllable type ii: +Onset: $C_{1.1}+N u c: V_{1} V_{2} \pm$ Coda: $C_{1.2}$

There are four sub-types of syllablo type ii:-
$S_{S y l l_{\text {ii.i }}}=+$ Nuc: $V_{I} V_{2}$
Syll ii.ii $=+$ onset: $C$ +Nuc: $V_{1} V_{2}$
Syll ${ }_{\text {ii. iii. }}=+$ Nuc: $V_{1} V_{2}+$ Coda: $C$
Syll ${ }_{\text {ij.iv }}=+$ Onset: $C+$ Nuc: $V_{I} V_{2}+$ Coda: $C$
Examples of the sub-types of syllablo type ii are to be found in Tables 2.4. and 2.5., which follow the comments on each of the sub-types. In the discussion that follows, syllables are referred to in terms of their fillers only, for ease of comparison with the examples given.

First, it is appropriate to look at the possible sequences of vowels in syllable type ii.

### 2.2.2.0. Vowel Soquences in Syllable type ii.

There are the following restrictions on the vowels which may co-occur within one syllable in Resigaro:-

1. For any vowel in $V_{1}$ position, the same vowel may occur in $V_{2}$ position (i.e., an etic long vocoid is realized). The vast majority of vowel sequences are of this nature.
2. For each of the vowels occurring in $V_{1}$ position, the follow-
ing vowels are attested in $V_{2}$ position (in addition to sequences of the sane vowel, already referred to above):$/ i /+/ o /, / u / ; / e /+/ i /, / u / ; / a /+/ i /, / e /, / u / ; / 0 /$ $+/ i /, / e / ; / u /+/ i /, / a / b$

This is a total of 11 sequences of different vowels within the same syllable, i.e., eloven differont diphthongs. $\Lambda$ further two sequences of different vowels are attostod (/i/ $+/ e /$ and $/ 0 /+/ u /)$, although these do not occur in the sane syllable (cf. section 2.2.3., below). If we add to these 13 possibilities the five sequences of the sanc vowol reforred to in (I), above, we have a total of 18 vowel sequences in Resigaro, of which 16 may occur in the sane syllable. These conoccurrences are show in the following natrix, in which bracketed values refer to the two soquencos which are not attested in the sane syllable.

| $+V_{2}$ | $i$ | $e$ | $a$ | 0 | $u$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $i$ | + | $(+)$ | - | + | + |
| $e$ | + | + | - | - | + |
| $a$ | + | + | + | - | + |
| 0 | + | + | - | + | $(+)$ |
| $u$ | + | - | + | - | + |

Table No. 2.3. Attested Vowel Sequences.

This table shows that three vowels ( $/ \mathrm{i} / \mathrm{F} / \mathrm{e} /$ and $/ 0 /$ ) do not occur before $/ a /$, and three ( $/ e /, / a /$ and $/ u /$ ) do not occur before / / Further, /u/ does not occur before /e/. There
would appear to be no significant pattern in these non-occurrances, except that high vowels /i/, /u/ are not followed by mid vowels $/ e /$, / $/$ /except for $/ i o /$, and mid vowels are not followed by the low vowel $/ \mathrm{a} / .^{3}$
2.2.2.1. Syllable type ii, sub-type i: $/ \mathrm{V}_{1} \mathrm{~V}_{2} /$.
a) When $V_{1}$ is the same as $V_{2}$ : all five vowel sequences described in paragraph (I) of the preceding section nay occur in this sub-type.
b) When $V_{1}$ is not the sane as $V_{2}$ : the only diphthong attested in this sub-type is /ai/, which occurs in two words (cf. Table 2.5., below).
2.2.2.2. Syllable type ii, sub-type ii: $/ \mathrm{CV}_{1} V_{2} /$.
a) When $V_{1}$ is the sane as $V_{2}$ : all five vowel sequences described in paragraph (1), above, may occur in this sub-type. Also, all consonants are attested for initial position, except $/ \mathrm{b} /$, / $/$ / and $/ \tilde{\mathrm{n}} /$ (cf. discussion of Table 2.2., above).
b) When $V_{1}$ is not the same as $V_{2}$ : of the eloven diphthongs attested, nine occur in this sub-type. Since there are so few words containing diphthongs in Resigaro, there are consequently few consonants attested for initial position before

```
3 AII other two-place conbinations of high, mid and low vowels
do occur (with a few exceptions):-
high + high: ii, iu, ui, uu
high + low: ua (but *ia)
mid + mid: ee, \(o\), oe (but *eo)
mid + high: ei, eu, oi (but ou not in same syllable)
low + low: aa
low + mid: ae (but * zo)
low + high: ai, au
```

then, though examples are to be found of plosives, affricates, fricatives and nasals, and of voiced, voiceless, and voiceless aspirated consonants, though not all the combinatory possibilities are attestod.
2.2.2.3. Syllable type ii, sub-type iii: $/ N_{1} V_{2} C /$.
a) When $V_{1}$ is the same as $V_{2}$ : vowel sequences /ii/, /ee/ and /aa/ occur in this sub-type. Only /?/ occurs syllable-finally in Resigaro, as stated above.
b) When $V_{1}$ is not the sane as $V_{2}$ : no diphthongs are attested in this sub-type in Resigaro. This denonstrates the relative infrequency of occurrence of this syllable-type, and the relative infrequency of occurrence of diphthongs.
2.2.2.4. Syllable type ii, sub-type iv: $/ \mathrm{CV}_{1} \mathrm{~V}_{2} \mathrm{C} /$.
a) When $V_{1}$ is the sane as $V_{2}$ : all five vowel sequences may occur in this sub-type. The following eleven consonants are not attested for the Onset position: $/ \mathrm{b} / \mathrm{h} / \mathrm{dy} /$, $/ \mathrm{kh} / \mathrm{l} / \mathrm{s} / \mathrm{l} / \mathrm{th} /$, $/ \mathrm{dz} /$, /čh/, /y/, /f/, /ž/ and/m/. This apparently haphazard selection of consonants represents no systematic pattern, and would appear to be nerely a reflection on the lower frequency of occurrence of syllable type ii, sub-type iv, as compared with syllable type ii, sub-type ii. /b/ is the only consonant which occurs in neither syllable type, but then it is a consonant of very infrequent occurrence. As stated above, Coda position can be filled only by /?/.
b) When $V_{1}$ is not the sane as $V_{2}$ : of the eleven diphthongs
attestcd in ResIgaro, five occur in this sub-type. These include the two (/ae/ and /oe/) which do not occur in syllable type ii, sub-type ii. Again, vory few consonants are attested in the Onset position, owing to the combination of the infrequency of occurrence of this syllablo type and the infrequent occurrence of diphthongs. Up to the present tine, only $/ \mathrm{k} /, / \mathrm{f} / \mathrm{s} / \mathrm{s} /$ and $/ \mathrm{m} /$ have been observed in this position before diphthongs. As always, only/?/ can occur in the Coda position.

Examples of Syllable type ii, Sub-types i-iy.

| Subtypes <br> Nucleus | $\begin{gathered} \text { Sub-type i: } \\ \text { /WV/ } \end{gathered}$ | $\begin{gathered} \text { Sub-type ii: } \\ / \text { CVV/ } \end{gathered}$ | Sub-type iii: NVC/ | Sub-type iv: /CVVC/ |
| :---: | :---: | :---: | :---: | :---: |
| ii |  | $\frac{\text { ypi }}{\text { "husiband" }}$ | $\frac{\text { iji? }}{\text { "possession" }}$ | $\begin{gathered} \text { pii?.sa.k8 } \\ \text { "your intest- } \\ \text { ines" } \end{gathered}$ |
| ee | $\frac{\text { et.no }}{\text { "thunder" }}$ | $\frac{\text { yese }}{\text { lequ }} \text { "wolf" }$ | 皆? ${ }^{\text {to }}$ fish with hook \& line" | "pee? phi.gin hook" |
| aa | $\begin{aligned} & \text { atame } \\ & \text { nother } \end{aligned}$ | $\frac{\text { kas. }}{\text { "roof }}$ | $\frac{\text { af? pe }}{\text { "tather" }}$ | haa?.ni |
| 00 | $\frac{00}{\text { "already" }}$ | $\frac{\text { p6o.tsi.gG }}{\text { "frog" }}$ | --mor | $\begin{aligned} & \text { ha? moo? } \\ & \text { "to be hot" } \end{aligned}$ |
| uu | $\begin{aligned} & \text { ss.un.? } 84 \\ & \text { "one (rope)" } \end{aligned}$ | šuu.kha <br> "to prevent" | ------ | $\begin{gathered} \text { a.ne.pfit? } \\ \text { "many" } \end{gathered}$ |

$\frac{\text { Table No. 2.4. Syllables Containing Sequences }}{\text { of Like Vowels. }}$
[See page 85 for syllables containing diphthongs.]

[^20]

Table No. 2.5. Syllables Containine Diphthongs.

1. No diphthongs are attested in this sub-type. The colum
is retained in the table to emphasize this fact.
2. The only othor diphthong in this sub-type is ai.tsa.bof,
an introducer for reported speech. 3. Sp.: montete

### 2.2.3. Rules of Syllable Division.

The exariple sa.un.? "one (rope)" in Table 2.4. raises the question as to how the first syllable division was arrived at. The following rules perrit an unequivocal determination of the position of syllable boundaries in otherwise doubtful cases.

### 2.2.3.1. Rule 1.

This rule recognizes the basic syllable pattern of Resigaro as being CV. Closed syllables and syllables consisting only of a vowel or vowels are less frequent in a dictionary count. Only /?/ can close a syllable, but it can also occur syllableinitially. Thus, given a sequence

CV?V
(where, in this case, $C=$ any consonant other than $/ ? /$ ), the syllable boundary occurs before the /?/:

$$
C V . ? V,
$$

just as would be the case with a non-suspicious sequence CVCV
(again, whete $C=$ any consonant other than /?/). In other words, /?/ is only assigned to syllable-final position i. it is followed by zero (a word-boundary), or by another consonant.

In consequence, a closed syllable cannot be followed within the sane word by a syllable with an initial vowel, since in such a case the syllable boundary occurs before the /?/, which is assigned to the following syllable.
i.e. $( \pm \mathrm{C}+\mathrm{V}+\mathrm{V}+?) \quad+(+\mathrm{V} \pm \mathrm{V}+\mathrm{C}) \quad \Rightarrow \quad \pm \mathrm{C}+\mathrm{V}+\mathrm{V} \cdot+?+\mathrm{V}+\mathrm{V} \pm \mathrm{C}$

The placing of a syllable boundary in a sequence

$$
\pm \mathrm{C}+\mathrm{V}+\mathrm{V}+\mathrm{V} \pm \mathrm{C}
$$

is dependent on the following rulcs:-

### 2.2.3.2. Rule 2.

In any sequence of two vowels, if the vowels are identical, they belong to the saine syllable.
e.g. naa.pi "night"
nda.pi "underneath"
nas.pa "spotted cavy"

### 2.2.3.3. Rule 3.

In any sequence of two vowels, if the vowels are not identical, the sequence reprecents onc syllable (a diphthong) or two syllables, in accordanco with the following rulos (which aro based on perceived acoustic inpressions) :

3a. If both vowels have the same tone, or the sequence is of a high followed by a fow, they repesont one otic (and onic) syllable.

```
e.g. ñoi.khá "to rub, polish"
```

boo. 㐤 "anklebone" aa.tghfu "chili"
32. If the tone of the first vowel is low and that of the
second vowel is high, the sequence represents two otic (and

```
eric) syllables.
e.g. tr.tyo.I "island"
    paa.ga.& "spider"
    ve.gi.a "our eye"5
```

Note also the sequences $/ i /+/ 0 /$ and $/ 0 /+/ u /$, which have
only been attested as merbers of two contiguous syllables:-
he.?o.pi.e? "before, previous"
no.va.fo. $\underline{G}$ "ny heart"

It is important to note that rule 3 is based on an observation of the etic syllablos in the languago, and doos not result in the establishment of an artificial emic syllable of different extension than the observed etic syllable. (i.e., the "rules" are descriptive of what does happen, not prescriptive (with a vicw to establishing a certain interpretation).) ${ }^{6}$

Words of the type exemplified under Rule 2 and Fule 3a, above, contain vowel clustors. i.e., a vowel cluster is defined as a sequence of vowels occurring in the sane syllablc. Words

[^21]of the type exomplified under Rule $3 b$, above, contain vowel sequences which are not clusters, sinco thoy occur in different syllables.

### 2.2.3.4. Rule 4.

In any sequence of three vowels, two contiguous vowels must be identical and the remaining vowel must be different.? The syllable boundary occurs between the two like vowels and the different vowel.
e.g. aan. 1 "yes"

```
    hi.po.mg*uu.?b "rope, string"
```


### 2.2.3.5. Tule 5.

This rule handes an exception to Fule 4, namely
hiliso "this (horn)"
This Rule has two parts:
5a. No syllable nucleus is longer than two vowels long. (This restriction is based on observed phonetic form, not on theoretical considerations.)

5b. A sequence of two like vowels with the same tone has priority over a sequence of two like vowels with different tone, in determining syllable boundaries. (The coment in the previous paragraph applies equally here, too.)

Thus, this word has three (emic and etic) syllables:-

7Two exceptions to this rule are discussed under Rule 5.

$$
\text { hi. } 19 \cdot ? 0^{8}
$$

### 2.3. Distribution.

The syllable is distributed in the phonological word. This is not analyzed in the present description, and in consequence, details of distribution cannot be given. However, possible sequences of two syllables in phonological words of two or nore syllables are described.

### 2.3.1. Permitted Sequences of Syllables.

Given eight types of syllable, any sequence of two syllables theoretically yields 64 possible combinations. of these, 16 are excluded by the first of the rules of syllable division (cf. 2.2.3.1., above).

Of the 48 remaining possible corabinations of syllable types, a further 15 are not attested (cf. Table 2.6., below).

Four of these (matrix cells $20,24,56$ and 64) may be accounted for by pointing out that a sequence of two closed syllables is extremely rare (especially a sequence in which one

[^22]of the syllables has the structure CVVC).

Enpty ceils 3,5 and $7(V+(V+V+C))$ reflect the fact that syllable type i, sub-type $i(V)$ only occurs initially, when (with only one exception) it is followed by a consonantinitial syllable, or finally (as in 2.2.3.3.b, above).
mpty cell 35 (VV + VC) 1ikewise reflects the fact that syllable type ii, sub-type $i$ (VV) occurs only word-initially, or medially, before a consonant-initial syllable (with one exception, indicated in cell 33).

No sequences of four vowels have been attested in Res 1garo ${ }^{9}$, which accounts for empty cells $37,39,45$ and 47 ((C) VV $+\mathrm{VV}(\mathrm{C})$ ).

Syllable type ii, sub-type iii (VVC) only occurs wordinitially, which accounts for empty cell 15 , as well as cells 7, 39, and 47 (whose non-occurrence has also been explained on other grounds).

Enpty cell 43 (CVV + VC) is apparently a reflection on the infrequent occurrence of syllable type i, sub-type iii (VC) in positions other than word-initial, and empty cell 40 a reflect-

[^23]ion on the infrequent occurrence of syllable type iix, subtype iv (CVVC).

A matrix showing the possible sequences of syllable types between any two syllables is now presented. This is followed by a list giving examples of each cell showing a positive value.

|  | $V$ | CV | VC | CVC | VV | CVV | VVC | cVvc |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| V | $1+$ | $2+$ | 3 |  | 5 |  |  |  |
| CV | ${ }^{9}+$ | ${ }^{10}+$ | $11+$ | ${ }^{12}+$ | $13+$ | $14+$ | 15 | $16+$ |
| VC | ${ }^{17} \times$ | ${ }^{18}+$ | ${ }^{19} \times$ | 20 | $\begin{array}{r} 2.7 \\ \times \end{array}$ | $22+$ | ${ }^{23} \times$ | 24 |
| CVC | ${ }^{25} \times$ | ${ }^{26}+$ | ${ }^{27} \times$ | ${ }^{28}+$ | ${ }^{29} \mathbf{x}$ | ${ }^{30}+$ | ${ }^{31} \times$ | $32+$ |
| VV | 33 + | ${ }^{34}+$ | 35 | ${ }^{36}+$ | 37 | ${ }^{38}+$ | 39 | 40 |
| CVV | ${ }^{41}+$ | ${ }^{42}+$ | ${ }^{43}$ | ${ }^{44}+$ | ${ }^{45}$ | ${ }^{46}+$ | 47 | ${ }^{48}+$ |
| VVC | $\left.\right\|^{49}$ | $150$ | ${ }^{51} \mathrm{x}$ | $52+$ | ${ }_{5}^{53}$ | $54$ | $5_{x}$ | 56 |
| CVVC | 57 | ${ }^{58}+$ | 59 | ${ }^{60}+$ | ${ }^{61} \times$ | ${ }^{62}+$ | ${ }_{6}^{63}$ | 64 |

## Table 2.6. Attested Sequences of <br> Syliable Types

Key:- + = "realized" - = "unrealized" $x=$ "not possible" Numbers refer to examples below.

1. a. 1 "that one"
2. S.no?.tt "to cause a tree to fall"
3. anin $^{n}$ "saliva"
4. --
5.     -         - 
6. a.vta.na.1 "stick"
```
7. -- 33. 22. i "vos"
8. a.Eii? "to be healthy" 34. ak.me "mother"
9. t*.tyo.壬 "island" 35. --
10. no.ne "my tooth" 36. (tst) if.tbe.pe.gi.d.ati" he
11. he.?0.pi.Eg "before"
12. i.po.gis "greon"
13. o.pii.pi.uu.?6 "liona
cord" 39. --
14. ka.mi1.de.t "sweet pom 40. --
                                    41. tya?.dif.0 "grondfather"
15. --
16. a.nc.ptu? "many"
17. x
18. a?.nt.pa "to warna
44. tsei.n5? "long"
oncself" 45. --
19. x
46. hee.nta.g{ "paternal uncle"
20. --
21. x
22. a?.nta.pi "arra"
23. x
24. --
25. x
26. i.dec.v直 "thus"
27. x
28. 1.n6?.ko? "lazy"
29. x
30. tho?.khod.tsif "postle" 57. x
31. x
58. kio?.kho.tho6 "limit"
32. ha?.moo? "to bo hot"
59. x
```

```
60. (tsh) na.to.van? gin? pe 62. han? phan.va "to comb onesolf"
    "they got (it)"
61. \(x\)
63. \(x\)
64. - -
```


### 2.3.2. Consonont Clusters.

If we apply to consononts the definition of "cluster" givon for vowels (cf. 2.2.3.3., above), the following definition of a consonant cluster results:

A consonant cluster is defined as a sequence of consonants occurring contiguously in the same syllablo.

It follows fron this definition and the doacription of syllable types given above that there are no consonant clustors in Resigaro. However, there are consonant sequencos, which occur ovor a boundary botweon two syllables. Since /?/ is the only consonant that can close a syllable, tho only sequencos are of this phoneme followed by any other consonant except itself and /ph/ $/ \mathrm{th} /$, /čh/, /č/ and/n/. The non-occurronce of those latter five consonants would appear to be non-significant, and thoy might be expectod to occux if the corpus were further expanded.

### 2.3.3. Highor-1ovel Sequencos.

Two othor fundamental and recurring changes involving sequences of units highor up tho phonological hiorarchy nust be referred to, since they affect the phonological form of structures in Resigaro. Both may be viewod as consequent on the concatonation of phonological words.

### 2.3.3.1. $/ u />/ a /$.

A word-final /u/ always becones /a/ before another word in the
sane utterance (a phonological phrase).
e.s. tsoda?pg gi-nod
she-sings him-with "She sings with hin"
(But final /u/ does not usually change bofore a suffix.)

### 2.3.3.2. $/ ? /$.

When a word with a fincl vowel is followad by a word with an initial vowel in the sane utterance, a glottal stop is intor. posed. Sinco this may be considered as a feature of juncturo belonging to neither of the words in question, and since this rule is absolutely regular, with no exceptions, the glottal is not indicated in axamples from the longuage in this thesis (except when they are writton in phonetic, not phonomic, script).
e.g. /n8 apmitti/ is [ab + ? + a?notúl "I eat"
I eat

$$
\begin{gathered}
P A R T \quad I I: \\
G R A M M A T I C A L
\end{gathered}
$$

$$
H I \mathbb{R} A R C H Y
$$

## Chapter 1

## 2007 LEVEL

The root is set up as the lowest level of the gromatical hiorarchy. Roots are divided into classes on the basis of thoir distribution in stens of difforunt classes. Thus, verb roots are typically distributed in verb stons, noun roots in houn stons, otc. Submelasses of each major class are set up on the basis of distribution within types of, nomally, the next level in the sane class. Thus, verb root sub-class 1 is distributod in verb ste: type i, etc. (The concept of the relation betweon sub-classes at one lovol and typos at the noxt lovel up is discussed in detail in soction 0.4.2.I. of the Introduction, above.)

### 1.1. Verb Root.

1.1.1. Contrast.

Verb roots (VbRt) have the following controstive-identificational features:-
i) They hove no internal gramatical structure.
ii) Thoy fill the Basc slot in vurb stons.

### 1.1.2. Voriation.

Verb roots consist of o singlu norphene.
e.s. i?pi "to go"
asmita "to eat"
kht "to do"

```
Iff "to foar"
ni?tsu "to boil" (intronsitive)
```

1.1.3. Distribution.

The nembers of the class of verb roots are distributed in the Base slot in the verb stem. Sub-classes of vorb roots are set up on the besis of aistribution in different types of verb stern.
1.1.3.1. Sub-class 1.

These verb roots occur only in verb ston type i, "Sirnple".
e.g. a?mita "to eat"
1.1.3.2. Sub-class 2.

These verb roots occur in verb sten type $i$, "Simple", and type ii, "Complex".
e.g. apó "to be awake"

Ifi "to foar"
ing "to sleep"

### 1.1.3.3. Sub-class 3.

These varb roots occur in verb stex type ii only.
e.g. tsa?vu- root of tso?vootf "to make safe a fiream"
hetsanu- " " hetsanota "to ask a question"
1.2. Noun Root.
1.2.1. Contrast.

Houn roots ( $N n R t$ ) have the following contrustive-identificational features:-
i) They have no internal gromatical structuro.
ii) They fill the Baso slot in noun atons.

### 1.2.2. Variation.

Noun roots consist of a single zorphone.


$$
\begin{aligned}
& \text { va?a-2 "rachete" (root) } \\
& \text { matha "beos" } \\
& \text { atsba "non" }
\end{aligned}
$$

1.2.3. Distribution.

The members of the class of noun roots are distributed in the Baso slot in the noun sten. Since all menberis share the sane distributional possibilitios, no sub-classos are sot up.

### 1.3. Pronoun Root.

### 1.3.1. Contrast.

Pronoun roots (PnRt) have the following contrastive-identificational foatures:-
i) Thoy hove no internal structure.
ii) Thoy fill the Base slot in pronoun stons.

I hyphen precedes Het, "hand", since, in connon with all body parts, and certain other words, it nust be posscssed. $A l l$ words of this type are indicatod by a precoding hyphen in the loxicon. The form that this possession tokes is indicatod at Phrase level -- cf. 6.1.2.2., below.
$2^{A}$ hyphen follows yapa-, "lachete" (root), since, in cormon with a large number of other noun roots in Resigaro, it must bear a classifier suffix. All roots of this type ore indicated by a following hyphen, and are described at Word level -- cf. 3.2.2., below.

### 2.3.2. Variation.

There are eight pronoun roots, each of which consists of a single morpheme:-
a6 First person singular
phi Second " "

| tsh Third | $"$ | $"$ | -- masculine |  |
| :---: | :---: | :---: | :---: | :---: |
| tso | $"$ | $"$ | $"$ | - feminine |

f\& First person non-singular -- inclusive
muu- " " " -- exclusive
hi) Second " "
i.)
al Third " "

For the second person non-singular, im is used in the imperative, and hat is used elsewhere.
1.3.3. Distribution.

The members of the class of pronoun roots are distributed in the Base slot in the pronoun stem. Sub-classes of pronoun roots are set up on the basis of distribution in different types of pronoun stem:-
1.3.3.1. Sub-class 1.

This consists of the following pronoun roots, which are distributed in pronoun stem type i:
n6 lst p. sg. fo. lst p. non-sg., incl.
phe 2nd p. se. i- 2nd p. non-sg., imptv.
tsh $3 \mathrm{rd} \mathrm{p} . \mathrm{se} . \mathrm{m}$. m . 3 rd p . non-se.
ts\% $3 \mathrm{rd} \mathrm{p} . \mathrm{sg} .1 \mathrm{f}$.

### 1.3.3.2. Sub-class 2.

This consists of the following pronoun roots, which are distm ributed in pronoun ston type ii:
tsi ${ }^{3}$ 3rd p.sg., m. mun- lst p. non-sg. excl.
ts6 3rd p. 6 ec. f. he and p. non-sg.
fe lst p. non.ag., incl. eh 3 rd p. non-sg.

### 1.3.3.3. $5 \mathrm{Bu}-\mathrm{class} 3$.

This consists of the following pronoun roots, which are distributed in pronoun stem type iii:
ft lst p. non-sg., incl. $\quad$ atd p. non-sg.
ha 2nd p. non-sg.

### 1.4. Adjective Root.

1.4.1. Contrast.

Adjectivo roots (AjRt) have the following contrastive-identificational featuros:-
i) They have no intermal grommatical structure.
ij) Thoy fill the Base slot in adjective stems.

### 1.4.2. Variation.

Adjective roots consist of a single morpheme.

```
\({ }^{3}\) The membership of these sub-classes is not exclusive; some pro-
noun roots occur in more than one sub-class. If mutually-exclus-
ive submelasses were set up, five sub-classes would be required:
Sub-cl 7: \(n\), phe, i- in PnSt i
Sub-cl 2: muu- in Pnst ii
Subucl 3: tsG, ts6 in PnSt i and ii
Sub-cl 4: hu in PnSt ii and iii
Subucl 5: ff, wa in PnSt i, ii and iii
This proceduro is not adopted hero, since it adds to complexity
without revoaling anything of structural importance.
```

```
0.8. oaii- "healthy"
    ño?hu- "soft"
    ooja- "smoll"
```


### 1.4.3. Distribution.

The members of the class of adjective roots are distributed in the Base slot in the adjective sten and in the Base slot in noun stem type ii, subutypes ii and iii. Since all members share the same distributional possibilities, no sub-classes are set up.
1.5. Adverb Root.
1.5.1. Contrast.

Adverb roots (AdvRt) have the following contrastive-identificational features:-
i) They have no internal gramatical structure.
ii) They level-skip, filling the Base slot in adverb words.

### 1.5.2. Variation.

Adverb roots consist of a single morpheme.
e.B. kapi- "quickly"
kence? 3 亿. "slowly"
1.5.3. Distribution.

The members of the class of adverb roots level-skip, being dist. ributed in the Base slot in the adverb word. Since all merabors share the same distributional possibilitios, no sub-classes are set up.
1.6. Demonstrative Root.
1.6.1. Contrast.

Demonstrative roots (DemRt) have the following contrastiveidentificational features:-
i) Thoy have no internal gramatical structure.
ii) Thoy level-skip, filling the Base slot in demonstrative words.

### 1.6.2. Variation.

There are two demonstrative roots, each of which consists of a single morpheme.
him "this"
he?o- "that"

### 1.6.3. Distribution.

The members of the class of domonstrative roots level-skip, being distributed in the Basc slot in tho demonstrative word. Sinco both nombers share tho some distributional possibilities, no subuclasses aro set up.
1.7. Numerol Root.
1.7.1. Contrast.

Nuneral roots (NunRt) have the following contrastive-idontificational featuros:-
i) They have no internal gromatical structure.
ii) They level-skip, filling the Base slot in numeral words. ${ }^{4}$
${ }^{4}$ In following a purely structural approach in tho presentation

### 1.7.2. Variation.

There are two numeral roots, each of which consists of a single norphene:-

> st- "one"
> ni- "two"

### 1.7.3. Distribution.

The members of the closs of numeral roots level-skip, being distributed in the Bose slot in the numeral word. Sinco both nembers share the sane distributional possibilitios, no subclassos are set up.

[^24]
## Chapter 2

## STE LM LEVEL

The stem is sct up as a lovel of construction above the root and below the word. Stens are divided into classcs on the basis of their distribution in word closses. Thus, verb stens are typically distributed in verb words, noun stens in noun words, otc. Types are set up within each class, on the basis of internal structuro. Sub-clesses of each major cless are set up on the basis of distribution within types of, normally, word level classes.
2.1. Verb Sten.
2.1.1. Contract.

Verb stems (Vbst) have the following contrastivowidentificational
features:-
i) Their Base is typicolly filled by a vorb root.
ii) Complex verb stems are formed by verbal derivators.

### 2.1.2. Variation.

Verb stens axe grouped into typos on the basis of internal structure.
2.1.2.1. Verb Stem Type i, "Sinpic"-
$\mathrm{VbSt}_{i}=+\mathrm{B} \mathrm{VbRt}_{I / 2}$
e.g. a?mith "to eat"

> ifk "to fear"
> íma "to sleep"
2.1.2.2. Verb Stem Type i., "Complex". ${ }^{1}$
$\mathrm{VbSt}_{i \mathrm{i}}=+\mathrm{B}: \mathrm{VbRt}_{2 / 3}+$ dorivator: ostv/incho/rest
There aro three sub-types of verb sten type ii.

### 2.1.2.2.1. Sub-type i, Causativo.

The derivator is added in accordance with the following rule:$\ldots \mathrm{CV}(\mathrm{V})>\ldots \mathrm{Co}(8)+\ldots t \mathfrak{a}^{2}$

Many complex verb stens are dorived from verb roots by this derivator, and the offect is to chango an intransitivo into a transitive.
e.g. ifk "to fear" > ifotk "to frighten"
ap6 "to be awale" $>$ aphotk "to awaken (s.o.)"
This exmple illustrates the occasional increase in voicing lag that occurs when the eausative is added to sone verb roots or stems. (cf. 3.3.2.1.1., below, especially fn 6中)
ha?pu "to cross (a river)" $>$ ha?potú "to save (from dangor)"
i?tu "to fast" > i?tota "to wean (s.o.)" mi?tsu "to boil (intrans)" $>$ mi?tsotti "to boil (sthg)" a?mu "to burn onesclf (accidentally)" $>$ a?motu "to burn (sthg)"

[^25]
### 2.1.2.2.2. Sub-type ii, Inchoative.

The derivator is added in accordence with the following rule:-

$$
\ldots C V(V)>\ldots C V(V)+-k a .
$$

Verb stems using this derivator are nowhere near as numerous as those using the causative derivator. e. ह. Ifd "to fear" $>$ Ifakod "to become frightonod, ap6 "to be awoko" $>$ apokas "to wake up (intrans)" imt "to sleep" $>$ inalas "to go to sloep" In a few cases, -liak varies freoly with $-\underline{-k}$ on a verb root. o.g. Imaknd $\sim$ imaks "to go to sleop"

### 2.1.2.2.3. Sub-type iii, Restrictive.

This derivator is added in accordance with the following rule:$\ldots C V(V)>\ldots C V(V)+\ldots H$

A few verb stems use this dorivator (but of. 2.1.2.2.4., below). e.g. a?vent "to burn eficld" $>$ a?venond "to burn superficially"
(?)vamo "to onter (a house)" $>$ (?)vanoma "to visit" In both these cases, the root $n$ is voiced before suffixation, though postulated oxamples in section 2.1.2.2.4. indicato that other final-syllable consononts in the root are not voiced.

### 2.1.2.2.4. "Fossilized" Derivations.

There are sone aporently complox verb stons containing verb roots which are no longer used excopt with one of the dorivators. There is obviously a dango of identifying as a derivator occurrences of $-\mathrm{t} \theta$, -ka or -S which are no more thon the fincl sylloble of a sinple stom consisting of a vorb root
only -- a single morpheme. The following are some of the verb stems which may be analyzable as verb root + derivator. Possibly containing causative derivator:-

> tsoatl "to annoy"

Possibly containing restrictive derivator:-
a?nank "to squeeze out"
i?kaak "to vonit"
i?tonk "to be standing up"
hekona "to harvest yucca"
kapoat "to throw, to cast"
o?doad "to fish with barbascc poison"

Reduplicated Roots.
Another type of verb stem which night be claimed to be complex is that containing a reduplicated verb root. However, this is no longer productive at this level, ${ }^{3}$ and the postulated root is not evidencod in a non-reduplicated form. So such rare cases as are observed are interpreted as ainple verb roots. e.g. de?ede?e "to nod one's head (whon slecpy)"

### 2.1.3. Distribution.

The nembers of the class of verb stems are distributed in the Base slot in the verb word. Since all menbers share the sane
${ }^{3}$ In some cases, the Basic or other constituent of the peripheral slot in the complex verb group, or in the case of a siraple verb group, the entiro verb group, is romeatod to enphasize the gradual nature of an action, but this is in the first case at another level, and secondly is not recuplication in the strict (i.o., morphological) sense of tho wrd. of. 4.1.2.3., below.
distributional possibilities, no sub-classes sre set up.

### 2.2. Noun Stom.

### 2.2.1. Contrast.

Noun stens (NnSt) have the following contrastive-identificational features:-
i) Their Base slot is typically filled by a noun root.
ii) Complex noun stens are fomed fron nembers of other classus by noninal derivators.

### 2.2.2. Variation.

Noun stems are grouped into types on the basis of internal structure.
2.2.2.1. Noun Stem Type i, "Simple".
$\mathrm{NnSt}_{i}=+\mathrm{B}: \mathrm{NnR} t$
e.g. -henalis "ear"
anotge "tapir"
ofínt "yons"
2.2.2.2. Noun Sten Type ii, "Complex".

Complex noun sters consist of a Verb Group, a conponent of a
Verb Group, an adjective, or a relator, plus a nominalizer. Three sub-types are established.
2.2.2.2.1. Sub-type i, "Concrete Nominalization".

This type of nominalization forms mouns that refer primarily
to concrete objects.
All types and sub-types of Verb Group may occur.
The derivatory rules are the following:-
i) A final-syllable voiceless stop becones aspirated, and a voiced nasal becomes voiceless. 4
ii) Final $i$, e and o do not change. Final $\underline{u}$ beccnes $o$.
iii) -!tsi is added to the resultant forr.
-. 8 .

1) Illustrating i) and iii), above:
hipa "to wash" >hiphoठtsigh "soap"
tsa?ti "to carry a weight" > tsa?thottsi "a weight"
pi?ko "to throw away" > pipkhobtsigi "one who throws away"
va?nk "to comand" va?nobtsink "law"
2) Illustrating ii) and iii), obove:
(?) aeni "to play"
>me?nítsi "a toy"
kone "to sell" >koncetsi "nerchandise"
Ens "to harpoon, spear" >nobtsiga ${ }^{6}$ "a lance, an arrow"
a?mitr "to eat" $>$ a?mithostsi "food, a neal"
In all the above exarples, the filler of the Base slot has been a Type i Verb Group. There follow examples of Type
```
\({ }^{4}\) This demonstrates the operation of the movenent of Voice Onset
Tining in the opposite direction to that described in section
3.3.2.1., below. i.e., increasing the lag in this case.
5 There is no final a, except where this is derived morphophon-
enically fror u.
The initial i is deleted here, and also in
    ind "to sleep" \(>\) mobtsing "a bed",
but is rotained in the following two cases (apparently because
of the following glottal):
    i?dt "to drinls" \(>\) i?doठtsipi "a drink"
    i?tsha(ka) "to sit down" \(>\) i?tshootsigh "a seat, a bench"
```

ii (sub-types $i$ and ii) Verb Groups in the Base slot:
$V G_{i, i . i}:$
tho? lhe "to grind" $>$ tho?khobtsil "a pestle"
$V_{i i, i j}:$
hoom i?votu "to freeze" > hoonsi?vothostsi" "ice"

When a type ii sub-type i noun is possessed (cf. 6.1.2.2.,

e.g. fio?khobtsi "a whistie" > nofio?khoonti "ny whistle" (referring in both cases to the concrete object (Sp. silbato)).
2.2.2.2.2. Sub-type ii, "Abstract Nominalization".

This type of nominalization forms nouns that refer primarily to events or qualities.

The derivatory rules are the following:-

ii) $\mathrm{B}: \mathrm{VG}_{\mathrm{ii} . \mathrm{i}}: \mathrm{NIzr}_{\mathrm{ij}}:-\mathrm{kEa}-\mathrm{tsi} / \mathrm{mi}$
-tsi/mi indicates that the two forms vary freely here.
e.g. 1) With Base filled by VG $i=$

1m保 "to sleep" > ímakstss "sleepincss"
emf "to bite" $>$ emakktsi "a bite"

[^26]2) With Base filled by Adjective Root.
ka?nu- "fermented" $\rangle$ ka?nakats! "something fermented"
ke?pi- "satisfied" > ke?piikatsi "satisfaction"
3) With Base filled by $V G_{i i . i-}$


2.2.2.2.3. Sub-type iii, "Agent Nominalization". NnSt ii.i.ii $=+\mathrm{B}: A j R t / b a s / r e l r R+N z_{i i i}:-m i n s a g 1$ "bos" is the basic filler of the peripheral slot in $V G_{\text {ij. }}$ " "relrR" is the relator in the Axis-Rolator Locative Phrase, sub-type iii: -a?ns, "beside" (cf. 6.2.10.2.2.iii, below). This type of nomanalization forms nouns that express a characteristic attribute of a person.
e.8. 1) With Base filled by Adjoctive Root.
$$
\text { In6 "lazy" }>\text { 1abmin6ag1 } 9 \text { "a lazy person" }
$$
2) With Base filled by basic filler of VG periphery.
hadnk lsha "to steal" $>$ habmaninages "a thief"
3) With Base filled by relator.
$$
\text { -a?nd "beside" } \quad>\text { a?namindagi "servent" }
$$

[^27]
### 2.2.2.2.4. Postulated Reduplicated Forras.

It may appear that there is another sub-type of complex noun ster, in which there is reduplication. Howevor, such forms would have to be derived from a hypothotical base form, since the reduplicated forns are not roducible to non-reduplicated elements occurring elsewher. Furthemore, the roduplication obsorved in nouns is highly irregular, and, nost inportont, is no longer productive. Thus, these apparently reduplicated forms aro viewod as simple, non-reduplicatod stens. Sone exanples are:-
tB?et6bれ "mushroom"
todetoode "(a type of dance)"
thiith1?8 "(a spocies of monkey)" (Sp.: sumileoncito)
tyb?otybba "butterfly"
tshe?tshepi "(a species of bird)"
tshii?tshiss "cricket"

### 2.2.3. Distribution.

The nembers of the class of noun sters are distributed in the Base slot in the noun word, in numeral word type ii, and in adjoctive sten type iif. Sub-classos of nown stoms are set up on the basis of this distribution.

### 2.2.3.1. Sub-class 1.

These nown stens occur in noun word type i, "simple". Thoy are further subuivided according to their occurronce in subtypes of this type:-

Sub-class 1.1. This consists of noun stems that are basically plural.
o.g. maspt "boes"
hada?phootsi "songs"
Sub-class 1.2. This consists of noun stems that refer to uncountables.
e.g. hooni "woter"
ps "

### 2.2.3.2. Sub-class 2.

Theso noun stens occur in noun word type ii, "complex". They are further sub-divided according to their occurrence in subtypes of this type:-

Sub-class 2.I. This consists of noun stens referring to people.
e.g. ke?víkKgi "chieftain"
phaig1 "old man"
Sub-class 2.2. This consists of noun stens reforring to nonhuman animates.
e.g. mañ゙áo "iguana"
hiviig1 "star" (sic)
ona?ks "snake"
Sub-class 2.3. This consists of noun stems referring to body parts.

$$
\begin{aligned}
& \text { e.g. -hitikt "nose" } \\
& \text {-nigi "forehead" }
\end{aligned}
$$

Sub-closs 2.4. This consists of all noun stens not yet accounted for.
e.g. vara- "machete"

```
po?tsshva "centrc"
```


### 2.2.3.3. Suk-class 3.

This consists of two noun stere which, in addition to their distribution in the noun word, also occur in numeral word type ii:

$$
\begin{aligned}
& \text { po?tssava "centre" } \\
& \text { pa }^{10} \text { "all" }
\end{aligned}
$$

### 2.2.3.4. Subclass 4.

This consists of those noun stems which, in addition to their distribution in the noun word, also occur in adjective stem typo iii.

```
e.g. oniftsi "bot-fly larva"
```


### 2.3. Pronoun Ster.

2.3.1. Contrast.

Pronoun stems (PaSt) have the following contrastive-identificational features:-
i) Their Base slot is filled by a pronoun root.
ii) Complex pronoun stems are formed by pronominal dorivators.
$\overline{10}$ pt is clearly a noun storm in Rosigaro, even though the English gloss "all" is not. It may occur with various classifiers. e.g. ptanoomi
all village "all the villages"
paupers all day "all the days" ps-?
all hand di rest "all two hands" (ie., "both hands"
-- used to signify the number "ten")
2.3.2. Variation.

Three types of pronoun sten are set up on the basis of internal structure:-

PnSt $_{i}=+$ B $_{\text {PnRt }}^{1}$
PnSt ${ }_{\text {ii }}=+$ BinRt $_{2}+$ Dor: - \& $\pm$ Specifier: -the
PnSt $_{\text {iii }}=+B: \operatorname{PnRt}_{3}+$ Der: $_{\text {nusi }}$-rupi
2.3.2.1. Pronoun Ster Type i, "Bosic".

Type i pronoun stens consist of a pronoun root, sub-class 1 , only:-
n6 First person singular
phit second " "

| tsi Third " | " nasculine |  |  |
| :---: | :---: | :---: | :---: | :---: |
| tso " " | " | " | feninine |

fí First person non-singular, inclusive
i Socond " " inperative
at Third " "
In all pronoun stens ending in $\underset{\sim}{u}$, this becomes $a$ in all contexts except clause-finally (cf. I.2.3.3.1., above).
2.3.2.2. Pronoun Sten Type ii, "Deictic".

Type ii pronoun stens consist of a pronoun root, sub-class 2, + a derivator, $\pm$ a specifier. Thoy indicate doixis.

The pronoun root is assimilated to the derivator in accordance with the norphophoneric procosses doscribed at word lovol (3.3.2.1.), since it is at that level that such assinilation is
most widespread. This results in the following changes:
3rd p. sg., n. tsí > gi-
3rd p. sg., f. ts $\gg$ dom
3rd p. nonusg. ti $>$ ra-
Ist p. non-sg., excl. muu-) do not change, in accordance with 2nd p. non-sg. hí-) cept that the u of hu becones a)
lst p. non-sg., incl. fe exceptionally does not change before the derivator, except that the $\underline{u}$ becones $\underset{a}{a}$, as indicated above (though in all other contexts it assiailates in accordance with the rules indicated in 3.3.2.1., below).

The vowel of the derivator has the sane quality as that of the preceding assinilated pronoun root, but is always short, yielding the following forns:-

| 3rd p. sg., z . | gi-? 1 "this one" (m) |
| :---: | :---: |
| 3ra p. sg., f. | do-?8 "this one" (f) |
| list p. non-sg., incl. | famat "we" (inclusive) |
| lst p. non-se., excl. | nuu-? ${ }^{11}$ "we" (exclusive) |
| 2nd p. non-sg. | ha-?a "you" |
| 3 rd p . non-sg. | namas "they" |

The specifier -the "distant" may be added to the above foras, when this is semantically neaningful. In proctice, this restricts its occurrence to third person pronouns:-

11 The base form of this is presumably *mu-Th, but sinco a final u always becones a before another wora (but not normally before a suffix), and since this pronoun is nowhere attested finally, the only form observed is mund.

```
gi?ithe "thet one" (n)
do?othe "that one" (f)
na?athe "they (distant)"
```

2.3.2.3. Fronoun Stem Type iii, "Dual".

Type iii pronoun stems consist of a pronoun root, sub-class 3, + one of the dual markers: -musi "masculine dual" こimpi "feminine duol"

The assinilated form of the pronoun root occurs, except (as in type ii, above) in the case of lst person non-singular, inclusive, fan.
fonusi "we (incl) two" (ni) fomupi "we (incl) two" (f)
homusi "you two" ( m ) hamupi "you two" (f)
nanusi "they two" ( n ) nanupi "they two" ( f )
2.3.3. Distribution.

The nembers of the class of pronoun stems are distributed in the Base slot in the pronoun word. Sub-classes of pronoun sten are set up on the basis of this distribution.
2.3.3.1. Sub-class 1.

This consists of all type i pronoun stems, which occur in pronounnoun word type i.
2.3.3.2. Sub-class 2.

This consists of all type ii and type iii pronoun stens, which occur in pronoun word type ii.
2.4. Adjective Stem.
2.4.1. Contrast.

Adjective Stems (AjSt) have the following contrastive-identificational Peatures:-
i) Their Base is typically filled by an adjective root.
ii) Further types of adjective stem are derived from the
basic form by morphophonemic processes principally involving addition and deletion of geminate vowels and elottal stops.

### 2.4.2. Variation.

Three ${ }^{12}$ types of adjective stem arc set up on the basis of internal structure.

```
AjSt 
AjSt ii = + B:AjRt + deri 
```



```
where der i and der ii stand for two different derivatory processes.
```

2.4.2.1. Adjective Stem Type i, "Basic".
Type i adjective stoms consist of an adjective rost only.
e.g. aqiim "healthy"
ha?mo?-"hot"
raašo- "good"

```
\(\overline{12}\) There is also evidence which suggests that some adjectives
are derived from verbs, though this is rare and would appear
to be no longor active. An exomple of such a fossilized form
is predicative adjective ponuu? "to be embarrossed, shy" (gloss-
ed in Spanish by informant as dar vergienza) and verb poni
"to be ashamed, mbarrassed" (glossed in Sparish as avergon-
zarse).
```

```
The resultant form attributes a quality to a noun.13
e.g. afiigi atssagi ... "The healthy man ..."
    heolthy man
        kaosogi yatnt ... "The good child ..."
        good child
        oojagi anoogr ... "The small tapir..."
        small tapir
```

(In each of these exomples, the final syllable of the adjective
is the classifier -- cf. 3.4.2.1., below.)
2.4.2.2. Adjective Stem TVpe ii: "Derived i".
Type ii adjective stems consist of an adjoctive root modified
in accordanco with the following morphophonomic rules:-
i) If not already long, the vowol of the final syllable is
lengthened.

```
e.g. ha?mo?- "hot" > ha?moo? "(to be) hot"
    ka?mu- "fermented" > ka?mutu "(to be) fermented"
```

This has the effect of shortening the length of any long vowel
previously in any other syllable of the adjective root. ${ }^{14}$

```
e.g. kaašo- "good" > kašoo? "(to be) good"
    ooy`a- "small" > oJ̌aa? "(to be) small"
```

ii) A glottal stop is added finally, if one is not already present.

```
e.g. amii- "healthy" > anii? "(to be) healthy"
    no?hu- "soft" > ño?huu? "(to be) soft"
```

$\overline{13_{\text {This }}}$ is related to distribution, and at wra level, but examples aro given at this stage, as the best, wh of indicating the semantic differences which form an inhewent part of each type of adjective stem.
14 This could also be described in terms of a shift of vowel length, though such an approach would not account for the longthening of vowols in stems where the root contained no long (or geminate) vowels, hence the proforence for viewing this as a two-stage process.

The resultant form predicates a state concerning the person/ thing thus qualified. e.g. anii? tsu "He is healthy"
healthy he
kašoo? tse "She is grod"
good she
2.4.2.3. Adjective Ster Trae iij: "Dorived ij".

Type iii adjective stems crisist of an adjective root or a noun stem ${ }^{15}$ modified in acondance with the following morphophonemic rules ${ }^{16}$ :-
i) Any long vowel in the filler of the Beso elot is shortened.

```
e.g. anii- "healthy" > ari "(to become) healthy"
    ooja_ "small" > oja "(to become) small".
        eniftsi "bot-fly larva"
                                    > enftsi "(to become) worm-
                                    infested"
```

ii) If the filler of tho Base slot contains two glottals, the first of these is delcted:-
e.g. ha?mo?- "hot" $>$ hamo? "(to become) hot"
(If the filler only contains one glottal, this is not deleted.
$\overline{15}$ It would be possible to ostablish two sub-types here, but this is not done, since so few casos of adjective stems derived from noun stems are attested, and since the sarn morphophonemic rules apply as with adjective roots. Such a procedure would merely complicate the presentation. We thus follow fike's criterion (cf. 1967:472) of recuiring two structural differences before establishing different types. Derivation from adjective root and noun stem is shom in the following description. ${ }^{16}$ In some cases certain vowel changes also occur, but these chonges are as yet unpredictaile and analysis of them must await the obtainine of further data.
e.g. phe?di?- "fat" $>$ phedo? "(to becone) fat" た̂e?ki?- "strong" $>$ Êeke? "(to becone) strong"

```
e.g. ka?mu "fermented" : ka?nu "(to become) ferrented"
    ño?hu- "soft" : ño?hu "(to become) soft" )
```

The resultant form predicates a process concerning the person/thing thus qualified.

```
e.g. ani tsa "He gets (becomes) healthy"
    enitsi ts6 "She gets worge" (i.e."becomes infected
    gets-worms she with intestinal worms")
    ka?ma tsG "It fermomts"
        ferments it
```


### 2.4.3. Distribution.

The nembers of the class of adjective stens are distributed in the Base slot in the adjective word, in the Base slot in the adverb word, and in the Periphoral slot in the verb group. Sub-classes of adjective stens are set up on the basis of this distribution.

### 2.4.3.1. Sub-class 1.

This consists of type $i^{17}$ adjective steras, which occur in adjective word type i, "Attributive".
e.E. kaašo "good"
aijuntu? "near"

### 2.4.3.2. Sub-class 2.

This consists of type ii adicotive stems, which occur in adjective word type ii, "Predicnive 3 , and in the advorb word.

[^28]e.E. karrux " (to be) fermented"
ai"jaz uu? "(to be) near"
ax:epuu? "(to be) a lot"
"rašoo? "(to be) good"
3.4 .2 3. Sub-class 3.

This consists of type iil adjective steas, which occur in ey jective word type iii, "Predicative ii". f.g. kašb? "(to become) good"
ai ${ }^{\text {Jnan? "to draw near" }}$

## $\therefore .4 .3 .4 . \quad$ Sub-class 4.

This consists of adjective stens (of all three types) which, in addition to their distribution in types of tho adjective word (indicated in sub-classes 1.-3), also occur in the periphery slot in verb group type ii, sub-type i. o.g. ooja "small"
ani "(to becone) healthy"
(For further details, cf. verb group, section 4.1.2.2.1., below.)

## Chaptor 3

WORD LEVEL

The word is set up as a lovol of construction above the sten and below the phrase. Words are divided into classes on the basis of their distribution in phrase level tagmenes (except in tho case of the verb word, which is distrikutod in the sub-level, Group). Types are set up within each class on the basis of internal structure. Sub-classes of word classes are set up on the basis of distribution in types of phrase (or the group, in the case of the verb) and, occasionally, in other structures.

### 3.1. Verb Word.

3.1.1. Contrast.

Verb words (Vb) have the following contrastive-identificational features:
i) Their Base is typically filled by a vorb stc:. .
ii) They co-occur with reflexive/reciprocal, causative/inchoative, directional, and progressive suffixes.
iii) Their basic (i.e., doclarative) form is subject to modification by the inperative mood.

### 3.1.2. Variation.

## Formula:-

$\mathrm{Vb}= \pm \mathrm{px}: \mathrm{Pn} / \mathrm{priv}+\mathrm{B}: \mathrm{VbSt} \alpha \pm s x$ loc: reflex/recip $\pm$ sx 2: cstv/ incho $\pm$ sx 3: dir $\pm$ sx 4: prog

The use of $\alpha$ in this formula obviates the need to establish two types of verb word, according to whether or not suffixes of order 1 may be added to the stem. Initially, it may appear that this is dopendent on transitivity -- order 1 suffixes boing applicable only to transitive verbs. However, they cannot be applied to all transitive verbs. (For instonce, not at all with verbs such as i?kana "to vomit", heernt "to roast", and very inprobable with such verbs as a?mita "to eat".) Likewise, thero are some intransitive verbs to which they aro applied. (For instance, o?do "to work ${ }^{11}$, *ne?aitotu_ ston of "to suffer" ${ }^{2}$.)

Thus, the restriction of application of order 1 suffixes appears to be more a lexical (and in consequence, semantic) one thon a structural one, and is thorefore considered not adequate for the ostablishnent of different types of vorb word -- especially since all suffixes of orders 2-4 may be added in alnost all cases (subject to restrictions indicated in the relevant sections, bolow).

Inperative is not indicated in the above formula, since it consists of both segmental and suprasegnental eleaents. The forula thus inclicatos the declarative form of tho verb only.

[^29]
### 3.1.2.1. Prefixes.

Pronouns and the privative profix are assinilated to tho vorb ston in accordance with the rules given in 3.3.2.1., below. Thero, three types of vorb (and noun and relator) are sot up on the basis of this assimilation. However, theso are norphophonological, and not gramatical, types, and thorefore are not relevant here.
e.g. Sten: hee?uh "to roast"
b8b? "I roast"
pheteme "you roast" (singular)
Hes? rakas ... ${ }^{3}$ "without roasting ..."
Stem: armita "to eat"
no?mitt "I eat"
pa?mita "you eat"
ma?mitaka\& ... "without eating ..."
Stem: marf "to call"
nomaxd "I call"
pimant "you cal.l"
mamanka\& ... "without calling ..."

## Special Case.

The verb kema "to say" loses its initial syllable when assimilated to a pronoun or privative prefix:

Hoaa kema ... "John says ..."
gimß ... "he says ..."
$3_{\text {The }}$ inchoative suffix must co-occur with the privative in this construction. For details, cf. Verb Piece type ii, sub-type ii (section 5.1.2.2.2., below).

### 3.1.2.2. Suffix Order 1: reflexive/reciprocel.

The addition of these suffizes has an effect on the distribution of the verb at clause level. When either of them is added to a transitive verb, it occurs in an intransitive, instead of a transitive, clause. i.c., the vorb is "demoted" one step on the tronsitivity scole. Howevor, transitivity is not considured a relevant structural foature at word level, for the following reasons:-
i) All verbs are fod through all levcls, and at verb word level distributional sub-classes aro set up on the basis of occurrence in different types of Verb Group, where degree of transitivity is not relevent.
ii) Likewiso, Verb Groups are divided into distributional sub-classes on the basis of their occurrence in different types of Verb Piece, where, again, transitivity is not a relcrant foature.
iii) The Verb Piece is distributed in the Verb Phrase, again not on the basis of transitivity, and it is only in ostablishing differcnt subuclasses of the Verb Phrase according to occurrence in difforent clauso typos that transitivity is relevant.

This follows from tho strict separation of structural types and distributionn classes and sub-clossos, and the demarcation of levols, ostablished in the introduction, and avoids endess repetition throughout tho levels, and other problems indicatod in that discussion.
-pheavd and -kakivel are probably both analyzable into two morphomes -- phaa-vti and -kalkt-va -a since -vt is occosionally omitted in phadav. Howevor, the function of the postulated morphone -va is not clear. ${ }^{4}$
3.1.3.3.1. Reflexive: -phoavh.
e.g. hao?phaovt "to conb oneself" < haa? "to comb (s.o.)" hiptphavak "to wash oneself" < hipk "to wash (s.o., sthg.)"

Often, the verb stem is rarely, or never, attested without the reflexive suffix, and in these cases, the inflection has virtually established a now word in which there is little or no awareness of the original form.
e.g. hoka?phaova "to get dressed, to get into (a canoe, etc.)" < horku "to bitel (of insocts)

In spite of this, -phaval is not considerod as a stem-level derivational suffix, for the following reasons:-
i) It is activcly used at word level.
ii) It is not closely bound to the verb stem, and is in fact the most mobile of verb suffixes, occurring sometimes after temporal and imperative clitics and the auxiliary indicator in verb piece type ii, sub-type i. (cf. 3.1.2.6.1.2.2.(ix), and 5.1.2.2.1.). It also occasionally occurs after the Order 2 suffix inchoative, and the Order 3 directional suffixes (cf. 3.1.2.4., below).
e.g. meptakdphaava no?pi "Without washing myself I go"

[^30]Aoknarktuphavti no?p1 "Dressing myself, I go"

### 3.1.2.2.2. Reciprocal:-kakiva. ${ }^{5}$

ecg. naa?lsakbut "they comb each other's hair" $<$ han? "to combil
(cf. Ean?phaava "they comb their (own) hair")
neptakiva "they wash on c another" < hips "to wash"
(cf. reptphava "they wash themselves")
nanovigipicakiva "they spook to each other"
< novigips "to speak"

When the reciprocal is added to the verb hate "to do", this is usually replaced by (ii) 解, "to be". (The (ii) is except on rare occasions omitted.)
e.g. (i) anotgi maine na-liní
tapir die they-do "They kill the tapir"

But kainite neežk- kaktivk
die they-be recipe "hey kill one another"
Contrast kaince neeža die they-be "They die"
(ii) phede? na-kht me greet they-do "They greet ne"

But phede? neežh-Koktva greet they-bo recip
"They groat ono mother"

As the above examples demonstrate, a restriction consedquant on the use of the reciprocal suffix is the limitation of the subject to the plural -- another senaritic restriction

5 When the reciprocal has been added, the verb is often distributod in a clause containing the concomitant phrase. $c f$. 6.2.5.2.1., below. See also comments on tho clause at the beginning of this section.
with inevitable (but not language-specific and therefore not significant) structural consequences.
3.1.2.3. Suffix Order 2: Causative/Inchoative. These suffixes have also been described as derivators at stem level, in the formation of complex stems. This does not preclude their functioning as inflectional suffixes at word level, and in fact both suffixes may occur on complex verb stems consisting of a verb root + either derivator. ${ }^{6}$ With causative derivator at stem Ievel. e.g. mi?tsota "to boil (sthg)"
i) + causative verb word suffix:
tshonava ts6 hooni mi?tsototi
her-mother her water boil-cs-cs

"He made them frighten one another"
Here the causative suffix has functioned as a derivator at stom levol, boosting an intransitive verb root (ift, "to fear") to a transitive stem ("to frighten"). It has then functioned as an inflectional suffix at word level, boosting a transitivo stem to a ditransitive verb. Only one objoct tagmeme is prosent in the clause, sinco the reciprocal suffix demotes the verb one step on the tronsitivity scale, as indicated in 3.1.2.2., above.
"Her mother makes her boil the water"
ii) + inchoative verb word suffix:
tst hooni mi?tsotakas
she water boilmosmincho "She begins to boil tho water" With inchoative derivator at stem level.
e. ह. 1fakad "to become frightened, to ropent"
i) + causative verb word suffix:
tst tso ffakoota
he her become-os "He makes her become frightened" frightened
ii) + inchoative verb word suffix:
gifakakat - mi
he-repent-incho-rec "He began to repent" (Lit.: "He past began to become frightened")

Causative and inchoative suffixes modify stems to which they are added in exactiy the same way as at stem level (cf. 2.1.2.2.1. and 2.1.2.2.2., above).

### 3.1.2.3.1. Causative: -ta.

e.g. tshonava dotstate nekhiga do-khota her-mother her-brother shelter she-do-cs "Her mother makes hor sheltor her brother" When the causative is added to the verb (ii) YG "to be", this is obligatorily replaced by kha, "to do".?
e.g. mitshtimi gi-ža get-up rec he-be "He got up"
Becomes.
tsa-m1 mitsha gi-khota
him-rec get-up he-do-cs "He made him get up" past

[^31]```
3.1.2.3.2. Inchoative: -kab.
e.g. valkht giža-kaa
    ill he-be-incho "He becones ill"
(cf. vakha giža "He is ill")
    gi?tbak - ka&
    he-standing - incho "He stands up"
(cf. gi?tba| "He is standing")
The inchoative is occasionally optionally followed by nnu,
the meaning of which is unclear.
e.&. gi?tomákaánG "He stands up"
For discussion of #nk, cf. 3.1.2.5.1., below.
Order 1 suffix -phang sometimes moves right, to occur after the inchoative suffix.
e.g. noptkaa-phaavt no?pi
    I-wash-incho-reflex I-go "Washine myself, I go"
of. 3.1.2.2.1. (ii), above.
```

3.1.2.4. Suffix order 3. Directional.

There are two verbal ${ }^{8}$ directional suffixes:
-kee "to go to"
\{-ki\} "to come from"
They are added in accordance with the following rules:-
i) Any verb stem final vowel other than /i/ is chonged to /e/.
/i/ does not change. 9
ii) -kes or $\{-k i\}$ is added to the resultant form.


```
iii) \(\{-k i\} \quad-k i \sim-k e\)
    -ki occurs after / \(\epsilon /\)
    -le " " /i/
```

Directionals are not added to directional verbs or to verbal constructions indicating direction (e.g., Verb Piece type ii.i; verbs with imperative directional suffixes -.- of. 3.1.2.6.2., rule (x), below).

### 3.1.2.4.1. -kee "to go to"

| e.g. | no?mitekes "I go to eat" | $<$ | a?mita |
| :---: | :---: | :---: | :---: |
|  | nokhonike "I go to laugh" | $<$ | khoni |
|  | boto? dokheker "She goes to sweep" | $<$ | boto? kht |
|  | tua gizzeker "He goes to jump" | $<$ | tua ${ }^{\text {\% }}$ |
|  | gi-manka vate?kes "We go to know (meet) |  |  |

$<$ manta t8?
noke:kes "I go to open"

Additional changes with -phaava.
Following some verb stems, the vowels of both syllables of this Order 1 suffix may change to $/ e /$, or only the vowel of the last syllable, as indicated by rulo (i), above.
e.g. $\left.\begin{array}{l}\text { nodo?phaavt-ket } \\ \text { nodo?pheeve-kee }\end{array}\right\}$ "I go to work" $<$ odo?phaovk No meaning difference is obvious, though the chonge of vowel in the first syllable may indicate the presence of motion in the working, as well as in the going to it.

Also, this Order $I$ suffix may sometimes be permutatod to
a position following the directional, in which case, the vowel change occurs in the stem, and not the suffix.
e.E. Aopkpheeveket $\left.\begin{array}{c}\text { nopeketphavit }\end{array}\right\}$ "I go to wash myself" < hipaphaavt (In this particular case the change of all vowels in -phaava when preceding the directional would appear to be obligatory.) 10

In some cases, phaava cannot follow the directional, and the vowels of the first syllablo do not change. e.g. noo?phavaket "I go to comb my haix" < haa?phaava

$$
\begin{array}{r}
\text { moka?phaovtkel "I go to enter (a house, a canoe); } \\
\text { I go to dress" } \\
\text { < hoka?phaavt }
\end{array}
$$

The use of this directional suffix results in a meaning which parallels that obtained by verbol piece type ii.i with the verb i?ps "to go".

```
e.g. a?mitere no?pi "I go to eat"
```

cf. section 5.1.2.2.1., below.
3.1.2.4.2. $\{-\mathrm{kr}\}$ "to come from".
e.g. no?miteki "I come from eating"
nokhonike "I come from laughing"
$\overline{10}$ A clarification of the possible differences of meaning here must await further research. My informant assured me that both forms were "the somel, but this may merely reflect the difficulty he would have in expressing such fine distinctions in Sponish. It may be that the first form means "I wash myself -a go to do", while the second may be "I GO to wash -- reflexive"

# vataponike "We come from dreaming" < taponi "to drean" boto? dokhek! "She comos from sweeping" <br> no-nbagi-nee J̌i? gižeki "He comes from meeting my-brothex-with with ay brother" 

< Ji? 㮏 "to meet"

No additional rules appear to apply in the case of -phava, before this diroctional marker (yet it is attested in less cases than mee, and it is thus possible that further data might reveal similar changes.
e.g. nodo?phaavek1 "I como from working"
noka?phavek1 "I come fron dressing, from entering"

But after to?, -ki is aspirated:
e.g. gi-manáa no-te?kh1 "I cone from knowing him (meeting him for the first tine)"

This would appear to be irregular. It is not due to the preceding glottal, as indicated by asko, "to open":
noke?ki "I cone fron oponing".

The following examplo illustrates the use of a directional after the Order 2 causative suffix:-
nošbtek 1 "I go to cause to eat meat" (i.e., "I go to feed (the children, etc.) with neat") < ša "to eat neat"

The use of this suffix results in a meaning which closely approximates to that obtained by the Adjunct Phrase with the
verb tsa? (nu) "to come".
e.g. no?mittkak notst? "I cone from eating"

However, this latter structure may also bo glossed as "Eating,
I cone", or "After eating, I cone". cf. 6.2.8.2. (iii-iv), below. 11

### 3.1.2.5. Suffix Order 4. Progressive.

Progressive ospect is indicated by verbal suffix - pa. (Contrast the tense markers, which are clitics, and principally do not go on the verb -m of. 7.2.1.2.6., below.)
e.g. ginspa "He is sleeping" (cf. gink "He sleeps" kainte gižapa "He is dying" (cf. kaintenl oo gižt "He has already died")

### 3.1.2.5.1. -nk.

The progrossive is optionally followed by $-\underline{n d}$, the meaning of which is not clear, though it is probably to bo identified with the na occurring oftor inchoative in final position, as indicated in 3.1.2.3.2., above.
c.g. ginfpanf "He is sleeping"

If the inchoative is non-final, nh does not occur, unless - pa
is final:-

Though 年ee parallels verb piece ii. i with i?p1 in neaning, and ( -kI ) closely approxinates to Adjunct Phrase with tsa? (nu), these latter two constructions should not be taken to be para1lel. 'In the forwer the verb is not varlred for person and is dependent on an auxiliary verb; in the lattor tho verb is marked for person, typically has the inchoative marker, and fills the Axis slot of an Axis-Relator phrase. of. rolevant sections for furthor details (references as above).

```
gi?tsakad-ni "He sat down"
gi?tsakabmi-pa-nG "He was in the process of sitting
                                    down'"
```

(Here the terporal clitic -nf precedes the progressive suffix.)

This -nd may be relatod to the syllable occurring at the end of the verbs i?pI "to go" and tsti? "to cone" when they are dependent or in the negative inperntive, but which is othorwise always onitted.with i?pi and only rarely included with tsk? ${ }^{12}$

```
e.g. (i) a?mitene no?pi
    eat aux I-go "I go to eat"
    ind
        VbPceeii.i
```

Contrast:

"He wants me to go to cat"

> (ii) nornitakas notss? $\underset{\text { Adjunct Phrase }}{\text { I-cat incho }}$ I-cone

Contrast:

[^32]
"He wants me to come from eating"

In both examples, the vowel of $\boldsymbol{n}$ n becomes a before suffixation, and this is lengthened and a glide added by nominalization. In the second example, the stem glottal also moves right one syllable before suffixation.

The above verb word suffixes may be followed by a number of clitics $m$ reportative, frustrative, desiderative/ stated intention, temporal and dubitative/incompletive -but since these are not specifically verbal suffixes, but may occur on other clause-level tagmemes (and do when such are present), details are given in the description of the clause, in 7.2.1.2.6., below. One example is included here:
da?mits-tso - po? - nd - ?pe
hemeat report frus desid remote past
"It is said that he wanted to eat (but he didn't eat)"
3.1.2.6. Imperative Mood.

This is not a suffix order, but a different mood (preceding paragraphs describe the declarative). The imperative in Resi. garo is very rich, and its various forms are marked by both segmental and suprasegmental features, as indicated in the
description which follows.

The imperative applies to verb words marked for the second person -- singular, dual, or plural -- only, and only in the present. It may be affirmative or negative. There are two types of imperative: basic imperative, and directional imperative.

### 3.1.2.6.1. Basic Imperative.

### 3.1.2.6.1.1. Affirmative.

(i) Singular.

Rule i. The normal second person singular pronoun phet precedes the verb stem, to which it is obligatorily assimilated. Rule ii. If the penultimate and antepenultimate syllables of the stem consist of a single vowol each, and have low tone, this becomes high.

$$
\begin{array}{ll}
\text { e.g. pa?mitG "drinkl(sg. } \left.{ }^{13}\right) " & \text { (of. pa?mita "you drink") } \\
\text { pi?pi "gol" } & \text { (cf. pi?pi "you go") }
\end{array}
$$

If the verb stem consists of a single syllable, the imporative is homophonous with the assimilated form of the desclarative. e.g. boto? pilkh "sweepl" (cf. boto? pikht) "you sweep") ee?phi pikht "fish!" (cf. ee?phi pikht ${ }^{\text {ee?phi kht })}$ "you fish") piša "eat meatd" (cf. phiša) "you eat meat")
$\overline{13_{\text {Not }}}$ repeated in succeeding glosses, since all examples in this section are of the singular, as indicated by the paragraph heading.

Rule iii. The underlying initial ij of the copulative verb, which is deleted (with very rare exceptions) in the declarative, is retained in the imperative. e.g. tua piiža "jumpl" (cf. tua pižt) "you jump")

Rule iv. In hiph "to wash" and mita "to smoke (food -- as a preservative process)", i>is :philpG "wash!" (cf. phe phipa) "you wash") philptphaava "wash yourselfd" (cf.phs hipsphaava)
"you wash yourself")
pimiltt "smoke (it)!" (cf. phimitt\} $\}$ mitt ) "you smoke (it)"

## (ii) Dual.

Rule v. The second-person non-singular (i.e., dual and plural) imperative pronoun in precedes the verb stem, to which it is obligatorily assimilated. (This results in $\underset{i}{ }>\varnothing$ before $\underline{h}$ and V- initial verbs.)

Rule vi. Dual marker musi ( m ) or mupi ( $f$ ) is added to the end of the verb (which results in the usual change of final $\underline{u}$ to $\mathfrak{a}$, and movenent one syllable to the right of any glottal stop closing the penultimate syllable in the verb). Rule ii, above (tone change), also applies in the dual. e.g. 6?mitamusi "eat! (d1 ${ }^{14}$ ) (cf. hanusi a?mitG "you (dl) eat")

[^33]| 1?pinusi "go:" | (ef. hamusi i?pf "you gol') |  |  |
| :---: | :---: | :---: | :---: |
| hadapd?musi "singd" | (cF. | " | hadtrp( "you sing") |
| istmusi "eat meat" | (cf. | 11 | sut "you oat neat") |
| boto? ikhsmusi "swoepl" | (cf |  | boto? kht "you sweep") |
| ee?phi ikhtmusi "fishl" | (cf. | " | eepphi khi "you fish") |

Rules iii and iv, above, apply also in the dual.
e.g. (Rule iij)
tua iižGusi "jump!" (cf. hanusi tua ya "you junp")
(Rule iv)
hifparausi "washb" (cf. " hipd "you wash")

It is noted thot -nusi/-mupi canot precode the reflexive:hisptphaavanusi "wash yourselvesf" (cf. hanusi hiptphaava "you wash yourselves")

## (iii) Plural.

Rules ii-v, above, apply. No suffix is added. Thus, when i $>\varnothing$, the plural imperative may be homophonous with the unaffixed form of the verb, or differentiated from it only by tome. e.S. a?mith "eatb (p1 15)" (cf. a?mita "to eat", hars a?mitto "you (pl) eat")

$$
\begin{array}{r}
\text { 1?p1 "go!" (cf. i?pi "to go", ha?s i?pf } \\
\text { "you go") } \\
\text { hada?ph "sing!" (cf. hade?pa "to sing", ha?t hada?pa } \\
\text { "you sing") }
\end{array}
$$

[^34]```
išG "eat meat!" (cf. ha?s ša "you eat meat")
boto? ikht "sweepl"(cf. " boto? khG "you sweep")
ee?phi ikh{ "fish!" (cf. " ee?phi kh& "you fish")
tua iiž̌ "jump!" (cf. " tue 况 "you junp")
hilpG "wash!" (cf. " hip& "you wash")
hilptphavva "wash yourselves!" (cf. ha?& hipkphava
    "you wash yourselves.")
```


### 3.1.2.6.1.2. Negative.

The negative imperative may be derived from the affirmative imperative, above, by addition of the negative imperative clitic $\{-m a ? u\}$ (which changes a final $\underline{u}$ to $\underline{a}$, and moves one syllable to the right any glottal stop closing the penultimate syllable).
3.1.2.6.1.2.1. Allomorphs of the Negative Imperative Clitic. $\{-\operatorname{maru}\}^{16}:-\operatorname{ma} u \sim-\mathrm{m}^{2} \times-\mathrm{a}$ : ?

## a) -max u

This occurs inmediately following leht or (ii) Ju. ${ }^{17}$ Thus, it does not occur in the dual, since tho verb is then suffixed.
e.g. Singular Plural
"Don't sweepl" boto? pilkhtma?u boto? ikhtma?u
"Don't jump!" tua piižzma?u tua iiž6ma?u
$\overline{16}$ This clitic may also be used to indicate the desiderative, subject to the limitations indicated in 7.2.1.2.6.3.1., below. 17 And on all verbs with imporative directionals -- cf. 3.1.2.6.2.2., below.

## b) -ma

This occurs non-finally on the verb, or on the basic or other filler of the peripheral slot in the complex verb group. ${ }^{18}$
e.g.

Singular
"Don't works"
podo?maphaavú odo?máphaavámusi odo?maphaava
"Don't sweepl" boto?ma pikht botorma ikhsinusi boto?ma ikha ${ }^{19}$
"Don't jump!" tuamá piiža tuame iižanusi tuamk iižan ${ }^{20}$

## c) $-m a ?$

This occurs elsewhere i.e., finally on all verbs ${ }^{21}$ except kht and (ij) ye, and after -musi/-mupi on these verbs.

| e.g. | Singular | Dual | Plural |
| :---: | :---: | :---: | :---: |
| "Don't eatd" | parmitsma? | a?mitamusimat a | t? mittins? |
| "Don't gos" | pi?pinamas | i?pinanusimb? i | i? pinamk? 22 |
| "Don't toastl" | piktvo?me? | ikfv6?musimb? i | iktvo?ma? |
| "Don't sweep!" | --- | boto? ikh6musinf | 6? |
| "Don't jumpl" | --- | tua iižsmusina? | . --- |

In the last two examples, the dual forms are variants of
those exemplified under -ms.
3.1.2.6.1.2.2. Application of $\{-$ ma?u\} to verbs.

The above remarks concerning the allomorphs of $\{$-ria?u\} serve

[^35]simultaneously to illustrate the negative imperative of singular, dual and plural of most verbs, and only a few additional comments are necessary.

Rule vii. The negative imperative marker -nat? is added finally to the imperative of all verbs except kht and (ii) jén, to which -me?u is added, except in the dual after =musi/-mupi, when ma? is added. See examples in a) and c), above. Rule viii. When kht and (ii) Jit form part of a complex verb group, the negative imperative may be narked as indicated in rule vii, or by adding -ma? to the basic or other filler of the peripheral slot. See examples in b), above. Rule ix. The negative imperativo markor precedes the reflexive suffix. The form used is mt. See examples in b), abovo.
3.1.2.6.2. Diroctional Imperativo. hs with other verbal directional markers in Resfgaro, direction to or from may be indicated in the directional imperative, i.e., "go and..." or "come and ..."

### 3.1.2.6.2.1. Affirmative.

Person and number are marked as indicated for "Basic Imperative", in 3.1.2.6.1. In addition, the following rules apply: Rule $x$. The directional imperative may not be applied to directional verbs or other verbs with non-imperative verbal directional suffixes. ${ }^{23}$

23 cf. 3.1.2.4., rule iv, above.

Rule xi. Any verb stem final vowel other than $i$ becomes e. $i$ does not change. 24

Rule xii. Verb stem final vowel is lengthened.
Rule xiii. - ? kh "come and ..." or mi "go and ..." is added to the resultant form of the verb stem in singular and plural. Rule xive -ni is omitted when its occurrence after the verb stem would make it nonmfinal (i.e., in tho dual or when the verb bears the reflexivc suffix).

Rule $x v$. -?kif may be omitted in the dual only, when anbiguity with "go and ..." will not result, 25 except with kha and (ii) Yu, when it is always included.
e.g. "Come and ..."

|  | Singular | Dual | Plural |
| :---: | :---: | :---: | :---: |
| "... eat!" | parmitee?ka ${ }^{26}$ | a mitee(?kf)musi | a?mitce?kh |
| "... sing ${ }^{\prime \prime}$ | phadapee?kf | hadapee? ( $\mathrm{kk}^{\text {a }}$ ) mus | Thadapee?kd |
| "... eat meatl" | pišee?kf | išee(?kz)musi | išee?kt |
| "... play!" (< (?) meai, "to play") |  |  |  |
|  | pi?menii?ka | i?menii( ?k ${ }^{\text {a musi }}$ | i?moaii¢kt |

"... sweepd" boto? pikhee?kG boto? ilkhee?kkmusi boto? ikhee?kl

24 cf. verb word suffix Order 3, "Directional", in 3.1.2.4., rule $i_{1}$ above, and verb piece, section 5.1.2.2.1.(i), below. $25_{\text {The omission of }}^{-n 1}$, and occasionally of - ?kG, in the dual, while the verb stem final vowel remains long, accounts for the establishment of rulo xii instead of interpreting the im-

$26_{\text {Tonal }}$ change is due to tonal morphophonemics. cf. comment in Introduction, section 0.5., on scope.
${ }^{27}$ The stem glottal of hada?pu moves right one syllablo before suffixation and is assimilated to the glottal of - ?ki, when this occurs. Two glottals are not pronounced in tho dual when -?kG is included; the repetition of the glottal in the transcription of the example merely shows that when the whole of -2 k is deleted, a glottal remains, namely that of the stem.

```
"... jump!" tua pižeerka tua ižee?kamusi tua ižee?kt \({ }^{28}\)
"... work!" podee?taphavt \({ }^{29}\) odee?(?ka) phaavtmusi \({ }^{30}\)
odee?káphaavta
```

e.g. "Go and ...."

Singular Dual Plural
"... eat!" pa?miteeni a?miteemusi a?miteeni
"... sing!" phadápee?ni ${ }^{31}$ hadápee?musi hadapee?nf
"... eat meat!" pišeens išeemusi išeens
"... play!" pi?mening i?menimusi i?meniini
"... sweep!" boto? pikheens boto? ikheemusi boto? ikheen!
"... jump!" tua pižeens tua ižeemusi tua ižeens
"... work!" podee?phaava ${ }^{32}$ odee?phaavamusi odee?phaava

### 3.1.2.6.2.2. Negative.

The negative directional imperative may be derived from the affirmative directional imperative, above, by addition of the negative imperative clitic $\{-\mathrm{ma}$ ? $u\}$, as in 3.1.2.6.1.2., above. However, the distribution of allomorphs of this clitic is slightly different from that indicated there, and conforms to the following rules:
a) -ma?u

This occurs finally on all verbs containing an imperative
${ }^{28}$ The sequence ii becornes $i$ before the ee in the following syllable. ${ }^{29}$ Vowel change and suffixation affect stem only, as indicated in rules xii and xiii.
30 Footnote 27 , above, applies equally here.
${ }^{3 l_{\text {Glottal }} \text { belongs to stem. cf. footnote } 27 \text {, above. }}$ 32 cf. rule xiv, above, on omission of $\underline{n} 1$.
directional.
o.g. "Don't come and..."


## "Don't go and..."

"... eat!" pa?miteema?u 33 a?miteemusima?u a?mfteema?u
"... eat meat!" pišecma?u iseemusima?u išeema?u
"... sweepl" boto? pikheema?u boto? ikheemusima?u
boto? ikheema?u
"... jumpl" tua pižeema?u tua ižeemusina?u tua ižeema?u
"... work!" podee?phavatma?u odee?phavstmusima?u
odee?phantma?u

## b) -ma

This occurs elsowhere, in the alternative forms of some verbs that are possible in some casus, as in the following examples:"Don't come and ..."
"... sweepl" boto?ma pikhee?kG boto?má ikheerkamusi
boto?ma ikhee?kt

[^36]
## "Don't go and....""

"... sweep!" boto?má pikheeni boto?má ikheemusi
boto?ma ikheen
"... work!" podee?maphaava --- --

The paradigm is incomplete, since not all possibilities are realized. Instead of dual and plural of negative directional imperatives, it is preferred to use the complex verb piece, with the negative imperative on the auxiliary verb, as in 3.1.2.6.1.2.2., above.
e.g. ode?nephaavt i?pinamusimb? "Don't you (dl) go and work!" tua Jene itsfna?mf? "Don't you ( pl ) cone and jumpl" As an alternative to indicating the negative imperative on the auxiliary verb, it may be added to the verb in the Head slot of the complex verb piece:ode?nephaavand i?pi "Don't you (pl) go and worlc!" boto? kheaema itsana?musi "Don't you (dI) como and swuep!"

For further details of tho verb piece, of. 5.1.2.2.1., below.

### 3.1.3. Distribution.

The members of the class of verb words are diatributed in the nucleus slot of the verb group. Sub-classes of verbs are set up on the basis of this distribution.

## Sub-class 1.

This sub-class has nino members, which occur in verb group types i and ii:
kht́ "to do, to make"

| (ii) Ja "to be" | pieko "to throw away" |
| :---: | :---: |
| t8? ( $v a)$ "to obtain" | a?pithooti "to cause to bathe" |
| i?toma "to be standing | i? vote "to cause to dry" |
| up" | henota "to cause to be the |
| aa?ni "to give" | same" |

## Sub-class 2.

This sub-class consists of all othor verbs. These occur
in verb group type i only.
e.g. a?mitu "to eat"
i?pi "to go"
3.2. Noun Word.
2.2.1. Contrast.

Noun words ( Nn ) have the following contrastive-identificational features:-
i) Their Base slot is filled by a noun stem.
ii.) They typically co-occur with classifier, augnentative/ diminutive, number and restrictive nominal suffixes.

### 3.2.2. Variation.

Nouns are grouped into two types, according to whether or not they may bear Order 1 (classifier) and Order 3 (number) suffixes.
3.2.2.1. Noun Type i, "Simple".
$\mathrm{Nn}_{i}=+\mathrm{B}: \mathrm{NnSt}_{1} \pm \mathrm{sx} 2: \mathrm{aug} / \mathrm{dim} \pm \mathrm{sx} 4:$ rest
i.e., classifiers and number suffixes do not occur.

Two sub-types are distinguished:-

### 3.2.2.1.1. Sub-type i, "PIural".

This consists of noun stems which in their basic form are plural (sub-class 1.1).
e.g. apant "leaves"
na?1 "worns"
atsfáa "men"
Number suffixes may be added to these nouns if they are first singularized by addition of the appropriate classiffer suffix. But then the resultant forms are considered to be different words, belonging to the appropriate sub-type of type ii nouns. (There appears to be a semantic difference between basically-plural nouns, and those forms which result from the addition of a classifier and then the plurol number suffix, in that the former is a generic term, while the latter tends to be used with more specific numbers. 34

```
3.2.2.1.2. Sub-type ii, "Uncountables".
This consists of noun stens that refor to uncountobles (noun
stem sub-class l.2.).
e.g. petgi "starch"
    hooni "water"
```


## Occurrence with Order 2 and Order 4 suffixes:

```
e.g. aptnt-kobu leaves aug "big leaves"
```

[^37]```
na?i- %a?
worms dim "little worms"
matpa-y̌t?-atc
bees dim rest "only little bees"
```

3.2.2.2. Noun Type ii, "Complex".
$\mathrm{Nn}_{\mathrm{ii}}=+\mathrm{B}: \mathrm{NnSt}_{2} \pm$ sx 1:clsfr $\pm$ sx 2: aug/dim $\pm$ sx 3:nmb $\pm$ sx4:rest Four sub-types of noun type ii are established on the basis of co-occurrence with different allomorphs of the number suffixes. Since suffixes of Orders 1, 2 and 4 may occur with all these sub-types, they are described without reference to the sub-types, which are described in the presentation of the Order 3 suffix (number).

### 3.2.2.2.1. Suffix Order 1: Classifier.

Classifiers indicate the shape or other inherent characteristics of anything that may be referred to by a noun in Resigaro. Most classifiers may be added to a wide range of noun stems, modifying the meaning accordingly, Some classifiers, however, have a very narrow distribution, only being attested with one or two noun stems, which may not themselves occur with other classifiers. When the complete list of noun stems which may bear a given classifier is presonted, this is indicated by the abbreviation (C.I.) -- "Complete list". The complete list does not include all adjectives, numerals and demonstratives which may also bear the classifiers when in concord with a noun. Nor does it necessarily include nouns such as po "all", sf "other", which may boar all classifiers. It
is also possible that further data might revoal that some lists indicated as complete were not, although probably nearly so.

When the use of a classifier is widespread, the letters "(C.I.)" are absent, and further examples will bo discoverod in the lexicon, and throughout the thesis.

Sometimes a classificr may be optionally omitted from a stern, in which case the abbreviation (M.O.C.) -- "May omit Clossifier" -- appears after the example in question. This applies only to the singular form, since the classifier must appear in the dual and plural (except in the casc of "axm", of. -?aapi, below).

As indicated above, classifiers also have the effoct of singularizing any noun stem which in its basic form is plural. They may be followed by dual and plural number suffixos, as indicated in 3.2.2.2.3., bolow.

Where possible, the form of the noun with tho classifior is contrasted with the form without it (if tho classifier may be omitted), or with a form with onothor classifier. In a few cases where the noun nay not occur without the classifiox, and this only occurs on tho one noun, tho morpheme-break botween the stem and the suffix is detominod by roference to 2. numoral or other word bearing the same classifier suffix.

```
-bsba "that which belongs to something" 35 (C.L.)
    -hii?pl "foot" : hii?pababl "sock, stocking"
    -hiveG "head" : hívebabt "pillow"
```

-baht "uninhabited part of the jungle" (C.I.)
tsbahk "uninhabited part of the jungle"
hibaha "this uninhabited part of the jungle"
-bh i) "made of liana cord"
e.g. hamakable "hammock" (M,O.C.)
kamo?bl "basket made from liana cord" (Mi.O.C.)
ii) "a felled tree"
e.g. hakja?s "trunk of the huacrapona ( $=$ yaripa) tree,
standing"
: hasjabe "(ditto), cut down"
ta?aka?e "trunk of the Annona muricata tree, standing"
: ta?akabl "fruit of the same tree,
cut down"

- do "female" ${ }^{36}$ (C.L.)
nagi "brother (of br.)" : ndad6 "sister (of sis.)"
-gaapž6 "raft, florting thing"
e.g. avsana?e "tree trunk" : avtanagaa?ž8 "raft"
-gahk "above" (C.L.)
1aia "eye" : 1aigaht "eyebrow"
tegah́ "hill"

[^38]```
-g1 "human, male, and all non-humen animetes"
e.g. atska "men" : atstagi "man"
    phaipije "old woman": phaigi "old man"
anobgi "ttapir"
-gh "long and flat"
e.g. -kt "hand" : -kegf "finger"
    -hii?p| "foot" : -hii?págł "toe"
    boe?khootsigf "paddle, oar" (M.O.C.)
    va?agh "machete"
```

-h1 "round and flat"
e.g. kopaagl?amf "paper money" (usually una libra, i.e.
10 soles)
: koptagihi "a coin" (usually l sol)
hadd "land turtles": haddahi "land turtle"
bo?otshi "a plate"
hipohi "land, earth" 37
-ha i) "long and flat -- horizontal"
e.g. Simk "to sleep" : mobtsihf "bed"
pagiak "to spread out a blanket"
: paginootsihú "a blonket"
pansitsiht "a house" (M.O.C.)
3Yyaag1 "big" (of people) : J̌î̃achk "width"

[^39]```
ii) "speech"
e.g. -n6 "mouth" : n6hl "language, word" nobtsina "word"
hada?phootsi "songs" : hada?phootsiht "song"
šoone 预 "to deceive": šoठht "a lie"
Bkoniigi "a fire" : Bkoniigiht "rifle" ("a voice of fire, or a fire that speaks")
-hug1 "path" (C.L.)
aǰaphugí "a pathi (M.O.C.)
sthugi "one (path)"
```

```
-1 "stick-like"
```

-1 "stick-like"
e.g. av*ana?e "tree trunk": aváana1 "a stick"
na?£ "worms" : na?i1 "a worm"
tho? kht "to grind" : tho?khootsif "a pestle"
-kaavai "shin"
-11?0 "long and oval-shaped" (C.L.)
-henak% "ear" : -hendkois?o "horn"
-j推l "dust"
e.g. blobniigi "a fire" : 6koniigiǰht "ash"
hipohi "earth" : hipojink "dust"
iftshinG "sugar cane": iftshiyinG "granulated sugar"
-jii?8 "stringy"
e.g. hive?tsi "crown of the head": hive?J̌ic% "long hair"
ponetma:e "trunk of the hungurahui palm tree"
: pono.{m5```ii?6 "tocuma" (the

```
- krandd "watering-place" (C.I.)
\[
\begin{aligned}
\text { i?de "to drink" : } & \text { i?dkaa?d6 "watering-place" } \\
& \text { (where wild animals drink) }
\end{aligned}
\]
-k 6 "a thick stick" (C.L.)
iftshi ĵfha "granulated sugar": iftshiks "wild sugar cane"
```

-kooms "village" (C.I.)
paniitsi "house" : panitsim0koomi "a village,
a hamlet"
sakoomf "one (village)"
-koo?k "broom" (C.I.)
boto? khf "to sweep" : boto?kho\deltatsikoo?k "a broom"
panonobtsikoo?\& "a broon"

```
-kuba "leg" (C.L.)
    -1phi "thigh" : -iphikuba "leg"
    -hii?pa "foot" : -hii?pakuba "leg"
-mi "canoe" (C.L.)
    histami "a canoe" (M.O.C.)
    stmi "one (canoe)"
-mí?o "skin (-like)"
e.g. -hensk6 "eax" : samit?o "one (ear)"
    etmk "skin, hide" : efmarail?o "skin, hide" (M.O.C.)
```

-moki "dead"
e.g. atskag1 "man" : atstamoki "dead man"
-mG "tube-like"
e.g. iftshiẙht "gronulated sugar" : iftshima "sugar cone"
vaknam\& "bamboo"
sam{ "one (drum, etc.)"
_paahi "hollow"
e.g. hive?Gsi "crown of the head" : hive?panhi "skull"
-pa\{ "field" (C.I.)
Jakbdepay1 "fjeld" (M.O.C.)
sapaji "one (field)"
\#obk% "honey" (C.I.)
fmu?8 "beehive, honeycomb" : i{mu?opsk\& "honey"
-p{si "ring"
e.g. -hentk6 "ear" : hentkopasi "earring"
-ks "hand" : keptsi "ring (on hand)"
-ini\& "eye" : SmipksI "spectacles"
-pek6 "day"
e.8. pSpek6 "every day, always"
h{pek6 "last night"
sipek% "the day after tomorrow" (Jit., "the other day")
-p1 "liquid" (countable)
e.g. ड̌akoo?g1?6 "a banana": sokoo?gipi "a drink mado from
bananas"

```
```

i?dG "to drink" : i?dobtsipi "a drink" (N.O.C.)
Emik "eye" : {mipi "a tear" ([thLo])

```
-piste "human female"
o.g. phaigi "old man" : phaipiñt "old woman"
    heeveri kht "to study": heeve?ikhotsopist "a female
                                    student"
-tu? "foot" (C.L.) \(^{\text {( }}\)
    -hii?pstu?s "foot" (M.O.C.)
    situra "the other (foot)"
    satu?s "one (foot)"
-tsi?aa?d8 "shoe" (C.L.)
    -hii?pt "foot" : hii?pstsi?aa?d6 "shoe"
- A "spherical"
e.g. Smipasi "spectacles" : -init "eye"
    -vaf6 "interior, stomach": -vaf6G "heart"
    ofíint "yams" : ofiináa "yem"
Any stem-final glottal is deleted before addition of this
classifier.
e.g. -hive?paahi "skuli" : hiveG "head"
-uu?d "a part of" (C.L.)
    maa?mi "cassava" : maa?mau?a "a piece of cassava"
-uu? 6 "rope-like"
e.g. e-iipi "liana" : epiip\{up? "liana cord"
                                kombtrauu? 8 "vein"
```

-vuuda "log"
e.g. avbanare "tree trunk" : avtonavuudf "a log"
bkbniigi "fire" : \deltakbniig{vuuda "a burning piece
of wood"
-?aam{ "leaf-like"
e.g. aphnt "leaves" : aptnt?acmi "a leaf"
koptagini "a coin"(usually I sol) : kopkagi?ammp
"paper money" (usu. una libra)
ts?aamS "book, notebook"
-?aonk "liquid" (uncountable)
e.g. -i?nimG "nipple" : i?nf?aanG "milk"
nonkank?8 "pineapple" : nontant?aank "pineapple juice"
-?aup5 "arm"(C.I.)
This suffix is not added to the noun for arm (-a?nsapf),
probably to avoid the repetition of syllables that would
result, but to certain numbers, demonstratives, etc., rofer-
ring to the arm, and to nouns referring to things that aro
arm-like in shape.
e.g. så?anpi "one (arm, ete.)"
-vtai "back" : -vtal?aapi "backbone, spinal
column"
-?aav1 "side of"
e.g. te6?1 "a river" : te\&?1?aavi "river bank"
-n6 "mouth" : -n6?aavi "lip"
-inik "eye" : -imiraavi "eyelashes"

```
```

-?abaú "shoulder" (C.L.)
-vaakb?aba| "shoulder" (M.O.C.)
sa?aba{! "one shoulder"
-?apo "short cut" (C.L.)
tee?{ "river" : tee?i?apo "short cut overland
avoiding a bend in the river"
-?Ss1 "central place"
e.g. hive?yii?0 "long hair" : hive?s,si "the crown of the
head" (The initial glottal
of the classifier fuses with
the final glottal of the stem)
anobgi "tapir" : anobgsocsi "central place in
the jungle where the tapirs
gather"
-?E "trunk of a tree"
e.g. avsonal "stick" : avkana?e "troe trunk"
pipiigia "fruit of the Guilelma : pipiigi?e "trunk of the
palm" Guilelma palm"
-?tha "hole in the ground"
e.g. hoonl "water" : hooni?cht "a well"
ts?ehu "a pot-hole"
-?ete "flower"
e.g. tshomastsh{?et* "cotton (on the plant)" (M.O.C.)
giivi?ete "flower" (i.O.C.)
-?1 "bunch"
e.g. šakoo?gi?8 "a banana" : šakoo?gi?{ "a bunch of bananas"

```
pipligik "fruit of the : pipiigi?s "a bunch of
Guilelma palm" Guilelma fruit"
-?iik6 "a new shoot"
e.g. nantana?b "a pineapple" : nandana?iikt "a now shoot on a pineapple plant" sk?iik6 "one(new shoot)"
-?150 "earthenware container for liquid"
e.g. itsaa?ni?@ys "earthenware pitcher, pot"
tansa?1j6 "cup" (from Sp. taza "cup")
sa?1jo "one (cup, pot)"
-?1pi "machine" (C.L.)
kon6ogi "rubber" : konbogi? 1pi "sewing machine"
-?8 "longish and oval-shaped"
e.g. Sakoo?gi?s "a bunch of bananas"

> : šakoo?gi?b "a benana"
> \(\begin{gathered}\text { cherkel "round-shaped } \\ \text { maraca" }\end{gathered}\) veske?ke? 0 "oval-shapod maraca"
> ves "naize, corn"
? ?oohk i) "metal or tin container"
e.g. vatshoठtsf?oohf "tin pot or pan"
sf?oohk "one (tin pot or pan)"
ii) "a room"
e.g. vadrva khf "to carry on a business"
: vad8v8?ooht "a shop"
hiponk "to tie up, to : hiponoठtsi?oohk "a prison"
take prisoner"
```

-?oots1 "lungs"
e.g. -vafbe "heart" : -vafb?oots{ "lungs"
-6?k\deltatsapi "throat : -6%k\deltathapi?ootsi "gills (of
(outside)" a fish)"
-?os1 "hand" (G.I.)
-kE?os1 "hand" (M.O.C.)
sf?osi "one (hand)" (= "five")
-?am\& "face" (C.I.)
masni "tar" : masni?tmi "a mask"
sa?lma "one (face, mask)"

```
3.2.2.2.2. Suffix order 2: Augmentative/Diminutive.
-kobu "augmentative"; -J̌? "diminutive"
e.g. J̌ânf "child": Jaanákobu "big child"; J̌aána-J̌a? "little
                                    child"
ket?še "cow": kee?st-kobu "big cow"; ket?še-jus "little
                                    cow'
-1phimkuba "leg": -1phimkuba-kobu "big leg"; -1phi-kuba-ja?
    NnSt clsfr NnSt sx 1 sx \(2 \quad\) NnSt sx 1 sx2
                                    "little leg"
va?a-gk "machete": va?a-ga-kobu "big machete";
    NnSt clsfr NnSt sxl sx 2
                                va?a-ga- ja? "knife"
Nnst sxi sx 2
3.2.2.2.3. Suffix order 3: Number.
Co-occurrence with different allomorphs of the number suffixes
requires the establishment of four sub-types of noun type ii,
as indicated in the following table:
\begin{tabular}{|c|c|c|}
\hline Noun sub-type & Dual & Plural. \\
\hline ii.i "Human" \({ }^{\text {m }}\) & \begin{tabular}{l}
-musi \\
mupi 38
\end{tabular} & -ne \\
\hline ii.ii "Non-human animate" & -musi & -mu \\
\hline ii.iiii "Body parts" & \{-k6\} & \(\{-n\}\}\) \\
\hline ii.iv. "Classifier nouns" & \{-kti\} & \(\{-\mathrm{h}\}\}\) \\
\hline
\end{tabular}

Table 3.1. Comoccurrence of allomorphs
of Number Suffixes with Noun sub-types.

The names assigned to the sub-types of noun words are merely convenient notional titles corresponding to the major number of members of each sub-type. They do not determine the membership of each sub-type, which is dependent on structural grounds (cf. Lyons, 1968:318).

Sub-type iv ("Classifier nouns") consists of all nouns (except atsagg "man", nagi "brother (of brother)" and nado "sister (of sister)") bearing a classifier, and therefore includes some nouns referring to people, to nonmuman animates, and to body parts. If the classifier may be omitted without affecting the meaning, these nouns may form the dual and plural

\footnotetext{
38
The dual forms -musi and -mupi may be analyzable into -mu-"non-singular" (identifiable with plural -mu) and misi masculine dual", -pi "feminine dual", and this -pi may beidentifiable with -pije "feminine classifier", though the relation between -si and -gi "masculine human and non-human animato classifier is not clear. Since such an analysis is not particularly revealing (and also irmplies analysis of -pije as -pi- "feminine" + -je "? ?"), it is not adopted here. However, such postulated forms may correspond to clearly identifiable morphemes in related languages. I believe Thiesen does identify similar morpheres in Bora (in his MS on Bora Morphology).
}
with the appropriate number suffixes corresponding to subtypes i, ii and iii. Thus, phai-pfet "old woman" may omit the classifier and form the dual with -mupi: phaimupi, or may retain the classifier and form the dual with \((\underset{-}{(k q)}\) ): phaipiyeekt. It has only one plural form -- phaipijehi --, since phaine would be homophonous with the masculine plural without the classifier (from phaigl "old man").
3.2.2.2.3.1. Noun Type ii, Sub-type i, "Human".

The Base slot is filled by a noun stem of sub-class 2.l.
Suffixation is in accordance with the following rules:-
1) Dual: add _musi (masc) / mupi (fem)
2) Plural: Stem \(\ldots \operatorname{VVCV}(V)>\ldots \hat{V C V}(\vec{V})+\underline{n}^{39}\)
e.g. Singular Dual Plural
"brother \(\quad\) (of brother)" nagi naginusi \({ }^{40}\) nagine
"chieftain" ke?viikagi ke?viiktmusi ke?vfkane
If the stem is a vocative, the changes of tone and vowel
length indicated in rule 2), above, do not occur.
\begin{tabular}{llll} 
e.g. & Singular & Dual & Plural \\
\begin{tabular}{l} 
"father" (of \\
son or daughter)
\end{tabular} & af?pe at?pemusi af?pent & at \\
\begin{tabular}{l} 
"brother" (of \\
brother)
\end{tabular} & maube mabemusi mabene
\end{tabular}

\footnotetext{
39 In these rules, the sign + is used to mean merely "add".
\({ }^{40}\) Exceptionally, the classifier -gi is retained with this word, as indicated above. The following word shows it deleted. \({ }^{47}\) Or "son" (of father or mother). Terms of address between parent and offspring of the same sex arc used reciprocally. (Wesley Thiesen informs me of a sirilar usage among the Boras.)
\(42_{\text {Sten-final tone }}\) lowered in accordance with general tonal norphophonemics.
}
3.2.2.2.3.2. Noun Type ii, Sub-type ii, "Non-human animato". The Base slot is filled by a noun stem of sub-class 2.2. Suffixation is in accordance with the following rules:-
1) Dual: Stem ...CV(V)?CV \(>\ldots \mathrm{CV}(\mathrm{V}) \mathrm{CV}\) ? + -musi
2) PIural: Stem \(\ldots C V(V)(?) C V^{43}>\ldots C V(?) C \hat{V}+\underline{-m u}\)
\begin{tabular}{|c|c|c|c|}
\hline e.g. & Singular & Dual & plural \\
\hline "hummingbird" & pi?mi & parmimusi. & pi?mimu \\
\hline "tapir" & anobgi & anotgimusi & axogimu \\
\hline "iguana" & maxñả? & manñ \({ }^{\text {a }}\) Omusi & maaña? \\
\hline
\end{tabular}
3.2.2.2.3.3. Noun Type ii, Sub-type iii, "Body Parts".

The Base slot is filled by a noun stem of sub-class 2.3.
Only those nouns referring to body parts and not bearing a classifier form the dual and plural with the allomorphs described here.

Suffixation is in accordance with the following rules:-
1) Dual: Stem + fka ~ =sk
2) Plural: Stem + fnt - - ?nt

Ekh/Zkt and Ene/i?ne vary morphophonemically, choice of allomorph being dependent on the preceding noun stem. Dual and

\footnotetext{
\(43_{\text {In }}\) th on the symbol \(V\) indicates that the tone may be high or low, \(f\) indicates that the tone must be high, and \(V\) indicates that the tone must be low.

Likewise, \(C\) has its normal meaning ("any consonant"), except that if? closos the penultimate syllable of the stem, the \(C\) that occurs initially in the final syaloble can only be one of those consonants attested after? (cf. part I, section 2.3.2., above). If ? does not occur here, the \(C\) in the final syllable may be any consonant, including?
}
plural forms of nouns are therefore indicated where possible in the lexicon (Appendix I).
\begin{tabular}{lcll} 
e.g. & Singular & Dual & Plural \\
"face" & -nigi & -nigikt & -nigint \\
"nose" & -hitak6 & -hitakookt & -hitakoone
\end{tabular}
3.2.2.2.3.4. Noun Type ii, Sub-type iv, "Classifier Nouns". The Base is filled by any noun stem to which a classifier has been added (with the exceptions indicated above) (i.e., ster submclass 2.4). This includes nouns referring to animates, both human and non-human, and to body parts, as well as all other nouns that can be dualized and pluralized. It is therefore the largest sub-type of nouns, including more than half of the nouns in the language.

Suffixation is in accordance with the following rules:-
1) Dual: Stem ...CV? > ...CV + fki ~
2) Plural: Stem ...CV? > ...CV + Shi ~ \(=\) :hi
 morph being dependent on the preceding noun stem. Dual and plural forms of nouns are therefore indicated where possible in the lexicon (Appendix I).
e.g. Singular Dual Plural
"chieftain" 44 ke?viiktgi ke?viiktgiikG ke?viiktgiihi
"bee" 45 mápagł maápagitika maapagiihs

\footnotetext{
\(\overline{44}\) Human animate with classifier. of. examples for type \(i\), above. \(45_{\text {Non-hunan }}\) animate with classifier.
}
\begin{tabular}{|c|c|c|c|}
\hline & Singular & Dual & Plural \\
\hline "toe" \({ }^{46}\) & -hii?pagh & -hii?ptgrakt & -hii?ptgaahq \\
\hline "knife" & va? \(\mathrm{g}_{\text {gaju }}\) & va? agajaalkt \({ }^{47}\) & varagajaahi \\
\hline "cup" & taasa?130 & teasa? i.jok \({ }^{48}\) & taasa?i \({ }^{\text {che }}\) \\
\hline
\end{tabular}

\subsection*{2.2.2.2.4. Suffix Order 4: Restrictive. \\ -ak - -nt "restrictive"}

The two forms vary freely.

ii) ket?šemusi-ma \(\mathrm{NnSt}_{2.2} \mathrm{sx} 3\) sx4 "only two cows"
iii) -hii?pa -
\(\mathrm{NnSt}_{2.3}\) sx 4 "only a foot"
iv) va?a-ga - Jaaku-at \(\mathrm{NnSt}_{2.4} \mathrm{sx}^{\mathrm{sx}} \mathrm{sx} 2-5 \times 3 \mathrm{sx} 4\) "only two knives"

\subsection*{3.2.3. Distribution.}

The members of the class of noun words are distributed in the Head slot of Noun Phrases, and in the Vocative tagmene slot at Clause level. Sub-classes are set up on the basis of this distribution.
3.2.3.1. Sub-class 1, "Temporal".

This consists of all nouns referring to time, which are dist-
```

46 Body part with classifier.
47This illustrates presence of suffix orders one (classifier),
two (diminutive) and three (number).
48}\mathrm{ The tone of the antepenultimate syllable hore becomes low,
since sequences of three high tones do not occur (except in
very rare cases).

```
```

ributed in $N P$ type ii.
e.g. nokbtsa nook6 ter?1-koo no?pi
yesterday afternoon river-to I-go
"Yesterday afternoon I went to
the river"
$\left(N P_{i i}-\right.$ of. 6.1.2.2.2., below)
3.2.3.2. Sub-class 2, "Vocative".

```

This consists of all nouns of address, which level-skio and are distributed in the Vocative slot at Clause level.
e.g. čhbmi, vée pitsta?
\(\frac{\text { sister }}{V: \mathrm{Nn}_{2}}\) here you-come "Sister, come here"
(Vocative tagmerme -- cf. 7.1.2.12., below)

\subsection*{3.2.3.3. Sub-class 3.}

This consists of all nouns not accounted for above, i.e., the vast majority of nouns in the language. These are distributed in the Head slot in NP type i. Different lexical categories of sub-class 3 nouns are established, according to whether or not those nouns may co-occur with the Limiter tagneme in \(\mathrm{NP}_{i}\), and, if so, whether that occurrence is optional or obligatory.
3.2.3.3.1. Category 1, " + Limiter".

This category consists of four groups of nouns: kinship terms, body parts, nouns referring to things conceptualized as parts of a whole, and nouns that undergo certain changes (apart from those caused by assimilation) when possessed.

\section*{3．2．3．3．1．1n Kinship terms．}

All kinship terms of reference（i．e．，not vocatives）are
included in this category．
e．g．Hoaa naagi＂John＇s brother＂
phanigi＂your father＂（＜pha hanigi4）

\section*{3．2．3．3．1．2．Body Parts．}

All nouns referring to body parts are included in this categ－ ory．Here，the term is used to determine the membership of the set，and not as in section 3．2．2．2．3．，above．Thus，un－ countables such as－iida＂blood＂and nouns formed by derivation with classifiers，but which nevertheless refer to body parts （or components），such as－hii？pgg＂toe＂，are included here． e．g．giidG＂his blood＂（＜tsa iidG） noo？pagt＂my toe＂（＜ms hii？pagi）

\section*{3．2．3．3．1．3．＂parts of Wholes＂．}

It is difficult to find an appropriate cover term for this group of nouns obligatorily possessed（or maxked for deixis）． These nouns refer to objects conceptualized as parts of a whole．The following examples clarify the meaning of this term．
e．g．daspa＂residue，crumbs＂（＜tsk abpa，Lit．＂its residue＂）
\[
\begin{aligned}
& \text { c..iivđ "centre" (く tsa hiiva, Lit. "its centre") } \\
& \text { čimiu "seed" (く tsahmia, Lit. "its seed") } \\
& \text { gipagia6 "nest" (< tsk psgin6, Lit. "its neet, cover") }
\end{aligned}
\]
\({ }^{49}\) For assimilation of pronouns，cf．3．3．2．，below．
3.2.3.3.1.4. Radical-changing Nouns.

This group consists of the "possessed" allomorph of those nouns that change either
i) a derivational suffix
or, ii) the stem itself
or thatiii) add a morpheme
when possessed, but not when marked by deixis.
3.2.3.3.1.4.i. Change of Derivational Suffix.

The nouns in this section are those that include in their derivation a complex noun stem, sub-type i ("Concrete Nominalization"), consisting of a nominalized verb group, as described at stem level in II.2.2.2.2.1., above. When these nouns are possessed, nominalizer -itsi \(>=\) nf (in which the \(\underline{u}\) becomes a before further suffixes). e.g. a?mithootsi "food, a meal" ; do?mithoonk "her food, meal"
boe?khobtsigh "paddle" ; piboe?khobnagu "your paddle"

There are a very fow exceptions:
a) tho?khobtsigl "mortar, bowl i \(n\) which yucca is ground" This remains unchonged when possessed.
b) tho?khornagi "pestle for grinding yucca" ka?foonagh "small wooden bourd used when moking cassava bread"

These remain unchanged, regardless whether or not possessod (perhaps in the first case to avoid homophony, and in the second by analogy to it).
c) \(-!t s i>-!k u\)

This change has only been observed for the following two nouns:
> i?kaxaniftsi "vomit"50 > gi?kananiझku "his vomit"
> konettsi "merchandise" \(>\) gikonesku "his merchandise"
3.2.3.3.1.4.ii. Stem Change.

Two types of sten change are distinguished:
3.2.3.3.1.4.ii.i. Vowel length movernent.

In the case of a few nouns with initial \(h\) and a long vowel in the first syllable, the length moves to the second syllable when the noun is possessed.
```

e.g. hiibl?e "coca" > č ibii?e "his coca"
hist\& "conoe" > čitito "his canoe"

```

But not all h-initial nouns with a long vowel in the first syllable change:-
e.g. hiivG "centre" \(>\) čiivG "(its) centre"

Thus, conditioning here appears to be lexical.
3.2.3.3.1.4.ii.ii. A special case.

The possessed form of paniltsi "house" is month. It is conceivable that this represents no more than a special caso of change of derivational suffix, - -tsi, - -nu, with the Base of the noun stem involved being *pa-, a verb in a verb group, as described in 2.2.2.2.1., above, the only irregularity being the addition of the syllable *ni- in the non-possessed form.

However, no verb group *pa hos been attested, nor has

\footnotetext{
50
Note irregular derivation from i?kbad "to vomit", with -nil. ( \(<^{*}\)-nim). ©f. 3.2.3.3.1.4.ii.ii, below.
}
a morpheme *ni- been observed in type ii sub-type i noun stems, with the exception of the irreguler i?kananiltsi, "vomit", where the morpheme is retained in the possessed


In the light of this, it seems best to consider that \{paniftsi\} is on irregular word in which the allonorph -padnh rust comocur with the Limiter tagme in the \(\mathbb{N P}\).

\subsection*{3.2.3.3.1.4.iii. Addition of a morphene.}

The small number of nouns that comprise this section add the norpheme \(\{-: 8 d 6\}^{51}\) when possessod. The form with this additional norpheme must co-occur with the Limiter tegnome in the NP. The following rules and examples clarify the variant manifestations of this morpheme.
1. If the sten has no long vowel, the suffix lengthens the vowel before it:
```

va?agayt? "mnife" > givo?aadegajft? "his knife"
kone? "bracelet" > dokonee?dens "hox bracelets"

```
2. If the sten has a long vowol, there is no addition of vowel length, but the existing vowel length moves right one syllable (except as indicated subsequently):
```

    iteevi?6 "aguaje" > gi?teviide?\delta "his aguaje"
    avtanal "stick" > da?vonaa?teq "his stick"
    hee?ña "a type of
                cassava" > nosñaade "ny cassaval
    ```
\(51_{\text {Written }}\) thus since nowhere are all elenents of the posited morphene scen together. The nunerous allonorphs aro bost seen in the examples that follow.

This rule does not apply in the following two cases:
i) if the long vowel is in the last syllable of the sten: anoogi "a fish" \(>\) no?moode "ny fish" poo?gi "frying-pan" \(>\) dopoo?de "her frying-pan"
ii) if the long vowel is followed by a glottal in the stem: oe?phigk "fishing hook" > dee?phidegk "his fishing hook"
3. If the stom has a glottal, this causes the delction of the suffix glottal:
ec?phigh "fishing hook" \(>\) dee?phidegh "his fishing hook"
puofei "frying-pan" > dopoo?de "her frying-pen"
va?agayta "knife" \(\quad>\) giva?aadegaýa? "his knife"
But if the sten does not have a glottal, one is added to
the end of the first syllable of the sten:
amoogi "a fish" \(>\) normoode "my fish"
iteevi?8 "aguaje" \(>\) no?teviide?8 "my aguaje"
(In iteevi?e, the glottol is in the classifier suffix, not the sten.)
avamai "o stick" is slightly difforent, with a socond glottal inmediatoly before the added iorphene, in which the \(\underset{d}{ }\) is devoicod: da?vanaa?toi "his stick"
gkoniigi "fire" also has an extra glottal, but the rest of the added morpheme is not present, and the long vowel in the sten is shortened d8?koni? "his/her fire"
4. Classifiers and other word level noninal suffixes go
aftet the additional morphene, and are often deleted:
i) Nominal suffixes included:
\begin{tabular}{|c|c|}
\hline ce?phigk "fishing hook" & ) dee?phfdegu "his fishing hook" \\
\hline iteevi?o "aguaje" & \(\rangle\) gisteviidese "his aguaje" \\
\hline avtanai "stick" & > da?vonou?tei "his stick" \\
\hline vara-ga-ja? "knife" & > giva?ande-gamêt "his mifoll (shows sx orders 1 and 2) \\
\hline kono? "bracolet" & > dokonee?dens "her bracoletis" (shows sx order 3) \\
\hline
\end{tabular}
ii) Nominal suffixes deletod:
\begin{tabular}{ll} 
anoogi "fish" & \(>\) da?noode "his fish" \\
poogi "frying-pan" & \(>\) dopoo?de "her frying-pan" \\
okgniiģ "fire" & \(>\) dó?koni? "his/her fire"
\end{tabular}

\subsection*{3.2.3.3.2. Category 2, " - Limiter".}

This category consists of the basic, non-possessed allomorphs of all "radical-changing" nouns (those with a special form when possessed -- cf. Category l, above, fourth group (3.2.3.3.1.4.)).
a.g. a?mithobtsi "food, a mal"
koneetsi "merchandisu"
hiltú "canoe"
paniftsi "housc"
varagaju? "knife"

\subsection*{3.2.3.3.3. Category 3," "土 Limiter".}

This consists of all sub-class 3 nouns not accounted for in Catogories 1 and 2 abovo, i.e., most sub-class 3 nouns. e.g. phaigi "old man"
```

    ona{kb "snake"
    yodoosf1ga "watorfall"
    (For NP type i, cf. 6.1.2.2.1., below.)

```

\subsection*{3.3. Pronoun Word.}
3.3.1. Contrast.

Pronoun words (Pn) have the following contrastive-identificational features:-
i) Their Base is filled by a pronoun stem.
ii) They are typically assimilated to a following noun, verb, or relator, in accordance with a series of morphophonemic processes.

\subsection*{3.3.2. Variation.}

Pronouns are grouped into types, according to whether or not they are affected by assimilation at word level. \({ }^{52}\)

\subsection*{3.3.2.1. Type i.}

This consists of sub-class 1 pronoun stems, viz:
n6 list person singular
phu 2nd " "
tsli 3rd " " - masculine
tso " " " - feminine

\footnotetext{
\(52_{\text {This }}\) qualification is included, since those very pronouns which are not affected by assimilation at word level are the ones which consist of a pronoun root + dexivator at stem level, where the root has been subject to the same assimilatory processes in the context of the following derivator as those which are described here as occurring at word level in the context of a noun, verb, or relator.
}
```

ft lst person non-singular, inclusive
i. 2ni " " imperative
m 3rd "\#

```

With the exception of \(\underset{i}{ }\), these are optionally assimilated to a following noun, verb, or relator (or, at stem level, (in all cases except the first two and the imperative pronoun) to a pronoun stem derivator). 53

ذ "2nd porson non-singular, imperative" is obligatorily assimilated to a following verb. \({ }^{54}\) This assimilation is difforent from that of all the other pronouns, since this pronoun consists only of a vowel, without a preceding consonant, and since this pronoun also only occurs with a verb, and then only in the imperative. The assimilation is simply as follows:
\(i \quad\rangle \phi\) before \(\underline{h}\) - or \(V\)-initial verbs;
\(\pm\) does not change elsewhere.
```

e.g. ša "to eat meat" : i.ša "eat meat"" (pl)
ee?phi khG "to fish": ee?phi itchG "fish!" (pl)

```

\footnotetext{
\(53_{\text {lst }}\) person non-singulor exclusive, muu- and 2 nd person nonsingular hu- are also assimilated to a pronoun stem derivator at stem leval, but not to following nouns, verbs, or relators at word level. Apart from the usual change of \(u\) to a in the case of hu-, their assimilated form is the same as their nonassimilated form, sinco in assimilated voiceless consonants become voiced, and m is already voicod, while thore is no voiced counterpart to \(h\) in Resigaro. (cf. 2.3.2.2., above)
54 The varbal piece auxiliary indicator ma- "Privative" is also obligatorily assimilated to a following verb, but in accordance with the processes described for pronouns other than i. Examples are given bclow, in footnotes.
}
hads?pl "to sing" : hsda?pa "sing" (pl)
i?pi "to gol : 1?pi "gol" (pl)
(cf. 3.1.2.6.1.1.(ii),(iii), above.)

Pronouns that are assimilated are normally functioning as Subject at clauso level. e.g. no?mita
\(\xrightarrow[S-\frac{1}{I}]{I \text { eat }}\) "I eat"
S:NP-P:VP'

However, there arc at least two cases whero assinilation may oceur between a pronoun functioning as object at clause level, and the following filler of the periphery slot in the verb group:
i) no-manda gi-t6?

ii) notte gi-kha \(\frac{\text { ne-help he-do }}{O: N P-S: N P-P: V P} \quad\) "He helps me"
(cf. Verb Group, 4.1.2.2.1., and Clause, 7.2.1.2.3.1.1., bolow.)

\subsection*{3.3.2.1.1. Major Changes.}

For all pronouns except i, assimilation affects tho vowel and consonant of the pronoun, and the first syllable of the following word or relator. It may best be describod by dividing both pronouns and following words/relators into three phonological groups. These groups are not structural types in the usual sense, as a type of a given class at a givon
level, since they cut across classes and levels, but aro merely convonient groupings of pronouns and following words/ relators, based on phonological charactoristios and morphophonemic considerations.

The form of vowel assimilation is dependent on the pronoun group involvod (with some limitations in the onse of Consonant-initial following words/relators). The fom of consonant assimilation is dependent on the group of the following word/relator.

\section*{Pronoun Groups.}

The three pronoun groups are:-
Pron. Group \(I \quad\) : Koo" \(=\mathrm{Bb}\), tsb


\section*{Following Word/relator Hroups.}

The three groups of following word/relator are:-
Noun Verb Relator

Following word/rel Group I:
\[
\text { h-initial e.g. -hentk6 ha?pú mip6o } \begin{gathered}
\text { "ear" "to cross" "undor" }
\end{gathered}
\]

Following word/rel Group II:
\[
\text { V-initial e.g. -ii?šsúa a?nitt } \begin{gathered}
\text { "belly" "to eat" "boside" }
\end{gathered}
\]
\(\overline{55}\) Verbal Piece auxiliary indicator ma- may also be considered to belong to this group.

Following word/rel Group III:
\[
\text { c.-initial } 56 \text { e.g. }-\mathrm{vtai} \text { "back" "to sce" "to(wards)" }
\]

The intersections of the three pronoun groups with the throe word/relator groups yield nine types of assimilation, which are sumarized in the following matrix, and explained in the subsequent paragraphs.
\begin{tabular}{|c|c|c|c|}
\hline ```
Word/rel
    Groups
Pron.
Groups
``` & I: h-initiol & II: V-initial & III: C-initial \\
\hline \[
\begin{aligned}
& I: K_{0} \\
& (n \delta, t s)
\end{aligned}
\] & Ko & Ko & Ko \\
\hline \[
\begin{aligned}
& \text { II: K } \mathrm{O}_{1} \\
& (\mathrm{ph}, \mathrm{ts})
\end{aligned}
\] & KV & KV & Ki \\
\hline \[
\begin{aligned}
& \text { III: } K a_{2} \\
& (f u, n a)
\end{aligned}
\] & KV (ex i) & KV (ex i) & Ka \\
\hline
\end{tabular}

Table 3.2. Matrix showing realizations of co-occurrence between pronouns and following words/relators.

\section*{Notes:}
1. If the following word/relator is fron Groups I or II, the pronoun is fused with the first syllablo of thet word/ relator, and the first two colums of the matrix indicate the form of the resulting syllable.

\footnotetext{
\({ }^{56}\) In this context, this is to be understood as meening "consonant-other-than-h initial". The abbreviation will be used for convenience throughout this section.
}
2. If the following word/relator is from Group III, the assimilated forn of the pronoun precedes the unnodified first syllable of that word/relator. The third colum of the matrix indicates the form of the pronoun when assinilated.
3.
and \(T S=/ c /\) before \(/ i /\) and \(/ u /\) and /ts/ elsewhere
4. \(K=\left(\begin{array}{l}(n)^{58} \\ p \\ v\end{array}\right)\)
and \(D=/ g /\) before \(/ i /\) and \(/ u /\) and /a/ elsewhere
5. / / / /i/ and /a/ have their usual values.
6. \(V=a n y\) vowel, the vowel chosen in any given case being that of the first syllable of the following word or relator.

The normal effect on the consonant of the pronoun assimilated to a word or relator is to voice the voiceless consonant of that pronoun (except when the word/rel begins with an h ). But there is one exception to this: aspirated/ph/ loses its aspiration. For this reason, the symbols \(\mathrm{K}_{\mathrm{O}}\) and \(K\) have been used, instead of \(C\) and \(C\).

The apparently assymetric behaviour of \(/ \mathrm{ph} /\), the only aspirated conconant in this set, is of particular interest. It initially appears to be the one exception to all the rules proposed, but further investigetion reveals that this is not

\footnotetext{
57 贸, from VbPce aux ind man, also belongs to this set. \(58_{\mathrm{m}}^{\mathrm{m}}\), from Vbpee aux ind \(\underset{\text { ma- }}{ }\), also belongs to this set.
}
the sase. On the contrary, its behaviour demonstrates the speration of completely systematic rules and confirms tre value of the concept of Voice-Onset Timing, as develojed by Lisker \& Abramson (1964), as a phonological paraməter operating in a longuage.

In their study of initial stops in several languages, Lisker \& Abramson demonstrated that the production of voiced, voiceless, and voiceless aspirated stops can be described by referonce to the relation betwoon tho time of release of the stop and the voice onset time (VOT). For voiced stops in the languages they studied, they found thet voice onset may precede release ("voicing lead") by from approximately 140 millisoconds to approximatoly 30 milliseconds, depending on the language and certain othor factors. For voicoless stops, voice onset may follow rcleaso ("voicing lag'I) by from 4 to 34 milliseconds, depending on the same factors. Likewise, for voiceless aspirated stops, thoro may be a voicing lag of fron 59 to 98 milliseconds. Thus, aspiration and voice aro seen as not difforent types of phonetic features, but varying degrees of the same feature (VOT). 59

59 Kim has claimed (1970) that, for Korean, at Ieast, the presence or absence of aspiration is in foct duo to the degree of opening of the glottis at tho tine of reloase, and the resultant differonces of "tine it takes for the open glottis to close for the vibration of the following vowel' (p. 109) :
"What is controlled by the laryngeal muscles in the case of aspiration is not the tiring of the glottal

In an article in 1972, Roberts extends the concept of Voice Onset Tining to the parmeter of nasality, introducing the concept of Nasal Onset Timing (NOT), with inplications with regard to othor features. Roberts onphosisos that the value of the concept of Feature Onset Tining is in a large measure dependent on its usability in field situations for perceptual, as opposed to puruly instrumental, studios, and the Resigaro data under discussion illustratos this point.

When a pronoun is assinilated to a following word or relator (except one beginning with \(/ \mathrm{h} /\) ), a voicoless consonant in the pronoun becones voiced, and voiceluss aspirated /ph/ loses its aspiration. Both theso processos represent the operation of the same phonetic change: a decreaso in voicing lag.

It is significant that not only does the prosent data provide morphophonomic substantiation for Lisker \& Abramson's contention with regard to initial stops, but extends the vall-
closing (Lisker \& Abramson's view) but the size of the glottal opening (my view)." (p. 112)

However, this point is of relatively minor importance to the understanding of the relationship between voice and aspiration, as Lisker and Abramson point out (1971:770): aspiration is in either case dependent on VOT, regardless of the physiological manner of controlling this -- either by delaying the cominand to vibrate the vocal cords, or by not dolaying this command, but by widening the glottal opening to cause a delay in accomplishing it.
idity of VOT with reference to all consonant types within the Resigaro system -~ stop (ph), affricate (ts), fricative (f), and nasal ( \(n)^{60} \ldots\) both in initial and non-initial posi ition. 61

The decrease in voicing lag would be expected to change \(/ t s /\) to /dz/, however, this is slightly modified, being realized as \(/ \alpha /\). This may be attributable to the extremely infrequent occurrence of the phoneme \(/ \mathrm{dz} /\).
/ts/ and/d/ are further affected before a close vowel (/i/ or /u/), as indicated above, becoming \(/ \mathrm{c} /\) and \(/ \mathrm{g} /\), respectively.

Full details of essimilation are now given, with examples.
3.3.2.1.1.1. Pronoun Group I ( \(\mathrm{A} 8, \mathrm{ts}\) ). .
I. With Word/relator Group I ( \(/ \mathrm{h} /\)-initial \()\).

K○ \(+h V(V) \ldots>K \circ(0) \ldots\)
2. With Word/relator Group II (V-initial).
\[
\text { Ko }+\mathrm{V}(\mathrm{~V}) \ldots \geqslant \mathrm{Ko}(0) \ldots
\]
\(\overline{60}\) And /m/ in the Vbpce aux ind. \({ }^{61}\) cf. also examples of movement of VOT in the opposite direction -- increasing lag -- in noun derivation at sten level (section 2.2.2.2.1., above). Likewise, \(/ \mathrm{n} /\) in the final syliable of \(i\) ? \(p l(n a)\) is devoiced before addition of the causative. e.g. tsa-mi gi?pinota him-rec he-go-cstv past "He made hin go"
past
(cf. causative, \(2.1 .2 .2 .1 ., ~ a b o v e)\).
3. With Word/relator Group III (C-initial).
\[
\mathrm{K}_{\mathrm{O}} \mathrm{H} \mathrm{CV}(\mathrm{~V}) \ldots \quad>\operatorname{KoCV}(\mathrm{V}) \ldots
\]

Exanples.
Word/rel
\begin{tabular}{|c|c|c|c|}
\hline Group: & I: \(h V(V) \ldots\) & II: V \(V\) V) ... & III: \(\mathrm{CV}(\mathrm{V}) \ldots\) \\
\hline Noun: & \[
\begin{aligned}
& \text {-hentk6 } \\
& \text { "ear" }
\end{aligned}
\] & \[
\begin{aligned}
& \text {-iissau } \\
& \text { "beldy" }
\end{aligned}
\] & \begin{tabular}{l}
-vanis \\
"back"
\end{tabular} \\
\hline E6 & moncik6 & noo? Sta & novtit \\
\hline (lst p.sg.) & "my ear" & "ny belly \({ }^{\text {n }}\) & "my back" \\
\hline ts6 (3rd & tsontik6 & doo?sta & dovani \\
\hline p.sg., f.) & "her ear" & "her belly" & "her back" \\
\hline \multirow[t]{2}{*}{Verb:} & ha?pu & q?mitu & \[
\operatorname{tsh} \operatorname{con} 1
\] \\
\hline & "to cross" & "to eat" & "to see" \\
\hline 46 & no?pa & no?mita & notshenf \\
\hline ( lst p.sg.) & "I cross" & "I eat" & "I see" \\
\hline ts6 (3rd & tso?pu & do?mita & dotshen 1 \\
\hline p.sg., f.) & "she crosses" & "she eats" & "she sees" \\
\hline \multirow[t]{2}{*}{Relator:} & -hipoo & \[
-0 ? n 6
\] & \[
-k 60
\] \\
\hline & "under" & "beside" & "to(wards)" \\
\hline \multirow[t]{2}{*}{\[
\begin{aligned}
& \text { mb } \\
& (1 s t \mathrm{p} .5 \mathrm{~g} .)
\end{aligned}
\]} & zopbo & no?nt & nok60 \\
\hline & "under me" & "beside me" & "to me" \\
\hline ts6 (3rd & tsop60 & do?nd & dolr6o \\
\hline p.sg., if.) & "under her" & "beside her" & "to her" \\
\hline
\end{tabular}

\subsection*{3.3.2.1.1.2. Pronoun Group II (phe, tsa).}
.1. With Word/relator Group I ( \(/ \mathrm{h} / \mathrm{minitial}\) ).
\[
K a_{1}+h V(V) \ldots \geqslant K V(V) \ldots
\]
2. With Word/relator Group II (V-initial).
\(\mathrm{K}_{\mathrm{O}} \mathrm{I}+\mathrm{V}(\mathrm{V}) \ldots \geqslant \operatorname{KV}(\mathrm{V}) \ldots\)
3. With Word/relator Group III (C-initial).
\[
K_{\delta} a_{1}+\operatorname{CV}(V) \ldots>\operatorname{KiCV}(V) \ldots
\]
\begin{tabular}{|c|c|c|c|}
\hline \multicolumn{4}{|l|}{Examples.} \\
\hline \multicolumn{4}{|l|}{\begin{tabular}{l}
Word/rel \\
Group:
\end{tabular}} \\
\hline & I: \(\mathrm{hV}(\mathrm{V}) \ldots\) & II: V(V)... & III: \(\mathrm{CV}(\mathrm{V})\) \\
\hline \multirow[t]{2}{*}{Houn:} & -henaks & -ii?šak & -v5as \\
\hline & "ear" & "belly" & "back" \\
\hline \multirow[t]{2}{*}{\[
(\text { pht }
\]} & phentrs & piisšat & pivsin 1 \\
\hline & "your eax" & "your bolly" & "Your back" \\
\hline \multirow[t]{2}{*}{\[
\begin{aligned}
& t s u(3 \mathrm{rd} \\
& \mathrm{p} \cdot \mathrm{sg} \cdot, \mathrm{~m} .)
\end{aligned}
\]} & tsensk6 & gii?šát & givtias \\
\hline & "his ear" & "his belly" & "his back" \\
\hline \multirow[t]{2}{*}{Verb:} & haspu & a?mita & tsheri 1 \\
\hline & "to cross" & "to eat" & "to see" \\
\hline \multirow[t]{2}{*}{\[
\left(\frac{\text { pha }}{\text { (nd p.sg. }}\right.
\]} & pha?ph & papmita & pitsheng \\
\hline & "you cross" & "you eat" & "you see" \\
\hline \multirow[t]{2}{*}{\[
\begin{aligned}
& \operatorname{tsG}(3 \mathrm{rd} \\
& \mathrm{p} \cdot \mathrm{sg} \cdot \mathrm{~m} . \mathrm{m}
\end{aligned}
\]} & tsa?pu & do?mitu & gitshens \\
\hline & "he crosses" & "he eats" & "he sees" \\
\hline \multirow[t]{2}{*}{Relator:} & -hip6o & -a?na & -k80 \\
\hline & "under" & "beside" & "to(wards) " \\
\hline \multirow[t]{2}{*}{\[
\frac{\text { phe }}{\text { (2nd p.sg.) }}
\]} & phip6o & & \\
\hline & "under you" & "beside you" & "to you" \\
\hline \multirow[t]{2}{*}{\[
\begin{aligned}
& \operatorname{tsk}(3 \mathrm{rd} \\
& \mathrm{p} \cdot \operatorname{sg} \cdot, \mathrm{~m} .)
\end{aligned}
\]} & čipoo & datnt & gin5o \\
\hline & "under him" & "beside him" & "to him" \\
\hline \multicolumn{4}{|l|}{Further examples show (TS) realized as /č/ and (D) as /g/} \\
\hline \multicolumn{4}{|l|}{before /u/:} \\
\hline \multicolumn{4}{|l|}{tş + hutoobąžb? "Banisterium" > čutooba?ž6? "his Banistcrium"} \\
\hline \multicolumn{4}{|l|}{tsú + uni "saliva" > guni "his soliva"} \\
\hline \multicolumn{4}{|l|}{3.3.2.1.1.3. Pronoun Group III (fa, af) \({ }^{62}\)} \\
\hline \multicolumn{4}{|l|}{.1. With Word/relator Group I (/h/-initial).} \\
\hline \multicolumn{4}{|l|}{\(\mathrm{Ka}_{2}+h V_{1}\left(V_{1}\right) \ldots>\mathrm{KV}_{2}\left(V_{2}\right) \ldots\)} \\
\hline \multicolumn{4}{|l|}{where \(V_{2}=V_{1}\), except when \(V_{1}\) is \(/ i /\), when \(V_{2}\) is \(/ \mathrm{e} /\).} \\
\hline \multicolumn{4}{|l|}{62 Verb piece aux ind ma- is subject to the same changes as the members of this group, except when otherwise indicated below.} \\
\hline
\end{tabular}
2. With Word/relator Group II (V-initial).
\[
\mathrm{K}_{\mathrm{o}}^{2}+\mathrm{V}_{1}\left(\mathrm{~V}_{1}\right) \ldots \geqslant \mathrm{KV}_{2}\left(\mathrm{~V}_{2}\right) \ldots
\]
where \(V_{2}=V_{1}\), except when \(V_{1}\) is \(/ i /\), when \(V_{2}\) is \(/ e / .63\) 3. With Word/rolator Group III (C-initial).
\[
\mathrm{Ka}_{2}+\operatorname{CV}(V) \ldots>\operatorname{KaCV}(V) \ldots
\]

Examples.
Word/rel


63 When preceding a Group II (ie., V-initial) verb beginning with an /i/, ma- becomes ma- (unlike fa and sty, which become ye- and ne-, respectively). However, when preceding a Group \(\bar{I}(h-i n i t i a l)\) verb with an /i/ in the first syllable, wa m follows the same rule as ft and ali becomes me.. \({ }^{64}\) Since the nouns in those examples are body parts, when the pronoun is plural, the nouns, too, must normally be plural. 65 Here are some examples of the Verb Piece auxiliary indicator

Here are further examples, showing fa and aik as fe- and newhen assimilated to Group I words in which the vowel of the first syllable is \(/ i /\), and as ve_ and ne_ when assimilated to Group II words in which the initial vowel is /i/:
Group I Verb: \({ }^{66}\) hipa "to wash"

all (3rd p. non-sg.) sepli "they wash"
Group II Verb: \({ }^{67}\) ima "to sleep"
fla (list p.non-sg.incl.) verma "we sleep"
aG (3rdp. non-sg.) nema "they sleep"

\subsection*{3.3.2.1.2. Additional Changes.}

In addition to the above changes when pronouns are assimilated, three further changes occurring when there is assinilation may be specified. They are dependent on certain features of the following word. 68
3.3.2.1.2.1. Following Words with \(/ \tilde{n} /\).

If a Group II (i.e., Vowel-initial) noun \({ }^{69}\) has both an initial /i/ and a palatal, /in/, at the beginning of the rext syll-
ma- prefixed to the same verbs:
\[
\begin{gathered}
\text { ma?packs } \\
\text { "without } \\
\text { crossing ..." "without eat_ "without seeing ..." }
\end{gathered}
\]
\(66_{\text {With Vbpce }}\) aux ind 鼠 : meptaka... "without washing ..."
\({ }^{67}\) With Vbpce aux ind : manaaks... "without sleeping ..." 68 i.e., the following noun or verb. No cases of following relators having the structures that undergo these changes have been attested.
69 No verbs with \(/ \tilde{n} /\) in the relevant syllable have been at.-
tested.
able, this has the effect of palatalizing the \(/ n\) / (but no other consonant) in the pronoun. It is significant that the regressive assimilation effect of \(/ \tilde{n} /\) is the only case where reference to a word syllable other than the first is relevant.
e.g. Unassinalated form Assimilated form
i) -iñočhi "neck"


Groups I and III nouns with a palatal/n/ in the first or second sylleble do not have this effect on the pronoun: Group I: hee?ñts "(a type of cassava)"
\begin{tabular}{|c|c|c|c|}
\hline n6 & a6 hee?ña & no?ñode 70 & "my cassava" \\
\hline a & 25 hee?ñ5 & ne?ñade & "their cassava" \\
\hline
\end{tabular}

Group III:
i) ñii?šogł "nightingale"


ii) tiñeencbí "(a type of trap used for catching animals)"
\(\overline{70_{\text {This }}}\) also denonstrates the addition of \(\left.\{-: ? d\}\right\}\) to the noun, with movement of vowel length to the next syllable (and onission of the suffix glottal in the context of the sten glottal). cf. 3.2.3.3.1.4.iii, above.
mb no tiñenebl＂．notiñeeneba＂my trap＂

3．3．2．1．2．2．／／J／－initial Words．
When pronouns are assimilated to words with an initial \(/ \mathrm{y} /\) ， the following additional change occurs：－
\(/ \mathrm{y} />/ \mathrm{z} /\) if the／ \(\mathrm{j} /\) is followed by \(/ \mathrm{a} /\) or \(/ \mathrm{u} /\)
eng．（i）／Ya．．．／
Jena＂to wait＂mb jx？nt nožk？ņ＂I wait＂
Jana＂child＂ts latina dožatne＂hor child＂

\section*{（ii）／jun．．．／}
a．施＂to be surprised＂

mitsha jug＂to get up＂
fa mitch 预 mitch važa＂we get up＂
Contrast：
（i）／ii．．．／


\section*{（ii）／ie．．．／}
levi＂wolf＂phr jet vi pijeevi＂your wolf＂
（iii）／yo．．． 1
Joins＂giant armadillo＂
ts yon giyb?n6 "his giant armadillo"

\section*{3．3．2．1．2．3．\(/: /=\) Addition．}

If a two－syllablo Group III（Consonant－initial）verb of the structure CVCV does not have a／？／as one of its consonants， a／？／is added initially when a pronoun is assimilated to the
vorb.
e.g.
(i) peat "to swallow" ts6 peas do?peat "she swallowe"
(ii) meal "to play" ser mesi na?mear "thoy play"

Fourteen verbs (and their derivatives) have been attested to fulfil all these requirements in Resigaro (but no nouns have). They are listed in the lexicon in the nomal way, but a/?/ in parenthesis is placed initially to indicate this change. The /?/ is ignored for filing purposes.

There are three exceptions to this rule:
i) tsheni "to see"
e.g. ft tshen 1 vatshon 1 "we sec"

Contrast tseas "to bump into something"
e.g. fatsenc va?tstab "we bump into somothing"
ii) kons "to cry"
e.g. nokan 1 nokani "I ory"
iii) mokhs "to cut wood"

This is the most significant, as it forms a mininal pair with
(?) mbkh 6 to smell (intrans)"
e.g. tst mbkh6 gjin6kho "he cuts wood"

Contrast tsa mokn \({ }^{71}\) gi?mbkh6 "he smells" (intrans)

Nevertheless, the dofinition CVCV is retained, since in
all other cases it includes all verbs that add/?/ and excludes
\(\overline{7 I_{\text {This }}}\) and the form above it are homophonous.
all those that do not.
3.3.2.2. Type i.i.

This consists of sub-class 2 pronoun stems, which are not assimilated to following words or relators, not modified in any way.
e.g. gi?1 "this one (m)"
hamupi "you two (f)"
3.3.3. Distribution.

The members of the class of pronoun words are distributed in the Head slot in NP type iii.
e.g. ak a?mita


This NP type is part of NP distributional sub-class 2, the distribution of which is indicated in 6.1.2.3.2., below. Members of this NP sub-class may occur in clause-level slots, as in the above example, or recursively in the Limiter slot in NP type i.
e.g. AK hanigi
their father

"their father"
(cf. 6.1.2.2.1.2., below)

If assimilation occurs, the two tagmemes involved ( \(S\) and P , or \(\operatorname{Lim}\) and \(H\), in the above examples) are still considered
to be present, although in their phonemic realization they are fused, and sometimes it may not be possible to indicate the boundary:
\[
\begin{aligned}
& \frac{\operatorname{ma?mita}}{\frac{1}{S: N P-P: V P}} \\
& \frac{\text { they eat" }}{\text { Eim: } \mathrm{NP}-\mathrm{H}: \mathrm{Nn}}
\end{aligned}
\]

\subsection*{3.4. Adjective Woxd.}

\subsection*{3.4.1. Contrast.}

Adjectives ( \(A j\) ) have the following contrastive-identificat-
ional features:-
i) Their Base is filled by an adjective stem.
ii) They co-occur with nominal and verbal word-level suffixes.

\subsection*{2.4.2. Variation.}

Three types of adjective are set up on the basis of internal structure:-

\(\pm \mathbb{N n}\) sx4: rest
"Attributive" \({ }^{72}\)
\(A_{j i}=+B: A j S t_{2} \quad\) "Predicative \(i^{\prime \prime}\)
\(\overline{72_{\text {Types }}}\) are set up on the basis of structural differences, as indicated in the formulae, but since these types are coextensive with the sub-classes of the adjective word set up on the basis of distribution, it is convenient to refer to these types by the titles chosen to describe the distribution.
This partial co-extensiveness of structural types and distributional sub-classes is a consequence of the fact that the structural variations signal semantic differences, which inevitably affect distribution. (This was also noted at stem level for the adjective.)
\(A j_{1 i i}=+B: A_{j S t}^{3}+V b s x 2:\) incho
3.4.2.1. Adjective Type i, "Attributive".

Mominal suffixes l-4 may be added to the filler of the Base slot in adjective type \(i\), as indicated in the above formula. An Order 1 classifier suffix must occur. Choice of suffixes is dependent on the noun in the Head slot of the NP in which the type \(i\) adjective occurs.
e.g. i) Jj Jaa-gi Jasn big sxl child "the big child" Jijaa- \(\mathfrak{K}\) viši?o- \(\mathfrak{G}\) "the big rock" JiJaa-ga-Yaah1 va?a-ga-Jaahi big sxl sx 2-sx 3 machetesx 1 sx 2-sx 3 "the big knives"
ii) ño?ha-? aam1 apank-?aami soft \(s x 1\) leaf sx 1 "the soft leafi" no?ha-a himi - a soft sxl seed sxl "the soft seed"
(For further details, cf. description of NP, section 6.1.2.2.1.4., below.)
3.4.2.2. Adjective Type ii, "Predicative i".

The fillex of the Base slot in adjective type ii may not be suffixed.
```

e.g. axii? ts%
healthy she "she is healthy"
gi?1 no?huu?
this soft "this one is soft"

```
3.4.2.3. Adjective Type iij, "Predicative ii".

The verb word order 2 suffix "inchoative" may be added to
the filler of the Base slot in adjective type iii, to emphasize the gradual or progressive nature of the process in question. \({ }^{73}\)
```

e.g. ami .. ka\& tef
healthy incho he "he is getting well."
gi?1 ño?ha-kaa
this soft - incho "this one is (gradually) becoming
soft"

```

\subsection*{3.4.3. Distribution.}

The members of the class of adjective words are distributed in Noun Phrase type i, in Predicate type i (sub-type i), in the Axis slot of Concomitant Phrase type \(i\), and in the Modifier slot in the Verb Phrase. Suboclasses are set up on the basis of this distribution.

\subsection*{3.4.3.1. Sub-class 1, "Attributive".}

This consists of type i adjectives, which occur in the Attributive slot in NP type \(i\) and in the Axis slot in Concomitant Phrase type i.
e.g.
i) In the Attributive slot in NP type i:-


(For further details, cf. 6.1.2.2.1., below.)
ii) In the Axis slot in CP type i:-


73cf. 2.1.2.2.2. (VbSt) and 3.1.2.3.2. (Verb word), above.
3.4.3.2. Sub-class 2, "Predicative",

This consists of types ii and iii adjectives, which occur in Predicate type \(i\), sub-type i.
e.g. i) ño?huu? tst
\(P_{\text {i. } i}: \frac{\text { soft }}{\prime} j_{2}\) (type ii) it is soft"
ii) ño?haká tsa \(\underbrace{\text { it }}_{i{ }^{\text {Soft-incho }}{ }^{\prime} j_{2} \text { (type iii) }}\) "It getting soft"
(For Predicate type i, sub-type i, cf. 7.1.1.1.1.1., below.)
3.4.3.3. Sub-class 3, "Modificatory".

This sub-class has so far been observed to have only one member. This is the type i adjective oona- "small", which, in addition to its distribution in sub-class 1 , as indicated above, also occurs in the Modifier slot in the Verb phrase. e.g. oojaje? do?vapa-mi 00


(cf. 6.1.1.2., below.)
3.5. Adverb Word.
3.5.1. Contrast.

Adverbs (Adv) have the following contrastive-identificational features:-
i) Their Base is filled by a level-skipping adverb root, or by an adjective stem, sub-class 2.
ii) They co-occur with the adverbial suffix \{-kuu?\}.
3.5.2. Variation.
\(A d v=+B: A d v R t / A j S t{ }_{2} \pm\) Emph: (-kuu?)
The structure of the Adverb word is not sufficiently varied to merit the establishment of different types (for comment on Pike's criteria for establishing different types, of. footnote 15 to II.2.4.2.3., above). Examples below indicate whether the filler of the Base slot is an adverb root or an adjective stem. \({ }^{74}\)

The form and distribution of the allomorphs of the filler of the Adverbial Emphatic slot are as follows:
\[
\begin{aligned}
& \{-k u u ?\} \text { "Adverbial Emphatic" } \\
& -k u u ? \sim-k a
\end{aligned}
\]

The glottal is deleted when the emphatic is affixed to a filler of the Base slot containing a glottal.

The second vowel is deleted when the emphatic is affixed to a filler of the Base slot containing a geminate vowel sequence.

The resultant form *-ku is subject to the general morphophonemic rule which changes \(\underline{u}\) to \(\underset{\sim}{2}\), since the adverb does

```

not occur utterance-finally.
e.g. With Base filled by Adverb Root:-
i) kapi de?yo
fast he-runs "he runs fast"
kapikuu? de? jo
fast-emph he-runs "he runs very fast"
ii) kenee?yb da?mita
slowly he-eats "he eats slowly"
kenee?Jaka da?mita
slowly - emph hemeats "he eats very slowly"
With Base filled by Adjective Stem;-
i) amepuu? d\&? Ј.
a_lot he-runs "He runs s lot" (i.e., often)
anepuu?ka de?jo
a_lot-emph he-runs "He runs very much" (i.e., very often)
ii) kašoo? dodo?phaavl
grod he-works "He works well"
ktšoo?ka dodo?phavat
good-emph he-works "He works very well"

```
3.5.3. Distribution.

The members of the class of Adverb words are distributed in the Modifier slot in the Verb Phrase.
e.g. anepuu? gima

(For further details, of. 6.1.2., below.)
3.6. Demonstrative Word.
2.6.1. Contrast.

Demonstrative words (Dem) have the following contrastive-identificational features:-
i) Their Base is filled by a level-skipping demonstrative root.
ii) They co-occur with nominal word-level suffixes.
3.6.2. Variation.

Dem \(=+\) B:DemRt + sx1:clsfr \(\pm\) sx 2: Mang/dim \(\pm 5 \times 3: n m b \pm 5 \times 4:\) rest
Demonstratives must bear the classifier suffix corresponding to the noun to which they refer. They also bear any other nominal suffixes found on the noun.
e.E. hi ) -gt va?a-ga this) \(s \times 1\) machete \(s \times 1\) "this/that machete"

 this)
that)
\(s x\)
1
\(s \times 2-5 x 3\) machete \(s x 1\) sx 2-sx 3 "these/those two knives"
 this) sx \(\operatorname{that)}\) sx 2-sx 3 sx 4 machete sxil sx 2-sx 3 sx 4 "only these/those two knives" hi-gi pi?mi
this sx 1 hummingbird "this hummingbird"
hese-gi-mu-na ano-gi-mu - ma that sxl sx 3 sx4 tapirsxl sx 3 sx4
"Only those tapirs"

\subsection*{2.6.3. Distribution.}

The members of the class of demonstrative words are distributed in NP type \(i\), where they occur in the Limiter slot.
e.g. he? emi hista

"that canoe"
(On NP \({ }_{i}\), cf. 6.2.1., below.)
3.7. Numeral Word.

\subsection*{3.7.1. Contrast.}

Numerals (Num) have the following contrastive-identificational features:-
i) Their Base is filled by a level-skipping numeral root, or by a noun stem, sub-class 3.
ii) They co-occur with nominal suffixes.

\subsection*{3.7.2. Variation.}

Composite formula:-

rest
With numbers "one" and "two", the choice of classifier to fill suffix order 1 slot is dependent on the noun referred to (cf. 3.2.2.2.1., above). Here, the "finger" classifier is given, as this is used by the Resigaros when counting without reference to a specific object, since counting is derived from an activity carried out on the fingers and toes. There is no choice of classifier with any other numeral, but when
"one" or "two" occurs in a Numeral Phrase, the choice of classifier for these components is still dependent on the noun referred to.

The following examples permit contrast wi.th the forms of the numerals given in the subsequent description:-
st - mi hilta
one clsfr canoe "one canoe"
sa - \(38^{75}\) avtana?e
one clsfr tree-trunk "one tree trunk"
mi - miikG hiltamiika
two clsfr-dl canoe-clsfr-dl "two canoes"
mi - ? e ek avana-? eek
two clsfr-dl tree. clisfr-dl . "two tree trunks"

The Order 2 (augmentative/diminutive) suffixes do not form an inherent part of any numeral, but must be added to "one" and "two", wherever these occur, if the noun referred to bears one of them.

mi - mi-kobacka? sk-mi-koba? hista-mi-kobaahi two clsfr aug-dl one clsfr aug canoe clsfr aug-pl
"three big canoes"

Two types of numeral word are set up on the basis of internal structure.

\footnotetext{
\(75_{\text {I'he }}\) basic high tone of st.. becomes low before the following high tone.
}
3.2.2.1. Numeral Type i.
\(\mathrm{Num}_{i}=+B: N u m R t+s x \mathrm{I}: \mathrm{Clsfr} \quad-/+\mathrm{sx}\) 3:d.
In this type, the order 3 dual suffix occurs with the numeral "two" only.

This type consists of the following four numerals:-
i) sa - ga

ii) sa - ? Os s

"five"
iii) sa - gl

"twenty" (Lit.: "one (man)", i.e.,
two hands and two feet)
iv) mi-gaaku

3.7.2.2. Numeral Type ii.
\(\mathrm{Num}_{1 i}=+\mathrm{B}_{\mathrm{NnSt}}^{3}+\mathrm{sx}\) 1:clsfr + sx 3:nmb \(-/+\) sx 4: rest
In this type, the Order 4 suffix occurs with the numeral
"ten" only.
This type consists of the following two numerals:-
i) po?tsaava - g a a h 1

"four" (Lit.: "centre finger", i.e., forefinger \({ }^{76}\) )

\footnotetext{
\(\overline{76}\) In Resigaro, "one" is the little finger of the left hand,
}
ii.) \(\mathrm{pa}-\) ? 0 osi \(-\mathrm{ku}-\mathrm{na}\)

"ten" (Ii.t.: "all two hands", i.e., both hands)
3.7.3. Distribution.

The members of the class of numeral words are distributed in the Numeral Phrase. Sub-classes are set up on the basis of this distribution.
3.7.3.1. Sub-class 1.

This consists of all the above numerals, which are distributed in Numeral Phrase type i.
3.7.3.2. Sub-class 2.

This consists of the numerals sagh, "one", and migaaka, "two", which are also distributed in Numeral Phrase type ii.
(For further details, of. 6.1.3.2., below.)

\footnotetext{
"two" is the ring finger, "three" is the index finger, and "four" is the forefinger. "Five" is the hand. "Six" is the little finger of the other hand, etc. -- cf. 6.1.3.2.2.2., below.
}

A GRAMMAR

0 F
RESÍGARO
by

Trevor R. Allin

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VOLUNE II
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The Group is set up as a level of construction above the Word and below the Piece, for describing certain structures in the Verb hierarchy, Strictly speaking, it may be termed a sub-level, since it is not relevant to the other classes.

Types are set up within the Group on the basis of internal structure, and sub-classes are set up on the basis of distribution in the Verb Piece and in other structures.

\subsection*{4.1. Verb Group.}
4.1.1. Contrast.

The Verb Group (VG) has the following contrastive-identificational features:-
i) Its Head is filled by a verb word.
ii) In its complex form, the periphery is filled by a Basic filler (cf. below), an adjective stem, a Noun Phrase, a Concomitant Phrase, an Instrument Phrase, or a relator.

\subsection*{4.1.2. Variation.}

Two types of Vexb Group are set up on the basis of internal structure.
\(V G_{i}=+H: V b_{1 / 2}\)
\(\mathrm{VG}_{i i}=\) +Periph:Basic/AjSt \(\frac{\mathrm{NP}_{2}}{2} / \mathrm{CP}_{2} / \mathrm{IP} /\) relr \(+\mathrm{H}: \mathrm{Vb}_{1}\)
When the filler of the Peripheral slot is an NP, this
does not have a greater expansion than \(+\mathrm{Lim}: \mathrm{Pn}+\mathrm{H}: \mathrm{Nn}\), and if the Limiter tagmeme occurs, assimilation between the two is obligatory. The pronoun does not necessarily refer to the same extraminguistic entity as the Clauselevel Subject of the verb in the Predicate.

In a dictionary check that produced 392 different verb groups, the numbers corresponding to each type and sub-type were as follows:-

Type i: 239
Type ii: 153
being, Sub-type i: 148
with khe : 101
with : 45
with tb? : 2
Sub-type ii: 5

\subsection*{4.1.2.1. Verb Group Type i, "Simple".}

All verbs occur in Verb Group type i.
e.g. kht "to make, to do"
yai "to be"
a?mita "to eat"

In the imperative, 选 becomes iiža. cf. 3.1.2.6.1.1.(i), above.

\subsection*{4.1.2.2. Verb Group Type ii, "Complex".}

Two sub-types are set up on the basis of structural differences of a finer degree of delicacy than those separating types \(i\) and \(i\).

\subsection*{4.1.2.2.1. Sub-type i.}

This has the form indicated in the formula above, with the following two restrictions:
i. In the Peripheral slot, the Instrument Phrase does not occur.
ii. In the Head slot, only the following sub-class 1 verbs occur: khe "to make, to do"
ja "to be"
to?(vú) "to obtain"

Verb Groups formed with khk, "to make, to do", refer to transitive actions, whereas those formed with 铬, "to be", refer to intransitive actions, or to some states. However, this is not a structural or distributional difference at this level, and so separate types or sub-classes are not established.

\section*{Examples.}


Table 4.1.: Verb Group ii.i. (kh \(/\) /Y 1 ).
to?(va) appears to be no longer productive, being attested in only two Verb Groups:
\[
\begin{aligned}
& \text { mansa to? }{ }^{2} \text { "to know" } \\
& \text { kavii to? "to hunt, to pursue, to pay attention } \\
& \text { to" }
\end{aligned}
\]
manka and kavij are both Basic fillers.

\footnotetext{
\(\overline{2_{\text {The }}}\)-vt is always omitted unless the verb is suffixed. of. 3.1.2.2.
}
manda to? is one of only two Verb Groups (the other being ifte khe, "to help") which always require an Object, even when the reciprocal suffix is added to the verb (this causes deletion of the Object with all other verbs -- cf. 3.1.2.2., above). Furthermore, the Object is in the majority of cases a pronoun, which must be assimilated to the filler of the Periphery slot (cf. assimilation, 3.3.2.1., above, and examples of an assimilated dummy Object with extraposition in 7.2.1.2.3.1.1., below).
e.g. na-manda na - tova?-kaktva
them know they get recip "They know each other"

\subsection*{4.1.2.2.2. Sub-type is.}

This has the form indicated in the formula at the beginning of the section, with the following two restrictions:
i. In the Peripheral slot, only the NP and the IP have been observed to occur.
ii. Only a few verbs (those indicated in examples below) may fill the Head slot, and then only in conjunction with the specified fillers of the Peripheral slot.

In some cases, the pronoun in the NP must refer to the Subject of the clause; in other cases, it may not. The restriction would appear to be semantic. Note the two possibilities:
1. Cross-reference between Subject of Clause and pronoun in NP in Peripheral slot of VG required:-
(i) -vaft henotf "to think, to meditate"
e.g. no-vaf8 nonoti "I think"
(く -vafo, "interior, inside"; henot\& "to make the same")
(ii) -ho?donalgi i?tokh "to kneel"
e.g. no?donati-gi no?tont

"I kneel"
2. Cross-reference between Subject of Clause and pronoun in NP in Peripheral slot of VG not possible:-
(i) -hivel a?pithoot "to baptize"
e.g. Ěsveß no?pithoota
his-head I-bathe-cstv "I baptize him"
(ii) -veni aa?ni "to buy, to pay"

Note that in this case the only pronoun observed in the NP
is that for the third person singular masculine. \({ }^{3}\)
e.g. gi-veni noorni its-pay I-give "I buy it" \({ }^{4}\)

The Verb Group -hivet pl?ko "to cut hair" has only been attested with different referents,
e.g. ǧáseh do-pi?ko
his-head she-throws_away "She cuts his hair"
though presumably in the case of a person cutting his own hair, the pronouns would be co-referential (and the reflex-

\footnotetext{
\(\overline{3}_{\text {If }}\) the occasion were to arise in which one would wish to say "I bought you, her, etc.", one may assume that other person markers could occur.
\({ }^{4}\) NB parallel between this and the sub-type i VG given 1 kht, "to recompense". The meaning of givent aa?ni is more specific, referring to giving of money or other goods to purchase something.
}
```

ive suffix would be added to the verb).

```
NP without pronoun: -
hooni i?vot "to freeze"
e.g. hoonf fa?vot \({ }^{\text {g }}\)
    water us-dry-csty "It freezes"
On use of first person plural, inclusive in meteorological
expressions, cf. footnote 17 to section 7.2.1.2.1., below.

No other cases of Verb Groups of type ii, sub-type ii have been attested, and this is a very little used structure.

\subsection*{4.1.2.3. Repetition of the Verb Group.}

Repetition may be used to emphasize the gradual or progress. ive nature of an action. In the case of the Simple Verb Group, the entire Group may be repeated. In the case of the Complex Verb Group, only the filler of the Peripheral slot is repeated.
i) The Simple Verb Group.
e.g. dotsânu dots\&?nu "She continues coming" gii?ša gii?ša "He gradually went up" gi?p1 gi?p1 "He returned" (Lit.: "He went, he went")
ii) The Complex Verb Group.
e.g. 芭? 葛? nakht "They pressed" phe tur tuu nokhetsi... "(I) cutting you in pieces..." nagi nagi giža "He becomes angry" tsaa tsaa neža "They shouted out"
4.1.3. Distribution.

The members of the class of Verb Groups are distributed in the Verb Piece and in Noun Stem type ii. Sub-classes of Verb Groups are set up on the basis of this distribution.

\subsection*{4.1.3.1. Sub-class 1.}

This sub-class has three members, which may occur in the Head and Auxiliary slots of either type of Verb Piece.

\author{
i?p1 "to go" \\ tsa?nu "to come" \\ khl "to do"
}

\subsection*{4.1.3.2. Sub-class 2.}

This sub-class consists of all other Verb Groups, which may occur in all the contexts indicated for sub-class 1 except the Auxiliary slot in Verb Piece type ii, sub-type i. e.g. a?mita "to eat"
go? khi "to make a hole"
kainte 36 "to die"

\subsection*{4.1.3.3. Sub-class 3.}

This sub-class consists of those Verb Groups which, in addition to the above distribution, are also distributed in the Base slot of Noun Stem type ii.
e.g. a?mita "to eat" tho? khe "to grind"
(?) tamb "to cover" hoons i?vota "to freeze" i?kank "to vomit"
(On Noun Stem type ii, of. 2.2.2.2., above.)

Chapter 5
PIECE LEVEL

The piece is set up as a level of construction above the Group and below the Phrase, for describing certain structures in the Verb hierarchy. Strictly speaking, it may be termed a sub-leval (like the Group), since it is not relevant to other classes.

Types are set up within the piece on the basis of internal structure. It is not necessary to set up sub-classes at Piece level.

\subsection*{5.1. Verb Piece.}
2.1.1. Contrast.

The Verb Piece (VbPce) has the following contrastive-identificational features:-
i) It consists of a Head and (in type ii) an Auxiliary, both of which are filled by Verb Groups.
ii) When the Auxiliary occurs, the filler of the Head slot is marked with an auxiliary indicator.

\subsection*{5.1.2. Variation.}

The Verb Piece may be simple or complex, and different types are established accordingly.
```

$\mathrm{VbPce}_{\mathrm{i}}=\mathrm{H}: \mathrm{VG}$
VbPce $_{i i}$ (Composite formula)
$= \pm$ aux ind $+\mathrm{H}: V G$ Faux ind + Aux: $V G$

```
2.1.2.1. Verb Piece Type i, "Simple".
This consists of a sub-class 1 or 2 Verb Group only.
e.g. a?miti "to eat"
    kh "to do"
    ye "to be"
    kainte khl "to kill"
    kainge 號 "to die"

\subsection*{5.1.2.2. Verb Piece Type ii, "Complox".}

Two sub-types of complex Verb Piece are established.
5.1.2.2.1. Sub-type i, "positive Action".
\(\mathrm{VbPce}_{\text {i.i. }}=+\mathrm{H}: V G_{1 / 2}\) taux ind: \(\propto\left\{\begin{array}{l}-\mathrm{ne} \\ -: \mathrm{zk} \sigma\end{array}\right\}+\mathrm{Aux}: \propto V G_{1}\)
where reads: -ae occurs with i?pl and tst?(nu)
-ike " " khk

The Verb Group filling the Head slot is modified in accordance with the following rules:-
i) Any final vowel except/i/ becomes /e/. /i/ remains unchanged. \({ }^{1}\)
```

$\overline{I_{c f .}} 3.1 .2 .4$. (i) and 3.1.2.6.2.1.(xi), above.
The only exception to this rule is the verb group te?khi
"to fetch", where final/i/ becomes /e/:
te?kheae no?p1 "I go to fetch"
te?kheeke nokh "I used to fetch"

```
ii) -ne "directional", or =? "habitual" is added to the subsequent form.
```

The appropriate verb is selected to fill the Auxilliary slot. This verb is marked for person in the normal way -- either with a separate Clause level Subject tagmeme, or an assimilated pronoun. In the examples that follow, to keep the structures as simple as possible, an assimilated pronoun is shown, and to facilitate comparisons, all examples are given in the first person singular. However, these constructions may of course occur with any person.
e.g. Hoan a?mitsme i?pi John eat-dir goes "John goes to eat" novigipine do-tsa? to_talk-dir she_comes "She comes to speak"
(a?mit\& "to eat")
a?mittee no?pi "I go to eat"
" notsk? "I come " ""
a?mitteke nokht "I used " n"
(novigipf "to speak")
novigipime no?pi "I go to speak"
" notsa? "I come " " "
nov1giplike nokh4 "I used " " "
((?)mbai "to play")
me?alme no?pi "I go to play"
" notsk? "I come " " "
mb?miik* nokh! "I used " " "

```
```

(kainse kh| "to kill")
kaince kheme no?pi "I go to kill"
" " notsa? "I come " " "
" khEekt nokh^ "I used " " "
(n化隹预 "to take shelter")
nafhigh Jene no?pi "I go to take shelter"
" " notsa? "I come " " " "
" jैtek\& nokht "I used " " " "

```

In the case of Verb Groups containing a verb to which the reflexive suffix has been added，this usually follows the directional marker，but precedes the habitual marker， with a concomitant shortening of／aa／to／a／in the latter case．
e．g．（hiptphaava＂to wash oneself＂
odo？phaave＂to work＂）

hipaphaveekt
odo？phaveeke \(\left\{\right.\) nokht＂I used to \(\left\{\begin{array}{l}\text { wash myself＂} \\ \text { work＂}\end{array}\right.\)

5．1．2．2．2．Sub－type ii，＂Negative Action＂． \(\mathrm{VbPce}_{\text {ii．} i \mathrm{i}}=\)＋aux ind：\｛ma－\} \(+\mathbb{H}: \mathrm{VG}_{I / 2}+\mathrm{Aux}: \mathrm{VG}_{1 / 2}\)

The Head slot in this sub－type of Verb Piece is filled by a Verb Group whose Head is filled by a verb to which the inchoative suffix has been added，in accordance with the description in 3．1．2．3．，above．

The auxiliary indicator in this case precedes the verb. It is the privative \{ma-\}, which is obligatorily assimilated to the verb in accordance with the rules stated in 3.3.2.1. for pronouns. \({ }^{2}\)

The Auxiliary slot may be filled by any Verb Group (subject to normal semantic limitations).

\section*{Examples.}
ma?mitakak no?pi "Without eating I go"
manovigipikaa notss? "Without speaking I come"
kainee makhskak no-minEpavi "Without killing I hunt"
nathiga mežakał nom \({ }^{3}\) "Without taking shelter I sleep"

This construction may also be used to convey negative temporal sequence. Thus, ma?mitakaa no?pita may mean "Without eating I have a bath", or "Before eating, I have a bath". Similar glosses could be given for the examples above.

\author{
This is particularly clear when the clitic -khe?, \\ "Incompletive" is added to the verb after the inchoative.
}

\footnotetext{
\({ }^{2}\) Since assimilation is obligatory, the choice of base form is dependent on purely theoretical considerations. That form is chosen which permits the privative to be viewed as subject to the same rules as those governing pronoun assimilation, since the various forms parallel those attested for pronouns in the same environments.
\(3_{\text {me- }}\) occurs here where ma- would be expected, due to the underlying initial ii. occurring with ja, but deleted in all but a few cases, as indicated elsewhere. Here /ii/ becomes /i/ in the proximity of /aa/, and this /i/ is assimilated to \(\left\{\begin{array}{ll}\text { a- }\}\end{array}\right.\) in accordance with the normal rules.
}
```

e.g. anepur? ee?phi ma - kht - katkhe? - mi nil kašoo? much fish priv do incho-incomp rec not well past no mita I-eat

```
"Before catching a lot of fish, I did not eat well"
This example also illustrates the Auxiliary verb in the negative. \({ }^{4}\)

\subsection*{5.1.3. Distribution.}

The members of the class of Verb Pieces are distributed in the Verb Phrase. Since all Verb Pieces equally share the same distributional possibilities, it is not necessary to establish sub-classes.

\footnotetext{
\({ }^{4}\) For another way of expressing negative temporal sequences (i.e., "before"), cf. Dative Object Phrase, section 6.2.1.2., footnote 9 , below. For positive temporal sequences ("after"), cf. 6.2.8.2. (Adjunct Phrase) and 6.2.9.2.1. (Directional Phrase), below.
}

\section*{Chapter 6}

PHRASE LEVEL

The Phrase is set up as a level of construction above the Word \({ }^{\text {l }}\) and below the Clause. "Phrase" is defined as a sequence or potential sequence of words which functions as a unit, as in Pickett:
"By 'potential sequences' I mean a sequence of words or a single word which is potentially expandable to a unit of two or more words by addition of optional modifiers. Traditionally, phrases have been assumed to be composed of more than one word. [Here she refers to Bloomfield, 1933:178.] In descriptions with the tagmemic model, however, conciseness and simplicity of statement are gained by considering phrase to include those single words which are potentially expandable to full phrases.... In addition to providing concisemess, such a description also more accurately reveals the structural relationships, since when the single noun which is potentially head of a phrase occurs in the Subject slot, it is not a different kind of unit but a representative of the phrase unit." (1960:33)

Phrases are divided into classes on the basis of their distribution in Clause-level slots. Some classes of phrase are endocentric (consisting of a Head plus or minus various modifiers), while others are exocentric (consisting of an Axis and a relator). The endocentric phrases are described first, and then the Axis-Relator phrases.

Types are set up within most classes on the basis of

\footnotetext{
IThe Verb Phrase is a special case, coming as it does above the sub-level Piece in the verb hierarchy.
}
internal structure. Sub-classes of some phrase classes are set up on the basis of distribution in Clause level slots and in other structures.

\subsection*{6.1. Endocentric Phrases.}
6.1.1. Verb Phrase.
6.1.1.1. Contrast.

The Verb Phrase (VP) has the following contrastive-identificational features:-
i) Its Head is filled by a Verb Piece.
ii) Its Modifier slot is filled by an Adverb or an Adjec. \#ive.
6.1.1.2. Variation.
\(V P= \pm \operatorname{Int}: 00 \pm \mathbb{M}: \mathrm{Adv}^{\left(\mathrm{Aj}_{3}+\mathrm{H}: \text { VbFce } \pm \operatorname{Int}: 00\right.}\) It is not necessary to set up different types of VP, since the only variation at Phrase level is the presence or absence of the Modifier and Intensifier tagmemes, which are in consequence regarded as optional.

\section*{Modifier.}

The following examples show the Modifier present, since ample examples of the unmodified Head tagmeme are to be found in section 5.1.2, on the Verb Piece, and the Modifier could in any case be omitted in any of the examples given here. Examples show the Modifier slot filled by and Adverb and by an Adjective.

\section*{With Modifier slot filled by an Adrerb:-}
i) Isabeel \({ }^{2}\) kenee? \({ }^{\text {ys a }}\) e? jo Isabel

"Isabel runs slowly"
ii) Peedrb kenee? 3*ka odo?phaav

Pedro \(\underbrace{\text { sly }}_{\text {slowly-emph }} \underbrace{\text { wivpen }}_{\text {works }}\)


With Modifier slot filled by an Adjective:-
When the Modifier slot is filled by a sub-class 3 Adjective, this may have the usual adjective suffixes (i.e., the nominal suffixes, which are also added to attributive adjectives to indicate concord between the adjective and the noun it qualifies). However, the Order 1 suffix -- the classifier -is obligatorily absent, since the choice of classifier is dependent on the noun which the adjective qualifies when occurring in the NP, and in the VP there is no noun present. The Order 3 suffix -- number -- is similarly absent.

Only oojog "small, little" has been observed in this slot,

e.g. Hoak oojaja? e? 3̌6

Juen little runs


> "John runs little" (i.e., infrequently)

\footnotetext{
\({ }^{2}\) Spanish names do not necessarily conform to the phonology of the language.
}

For emphasis, the nominal Order 4 suffix \(=0\) (restrictive)
is used.

"John runs very littie" (i.e., very infrequently)

\section*{Intensifier.}

The Intensifier tagmeme may occur initially or finally, or both initially and finally. It usually only occurs when the VP refers to an action in the past.
e.g. Hoaa-mi oo i?pi (00)

"John has already gone"

\subsection*{6.1.1.3. Distribution.}

The Verb Phrase functions as Predicate within the Clause. Different sub-classes of VP are set up on the basis of their function in different types of predicate.

\subsection*{6.1.1.3.1. Sub-elass 1."Intransitive".}

The members of this sub-class occur in type ii Predicate,
"Intransitive".
e.g. Peedrb imk

Pedro sleeps P \(_{\text {ii }}: V P_{1}\) "Peter sleeps"
na?a odo?phaava
they work
, "they work"

For further details, cf. 7.2.1.2.2., below.
These VP's may also occur in type iii Predicate, "Irans-
itive", if the verb in the VP has the causative suffix.
cf. 7.2.1.2.3., below.
6.1.1.3.2. Sub-class 2, "Transitive".

The members of this sub-class occur in type iii Predicate, "Transitive".

ts6 maa?ma ewt
she cassava bites "She bites the cassava" \(P_{i . i i}:{ }^{V} P_{2}\)

For further details, cf. 7.2.1.2.3., below.
These Vpis may also occur in type iv predicate, "Ditrans. itive, if the verb in the VP has the causative suffix. cf. 7.2.1.2.4., below.

\subsection*{6.1.1.3.3. Sub-class 3, "Ditransitive".}

This sub-class has one member, which occurs in type iv Predicate, "Ditransitive". e.g. no-mi bkoniigint gi-ke aa?ni

I rec
past \(\quad\) himle Dat give, \(\quad\) PI gave the rifle to him"

For further details, of. 7.2.1.2.4., below.
aa?ni may also occur in type v Predicate, "Iritransitive", when it has the causative suffix. cf. 7.2.1.2.5., below.
6.1.2. Noun Phrase.
6.1.2.1. Contrast.

The Noun Phrase (NP) has the following contrastive-identificational features:-
i) Its Head tagmeme slot is filled by a noun, a pronoun, a name, or a relative clause.
ii) Other tagmenes which may occur are: Limiter, Quantifiex, Attributive and Modifier.
iii) The order of its constituent tagmemes is relatively fixed, except for the few possible permutations detailed in section 6.1.2.2.1.5., below.
iv) There is concord in NP type i between the Head tagmeme and other constituent tagmemes, and details of this are given below.
6.1.2.2. Variation.

Four types of NP are set up on the basis of internal structure:

where \(\propto\) reads: when filler of \(H\) slot is from Category \(I\), Limiter is obligatory; when filler of \(H\) slot is from Category 2, or when filler of \(Q\) slot is an Interrogative, Limiter is obligatorily absent; when filler of \(H\) slot is from Category 3, Limiter is optional.
The tie bar indicates concord.
\(\mathrm{NP}_{i \mathrm{i}}= \pm \mathrm{Lim}: \mathrm{Nn}_{I} \pm \mathrm{QQumP}+\mathrm{H}: \mathrm{Nn}_{1}\)
\(N P_{i j i}=+H: R e l C l / P n\)
\(N P_{i v}=+H:\) name \(\pm M:\) RelCl

\begin{abstract}
6.1.2.2.1. Noun Phrase Type i.

The structure of this Noun Phrase type is as indicated in the formula in the preceding paragraph. There is concord with regard to all nominal suffixes (classifier, augmentative/diminutive, number and restrictive) within the NP between the Head and the Limiter (when filled by a Demonstrative), the Quantifier (when filled by a Numeral Phrase), and the Attributive.
\end{abstract}

In describing the variant manifestations of this Noun Phrase type, each constituent tagmeme is described in turn, in order to clarify which fillers may occur in each slot.

\subsection*{6.1.2.2.1.1. Head Tagmeme.}

The occurrence of this tageme represents the minimal expansion of NP type i.
e.g. anobgi "tapir"
phaipije "ald woman"
6.1.2.2.1.2. Limiter Tagmeme.
i) Occurrence of the Iimiter tagmeme.

The Limiter tagmeme occurs either optionally or obligatorily, or is obligatorily absent, depending on the filler of the Head tagmeme slot:
\[
\begin{aligned}
& \mathrm{H}: \mathrm{Nn}_{3.1}:+\operatorname{Lim} \\
& \mathrm{H}: \mathrm{Nn}_{3.2}:-\operatorname{Lim} \\
& \mathrm{H}: \mathrm{Nn}_{3.3}: \pm \operatorname{Lim}
\end{aligned}
\]
f.g. i) \(+\operatorname{Lim}\)
fa?mithoond "our food"
phaigs hita \({ }^{5}\) "the old man's canoel
\(\underset{\text { Inm }}{\text { Ontan }} \underset{H}{r}\)
ging gi "hjes face"
ciiva "its centre"
ii) - Lin
a?mincotst "food"
histu "canoe"
iii) \(\pm\) Lim
va?ag@ "machete"
ano6gi "tapir"
naikoogigi "shaman"

\section*{ii) Fillers of Limiter tagmeme slot.}

The Limiter tagmeme may be manifested by an embedded Noun Phrase sub-class 2, or by a demonstrative. The NP indicates possession \({ }^{3}\); demonstratives normally indicate deixis (cf. below).
a) Noun Phrase, sub-class 2.

All types and sub-types of NP occurring in distributional sub-class 2 of the IV may occur.
i) Type iti.i. Relative Clause.
e.g. ee?basrovigi peand

\({ }^{3}\) Changes in the form of the noun filling the Head slot when possessed are indicated in 3.2.3., above.

\section*{ii) Type iii.ii: Pronoun.}


In cases such as these, if no other tagmemes occur between the Limiter tagmeme and the Head tagmeme, assimilation usually occurs between the fillers of the two slots, as described in section 3.3.2.1. above.
e.g. nopaân
nonigi "my father"
In this construction, the type ii pronoun gi?f/gi?ithe may function as a demonstrative, in addition to its normal use as a deictic possessive adjective. (This is talking in terms of traditional grammar; structurally, and tagmemically, it is always a pronoun. cf. footnote 4 hereunder.) Thus, for example, gi? ha\&dah1 may mean "this one's land turtle" (i.e., "his land turtle"), or "this land turtle". Such ambiguity does not occur when the Head tagmeme slot in the NP is filled by a noun having a different form when possessed, as in the following examples:
gi?1 paniltsi "this house"
gi?! paind "this one's house"
gi?ithe boe?khobtsigh "that paddle"
gi?ithe boe?khoonagd "that one's paddle"

\footnotetext{
Thus, in traditional terms, the pronoun here functions as a possessive adjective, and not just a personal pronoun, as elsewhere.
}

\section*{iii) Type iv: name.}

This is of minimal expansion, and the Modifier tagmeme does not occur.

iv) Type i.

The form of the NP occurring in the Limiter slot is normally quite restricted, usually consisting of a Head only, or of a Head and a Limiter.
a) Head only.
e.g. phaig pasn \({ }^{6}\)

"The old man's house"
b) Limiter and Head.
e.g. higl phaigi pasnt


If the embedded Limiter slot contains an NP consisting of a pronoun, this is assimilated to the noun in the Head slot of the same NP.


Multiple embedding (e.g., "my father's house's roof's thatch") has not been observed in normal speech nor texts.

\section*{b) Demonstratives.}

The occurrence of a demonstrative filler of the Limiter
tagmeme slot indicates deixis.
e.g. himi hista
\(\underbrace{\text { this }}_{\text {Lim: Dem }}{\underset{H}{\text { canoe }}}_{\text {cin }} \quad\) "this canoe"
\(\underset{\text { Lim:Dem }}{\substack{\text { he? e? aams } \\ \text { that }}} \underbrace{\text { boom }}_{\text {bookn }} 1\)

\section*{iii) Concord in the Limiter tagmeme.}

There is concord of all nominal suffixes between the filler of the Head tagmeme slot and demonstratives.
```

e.g. hi-m i i h i hilta-m i i h 1
this sx l-sx 3 canoe sxl-sx 3 "these canoes"

```
    he?e-ga-jaaku-na va?a-ga-jaaka-ma
    that sx 1 sx 2-sx 3 sx 4 machete sx 1 sx 2-sx 3 sx 4
                                "only those two knives"

\subsection*{6.1.2.2.1.3. Quantifier Tagmeme.}

The Quantifier tagmeme slot is filled by a Numeral Phrase or by an Interrogative. There is concord of all numeral suffixes between the filler of the \(H\) tagmeme slot and the filler of the Numeral Phrase, affecting those numbers which may be modified (i.e., "one" and "two", and all Numeral Phrases of which these are components, viz., those that form 3, 6, 7, 8, 11, \(13,16,17\) and 18).
```

e.g. i) With Numeral Phrase filler of Q slot.
sa-ga- \a? va?a-ga-ya?
onesxl sx 2 machetesxl sx2 "one knife"
Q:NumP H:Na
sa?osi hifta-miih*s
five canoe sxl-sx3 "five canoes"
ii) With Interrogative filler of the Q slot.
Either of the Group 6 Interrogatives he?e anepuu? or
hide? anepuu? may occur (cf. 7.2.2.1.2.2., below, on In-
terrogative).
e.g. hide? amepuu? va?agajaahi
how - many

```

\subsection*{6.1.2.2.1.4. Attributive Tagmeme.}

The Attributive tagmeme slot is filled by a sub-class 1 Adjective. There is concord of all nominal suffixes between the filler of the Head tagmeme slot and the filler of the Attributive tagneme slot.

"only two big knives"
(For the Adjective, cf. 3.4.2., above.)

\subsection*{6.1.2.2.1.5. Modifier Tagmeme.}

The Modifier tagmeme slot is filled by a relativized clause.
```

e.g. atsargi-mi gifotsa - nigi - mi oo i?pi
man rec he-frighten-Orel rec int go
H:Nn
"The man he had frightened went away"

```

The Modifier tagmeme usually occurs after the Head tagmeme in the NP, although it may be permutated to the initial position in the NP, if ambiguity might otherwise result. For instance,
 that child-dim rec this big man frighten-Orel int go past past
could be understood as "That little child that this big man frightened went away" or as "This big man that that little child frightened went away" -- not as improbable an interpretation as may bo imagined, since Pablo pointed out this ambiguity, unprompted. In Resigaro -- though not in English -- the whole of the underlined section in each case is a reletiviaed clause. The meaning depends on the structures of the matrix and embedded clauses: (NB, here \(L=\operatorname{Lim}\) )


"That little child that this big man frightened went away"


\footnotetext{
i.e., "This big man that that little child frightened went away"
}

If the second meaning is that desired, the structure and form indicated are appropriate (though this may be simplified, at Clause level, by extraposition). If the first meaning is that desired, ambiguity may be avoided by permutating the enitre Modifier tagmeme to initial position:


The above description and examples refer to relativized clauses having a restrictive (i.e., identificational) function. In Resigaro, relativized clauses may also have a non-restrictive (i.e., merely informative) function. In these cases, the following changes occur in the NP:
i) The relativized clause in question is preceded and followed by a pause.
ii.) The entire structure has a distinctive intonation. 5 The contour rises immediately preceding each pause.

"The man, whom he had frightened, went away"

\subsection*{6.1.2.2.1.6. Co-occurrence of Tagmemes in NP Type i.}
\(+\mathrm{Lim}+\mathrm{HI}\) is probably the most frequent sequence of tagmenes

\footnotetext{
5 Though a description of the intonation is beyond the scope of the present thesis, rudimentary details are given in this case, since in this structure intonation is one of the prominent distinguishing features.
}
in NP type \(i\), followed in frequency by + Att \(+H\) and + Iim +Att +H. Q tagmeme ocours very infrequentiy, no doubt because most counting in Resigaro is in temm of "one", "two", or "several" 6 , and this can be handled at word level by suffixes. M may occur in all the above sequences, though maximal expansion is quite rare.

Though the number system extends to twenty. 6.1.2.2.2. Noun Phrase Type ii, "Temporal".
\(N P_{i i}= \pm I m: \mathrm{Nn}_{1} \pm \mathrm{NumP}+\mathrm{H}: \mathrm{Nn}_{1}\)
e.g. atpans Jakede-k6o no?p1 tomorrow field - to I-go
\(\mathrm{NP}_{\mathrm{ii}} \mathrm{IN}^{\prime} \mathrm{n}^{2} \quad\) "Tomorrow I am going to the field"


6.1.2.2.3. Noun Phrase Type iii.
\(N P_{i j i}=+H: \operatorname{RelCl} / \mathrm{Pn}\)
i) Relativized Clause.

The relativized clause occurring in this NP type always has a restrictive (i.e., identificatory) function.
e.g. gifotanigi mi mi oo i?pi


H:RelCl past UThe one he frightened went \(\mathrm{NP}_{1 i 1}\) away"

\section*{ii) Pronoun.}
```

e.g. n6 a?mit6
H: $\frac{\mathrm{Pn}^{\mathrm{I}}}{\mathrm{Pn}}$ eat
$N P_{i i i}$

```

This pronoun may assimilate with a following verb, as indicated in 3.3.2., above.
e.g. no?mitf "I eat"

But, grammatically, a separate NP is still considered to be present, even though on the phonological plane it is partly fused with the filler of the following tagmemic slot.
6.1.2.2.4. Noun Phrase Type iv.
\(N P_{i v}=+H:\) name \(\pm M: R e l C l\)
e.g. Hoaa - mi oo i?pi
\(\xrightarrow[\text { H:nane past }]{\text { Juan }}\) rec int go "John went away"
\({ }^{N P}{ }_{i v}\)
The relativized clause occurring in the M slot in this NP type always has a non-restrictive (i.e., merely informative) function (with attendant pauses and intonation contour).



\subsection*{6.1.2.3. Distribution.}

The members of the class of Noun Phrases are distributed in Clause and Phrase level slots. Two sub-classes of NP's are
set up on the basis of this distribution.
6.1.2.3.1. Sub-class 1, "M emporal".

This consists of all type ii Noun Phrases, which are dist-
ributed in the Temporal slot in the Clause, and in the axis slot in IP type ii, sub-type v.
e.g. adpana si - koomi - kSo ne?pi
tomorrow other-village-to they-go
\(\mathrm{T}: \mathrm{NP}_{1}\)
"Tomorrow they go to the other village"
(cf. 6.2.10., below, on LP.)
6.1.2.3.2. Sub-class 2.

All other NP types can be grouped in one sub-class. These Noun Phrases have quite a wide distribution, but since they all equally share the same distributional possibilities, it is not necessary to establish further sub-classes.

They may occur back-looped in the Peripheral slot in Verb Group type ii, sub-type i. (cf. 4.1.2.2.1., above.)
e.g. ntahiga kht

"to give shelter to s.o."

They may occur recursively in the Limiter slot of NP type i (cf. 6.1.2.2.1.2., above), and in the Axis slot of Axis-Relator phrases.
e.g. Hoaa-mi gi?ithe jatnaja-nee a?mitá Juan rec that child-dim with eat

John ate with that little chjlld"
(For further examples, cf. section 6.2., below.)

They may also occur in the following Clause-level tagmemes: Subject, Object, Causative Object, and Predicate \(_{\text {i. ii }}{ }^{\circ}\)
e.g. Hoaa Manoel tsheni
\({\underset{S: N P}{\text { iv }}}_{\text {Juan }}^{\mathrm{Manuel}_{\text {iv }}}\) see "John sees Manuel"
Further examples are to be found in the preceding description of the NP, and in the description of the clause, below.

\subsection*{6.1.3. Numeral Phrase.}

\subsection*{6.1.3.1. Contrast.}

The Numeral phrase (Nump) has the following contrastiveidentificational features:-
i) It may have a single Head tagmeme, or two Head tagmemes.
ii) These Head tagmemes are filled by numerals or by backlooped Numeral or Directional Phrases.

\subsection*{6.1.3.2. Variation.}

Numeral Phrases are either sinple or complex, and separate types are established on the basis of this difference.
6.1.3.2.1. Numeral Phrase Type i, "Simple".
\(\mathrm{NumP}_{\mathrm{i}}=+\mathrm{H}: \mathrm{Hum}_{1}\)
This consists of all sub-class 1 numeral words.
e.g. sagt "one"
postsatutgahi "four"
6.1.3.2.2. Numeral Phrase Type ii, "Complex".

Composite formula:-
\(\mathrm{NumP}_{i i}=+\mathrm{H}: \mathrm{Num}_{2} / \mathrm{DP}_{I}+\mathrm{H}: \mathrm{Num}_{2} / \mathrm{NumP}_{\text {ii. }} 1\)
Three sub-types are set up on the basis of structural differences of a finer degree of delicacy than those separating types i and ii.

\subsection*{6.1.3.2.2.1. Sub-type i.}
\(N_{\text {NumP }}^{\text {i.i.i }}=+\mathrm{H}: N u m(" t w o ")+/ ? /+\mathrm{H}: N u m(\) "one" \()+/ ? /\)
This sub-type has only one member:-

6.1.3.2.2.2. Subutype ii.
\(\mathrm{NumP}_{\text {ii. }}^{\text {ii }}=+\mathrm{H}: \mathrm{DP}_{1}+\mathrm{H}: \mathrm{Num}\)
Three variants of \(\mathrm{DP}_{1}\) occur. Each is combined with the numerals for "one", "two" and "four", to create other numbers, and fee?pa-kh6, "from our foot", is in addition combined with the numeral for "five", as indicated below.
a) si-?osi - khb sagit
\(\frac{\text { othex hand from }}{\mathrm{H}: \mathrm{DP}} \underset{\mathrm{H}: \mathrm{Num}}{\text { on }}\) "six" (Lit., "from the other hand oner") Nump \(_{\text {ii. ii }}\)
s1-?osi-kht migaak
ther hand from two hand two")

\footnotetext{
\(7_{\text {Numbers }} 6-9\) are counted on the right hend, starting with the little finger.
}
```

    si-?Osi-kh\delta po?ts{̌ávagaahi "nine" (Lit., "from the
    other-hand from four other hanc four")
b) fee?pa-kh6 sagh

```

```

                                "eleven" (Lit., "from
                                our foot, one"l')
        fee?pa-kh6 migaakt
                                "twelve" (Lit., "from our
        foot, two")
        fee?p&-kh8 po?tsG&vagaah1 "fourteen"(Lit., "from
        our-foot from four
        our foot, four")
        fee?pa-kh8 sk-?osi
        our-foot from five
    "fifteen" (Iit., "from
our foot, five")
c) si-tu?\& - kh6 sagt
other-foot from
other foot, one")
s1-tu?a-kh8 migaaki "seventeen" (Lit., "from the
other-foot from two
other foot, two")
si-tu?\&-kh8 po?tskávagaahi "nineteen" (Lit., "from
other-foot from four
the other foot, four")

```

\subsection*{6.1.3.2.2.3. Sub-type ii.i.}
\(\mathrm{NumP}_{\text {ii. }} \mathrm{i} i \mathrm{i}=+\mathrm{H}: \mathrm{DP}_{1}+\mathbb{H}: \mathrm{NumP}_{\text {ii. }}\)
As in sub-type ii, the three variants of \(\mathrm{DP}_{1}\) occur. Each is combined with migaakf? sagh?, "three", to form the numbers for "eight", "thirteen" and "eighteen", respectively.
\(8_{\text {Numbers }}\) ll-15 are counted on the left foot, starting with the little toe.
```

a) si-?osi-kh6 migaakt? sagh?

```

```

b) fee?p\&-kho migaakf? sagf? "thirteen" (Lit., "from
c) si-tu?k-kh8 migaakk? saga? "eighteen" (Lit., "from
other-foot from three the other foot, three")

```
6.1.3.3. Distribution.

The Numeral Phrase is distributed back-looped in the Quantim fier slot in NP typesi. and if.
e.g. gi? migaekf? sagh? va?agaahi

"These three machetes"
(cf. NP, 6.1.2.2., above.)
6.2. Axis-Relator Phrases.
6.2.1. Dative Object Phrase.

\subsection*{6.2.1.1. Contrast.}

The Dative Object Phrase (DOP) has the following contrastiveidentificational features:-
i) Its axis tagmeme slot is filled by a recursive NE, by a back-looped elause, which has been nominalized (cf. 7.2.2.3.), or by an interrogative.
ii) Its relator tagmeme slot is filled by \(-k\), "dative marker"
iii) The relator is phonologically bound to the last con-
```

stituent of the axis.

```

\subsection*{6.2.1.2. Variation.}

LOP \(=+\) Axis:NB/ig/NomCl +rel: -kt "dative marker"
With NP filler of Axis slot:
\[
\begin{aligned}
& \text { i) gi?ithe Jijatagi Jatna-kt-mi maa?ma doo?ni } \\
& \text { that big child dat rec cassava she-give } \\
& \underset{\mathrm{DOP}}{\mathrm{Axis}_{\mathrm{NP}}^{\mathrm{NP}_{2}} \quad \text { weir }} \text { past } \\
& \text { ii) Isabeel-mi Ha ntagi - kt iteevi?6 aa?ni } \\
& \text { Isabel rec Juan brother dat aguaje give }
\end{aligned}
\]
\[
\begin{aligned}
& \text { fruit to John's brother" }
\end{aligned}
\]

With Interrogative filler of Axis slot:

whom dat fut hammock she-give
Axis:ilg rel
"Io whom will she give the hammock?"
With Nominalized Clause filler of Axis slot:
i) anepur? nodo?phavaa-ke, nil maa?tsa no



From the above examples, it would appear that -ke is used with substantial differences of meaning when the axis slot of the Dative Object Phrase is filled with a nominalized
clause from when it is filled with an \(\mathrm{NP}_{2}\) or an interrogative, and, moreover, there is a possible difference of semantic relation between the clause-level tagmemes which the DOP manifests in each of the NomCl examples given, and the Predicate of the relevant clause. This difference of semantic relation may be indicated by the terms Concessive and Concurrent, respectively, and it gives rise to the possibility of viewing the relator in each case as representing two or even three homophonous but different
 "Concurrent".

However, this suggestion is rejected for the following reasons:
i) The clause occurring in the axis slot is clearly nominalized in accordance with the pattern evidenced in other, non-ambiguous, contexts in the language, and thus has a relationship to the relator parallel to that of the NP's and interrogatives occurring in this slot.
ii) Almost all other axismrelator phrases in the language are unequivocally attested with NP and nominalized clause fillers of the axis slot, and this lends weight to the interpretation of doubtful cases in accordance with the established pattern. The existence of one or two cases which are of doubtful or ambiguous interpretation is not considered sufficient reason for establishing a separate pattern type --
one in which some A-R phrases only have an NP filler, while some others only have a nominalized clause filler -- especialIy when the relators are the same in each case.
iii) Though meaning is not rejected as a criterion in tagmemics (contrast Harris, 1951, for example), and is in fact always tacitly present in the recognition of differences, from morpheme level on up, it is not considered adequate for the establishment of different grammatical categories or types unless it comoccurs with at least one (Pike, 1967:471) or two (Longacre 1964a:18) formal differences.
iv) It may be that the apparently different meanings of -ke are no more than a consequence of our interpreting Resigaro in the light of English and Spanish structures, or, if such differences are taken to represent semantic differences in Resfgaro, they may best be viewed as a consequence of the different contexts in which the DOP occurs, at clause level. It is to be expected that the relation of the Dative or Dative Object tagmeme to the Predicate tagmeme will vary with different fillers of the Predicate slot, and according to other similarities and differences between the nominalized and the matrix clause, such as when one is affirmative and the other negative, as in the first NomCl example, above. \({ }^{9}\) Whether a relationship is inter-

\footnotetext{
\({ }^{9}\) If the NomCl is negative, the DOP can be used to convey a negative temporal sequence. e.g. [Continued next page]
}
preted as concessive or not is in any case dependent on the expectations of the hearer, and though these may be reflected in different glosses, they are, in the final analysis, beyond the realm of the linguistic description.

All this is, in any case, a clause level variation, thus not affecting the establishment of types at phrase level. For this reason, it is also considered as not relevant to this level that when the Axis slot is filled by an NP or an interrogative, the filler of the predicate slot at Clause level must be aa?ni, whereas when the filler of the axis slot is a NomCl, there is no such restriction.

\subsection*{6.2.1.3. Distribution.}

The Dative Object Phrase is distributed in the clause, where it fills the Dative Object and Dative slots. Two sub-classes of DOP are established on the basis of this distribution:
6.2.1.3.1. Sub-class 1.

This consists of all Dative Object Phrases with an \(\mathbb{N R}\) or an interrogative in the axis slot. The members of this subclass are distributed in the Dative Object slot at clause
```

e.g. nil-mi-kht? af?pe ee?phi khaa-ke-minil kašoo?
not recincomp my-father fish do dat rec not well
past | past va?mita

```

"As yet my father didn't fish, we didn't eat well" i.e., "Before my father fished, we didn't eat well" Verb Piece ii.ij may also be used to convey "before". cf. 5.1.2.2.2., above. (cf. 6.2.8.2. and 6.2.9.2.1. for "after" temporal sequences.)
```

level (cf. 7.1.1.6., below).
eeg. i) gi-kt-mi šakoo?gi?6 noon
$\frac{\text { him }}{1}$ dat rec banana I-give Axis: $\frac{\mathbb{N P}_{2} r e l r}{1}$ past DO: DOR ${ }_{I}$ "I gave the banana to him"
ii) keent-ke-mi 8kbniigiht daa?ni
whom dat rec shotgun hemgive Axis: iq rel past "LO whom did he give the shotgun?"
6.2.1.3.2. Sub-91ass 2.

This consists of all Dative Object Phrases with a Nominalized Clause in the axis slot. The members of this subclass are distributed in the Dative slot at clause level (cf. 7.1.2.1., below).
e.g. dómaa - kt -mi iteevi? 8 gi-khk
she-sleep dat rec agraje he-eat
$\frac{\text { Axis:NomCl relr past }}{\text { Dat:DOP }}$ "While she slept, he ate aguaje fruit"

### 6.2.2. Purposive Phrase.

6.2.2.1. Contrast.

The Purposive Phrase (PP) has the following contrastiveidentificational features:
i) Its axis tagmeme slot is filled by a recursive $\mathrm{NP}_{2}$ by a back-looped clause which has been nominalized, or by an interrogative.
ii) Its relator tagmeme slot is filled by $\{-m 5\}$, "purposive marker".
iii) The relator is phonologically bound to the last con-
stituent of the axis.
6.2.2.2. Variation.
$\mathrm{PP}=+\mathrm{Axie}: N \mathrm{R} / \mathrm{Ig} / \mathrm{NomCl}+\mathrm{relr}:\{-\mathrm{a}\}\}$ "purposive marker"

- 6 - - h 6
-ho occurs with pronouns
-w occurs elsewhere
With NP filler of Axis slot:


'Cone here'."
ii) gi - ho ${ }^{10} \mathrm{mi}$ dank "veep pi-tsta"


With Interrogative filler of Axis slot:
kthee-mb-mi pima kamovii? 6
, whom apse rec youmsay drunk I
Axis:ig relrpast "To whom did you say I was drunk?" PP

With Nominalized Clause filler of Axis slot:
i) ve?e girts? intad6 gi-minab - ab here he-come woman he-seek, pps

"He comes here
to seek a wife"
$\overline{10} \mathrm{Th}$ e pronoun is assimilated to the relator, which in this case exceptionally has the same effect as a C-(other-than-$\mathrm{h}-$ ) initial word or relator. cf. 3.3.2.1., above.


It may be argued that the above examples allow for different interpretations of the relation indicated by $\{-n\}$, when the axis slot is filled by a Nominalized Clause, from when it is filled by an NP or an interrogative. ${ }^{11}$ However, these apparent differences of neaning may merely result from our giving too much weight to the structure of the English (and Spanish) glosses, when viewing Resigaro. It is certainly possible to gloss the first two examples above acceptably as "She said for that big child [to hear] ..." and "She said for him [to hoar] ...", respectively, and this obviously corresponds more closely to the Resigaro view of the relationships involved.

A second and apparently correlated difference may be noted: when the axis slot is filled by an NP or an interrogative, the resultant PP occurs in a clause in which the Predicate may only be filled by kernd, "to say"; when the axis slot is filled by a Nominalized Clause, no such restriction is present. From this it may be argued whether it would not be preferable to establish two different types

[^40]```
of PP -- or even two totally different phrases, each with
different (but homophonous) relators \(-\{-n 8\}\).
```

However, this suggestion is rejected for the reasons given in 6.2.1.2., above, when discussing a similar situation with regard to the Dative Object Phrase.

As regards the apparent distributional difference, while it is recognized that distributional differences often correlate with structural differences, it has been clearly established that in this description distributional differences are nowhere allowed to dictate typological divisions, which must be solidly based on structural differences relevant at the level in question (cf. 0.4.3.). Thus it is considered that insufficient evidence exists here for establishing different phrases, or even two types of PP.

### 6.2.2.3. Distribution.

The Purposive Phrase is distributed in the Clause, where it fills the Purposive slot ${ }^{12}$ or the Predicate slot. Two subclasses are established on the basis of this distribution:
6.2.2.3.1. Sub-class 1.

This consists of all Purposive Phrases with an NP or inter.

[^41]rogative in the axis slot. The nembers of this sub-class are distributed in Purposive tagmene type $i$ (which only occurs when the Predicate slot in the clause is filled by a VP containing kemt "to say, to tell"), and in the Predicate slot in nori-transitive clauses. e.g. In type i Purposive tagmeme:

(For type i Purposive, cf. 7.1.2.2.1., below.)

## In the Predicate:

i) kehee - mb hifth

ii) hilta gi - h6

(For non-transitive predicates, cf. section 7.1.1.1.1., below, especially sub-type iii.)

### 6.2.2.3.2. Sub-class 2.

This consists of all Purposive Phrases with a Nominalized Clause in the axis slot. The members of this sub-class are distributed in Purposive tagneme type ii (which has no occurrence restriction such as that for type i).
e.g. no?mital-ns no?pi

(For type ii Purposive, cf. 7.1.2.2.2., below.)

### 6.2.3. Benefactive Phrase.

6.2.3.1. Contraste

The Benefactive Phrase (BP) has the following contrastive. identificational features:-
i) Its axis tagmeme slot is filled by a recursive NB
a back-looped clause, which has been nominalized, or an interrogative.
ii) Its relator tagmeme slot is filled by -poks?, "benefactive marker".
iii) The relator is phonologically bound to the last constituent of the axis.

### 6.2.3.2. Variation.

$B P=+$ Axis:NR/ig/NomCl +relr: -poka? "benefactive marker"
With NP filler of Axis slot:
i) gi?ithe Jijáagi Jakna-poka? - mi a?mithootsi do-khk
 (because of) that big child"
ii) do-tskats-poks? tsods?pd


With Interrogative filler of Axis slot:


With Nominalized Clause filler of Axis slot:
i) ve?e gi-tsa? insado gimimak-poka? here he-come wife he-seek, ben

"He comes here because he seeks a wife"
ii) monigi amepuu? ee?phi khak-pokâ?, kašoo? va?mit

"Because my father catches a lot of fish, we eat well"

As the above examples show, when the axis slot of the BP is filled by a NomCl, the meaning conveyed by this and the Predicate in the Matrix clause is one of Cause-Effect. Any apparent difference in meaning when the axis is filled by an NP or an interrogative is not doubt at least partly due to the forms of the English glosses, and in any case there is not sufficient structural difference between the forms with different fillers of the axis slot to justify the establishment of different phrases, and it is clear that in the language no emic contrast is felt.
6.2.3.3. Distribution.

The Benefactive Phrase is distributed in the Clause, where
it fills the Benefactive slot.
e.g. no-novigipil-poka? gimh


### 6.2.4. Instrument Phrase.

6.2.4.1. Contrast.

The Instrument Phrase (IP) has the following contrastiveidentificational features:-
i) Its axis tagmeme slot is filled by a recursive NR, by a back-looped clause which has been nominalized, or by an interrogative.
ii) Its relator tagmeme slot is filled by -gi, "instrument marker".
iii) The relator is phonologically bound to the last constituent of the axis.

### 6.2.4.2. Variation.

$\mathrm{IP}=+$ Axis:NP/ig/NonCl +relr: -gi "instrument marker" With NP filler of oxis slot:
 that big machete instr rec snake dead he-make
Axis:N $\mathbb{B}_{2} \quad$ Helr past killed the snake with
that big machete"
ii) Isabeel-mi Hoaa hitaa - gi i?pi Isabel rec Juan canoe instr go past $\frac{\text { Juan canoe instr go }}{\frac{N_{2}}{\text { is }} \text { relr }}$ go "Isabel went in (i.e., by means of) John's canoe"

With Interrogative filler of Axis slot:


## With Nominalized Clause filler of Axis slot:

IP's with nominalized clauses in the axis slot are quite infrequent, though the following has been attested:-
gižafnú do?mbtshob-g1-mi ke?vigi naginagi do-khot
his-child she-hit, instr rec chief angry she-do-cstv

she nade the chief angry"

### 6.2.4.3. Distribution.

The Instrument Phrase is distributed in the Clause, where it fills the Instrument slot.
e.g. maa?makio? do-kht va?agaỷ - gi
cassava cut she-do
 with a knifel'

For further details, cf. Clause level, esp. 7.1.2.4.
The Instrument Phrase is also distributed in Verb Group
type ii, sub-type ii. (cf. 4.1.2.2.2.)

### 6.2.5. Concomitant Phrase.

### 6.2.5.1. Contrast.

The Concomitant Phrase (CP) has the following contrastiveidentificational features:-
i) Its axis tagmene slot is filled by a recursive NB, by a backlooped clause which has been nominalized, by an adjective, or by an interrogative.
i.i) Its relator tagmeme slot is filled by $\{$-nes $\}$, "with", $\{-m a ?\}$, "without", or -kapo?, "alone".
iii) The relator is phonologically bound to the last constituent of the axis.

### 6.2.5.2. Variation.

Three types ${ }^{13}$ of Concomitant Phrase are set up on the basis of internal structure:-
$C P_{i}=+A x i s: N R / N O m C l / A j_{1} / i g+r e l r\{\{-n e E\}, " W i t h "$
$C P_{i f}=+$ Axis:NB/NomCl $+r e l r:\{-m a ?\}$, "without"
CP ${ }_{\text {iii }} \equiv$ +Axis:NR2 $\quad$ +relr: -kApo?, "alone"
6.2.5.2.1. Concomitant Phrase Type i: $\left.\{-n e\}^{\prime}\right\}$

The structure of this phrase type is as indicated in the formula in the preceding paragraph.
$\{-n e \theta\}: \quad-n e t-\operatorname{nc}$
-n8 occurs after nouns and interrogatives end..
ing in ....VV.
-nef occurs elsewhere.
With NP filler of Axis slot:
i) gi?ithe Jiyang Jakns-nee-mi do-tsa?


[^42]ii) atstagi-? pe anofgi-nee pata?-kakave
man rem tapir, with look-recip

"The man and the tapir
looked at each other"
iii) In the example that follows, the $\mathrm{NP}_{2}$ in the axis slot
of the CP contains a subject-relativized clause as one of
its constituents (cf. 6.1.2.2.1.5., above, on the Modifier
tagmeme, and 7.2.2.4., below, on relativization).
jáana-mi gi-kei tobjovi -né ve?e tsa?nu
childrechis-fore- wounded-Srel with here come

"The child with the arm which is wounded came here"
iv) At the other extreme, the $\mathbb{N}_{2}$ may be of minimal expansion:
šob - ne
falsehood with

"lying"

With Nominalized Clause filler of Axis slot:
i) p6?manti? tsada?pa ${ }^{24}$ nes-mi dodo?phaava loudly he-sing, with rec he-work

"Singing loudly he worked"
ii)


[^43]With Adjective filler of Axis slot:
Of all the Axis-Relator phrases, adjectives are only att. ested in the Axis slot of $\mathrm{CP}_{\mathrm{i}}$.
e.g. kai $n t_{e}{ }^{16}$

"dead"

With Interrogative filler of Axis slot:

6.2.5.2.2. Concomitant Phrase Type ii: $\{- \text { ma? }\}_{0}^{17}$

The structure of this phrase type is as indicated in the formula in 6.2.5.2., above.

$$
\left\{\begin{array}{rl}
\{-\mathrm{ma}\}
\end{array}: \begin{array}{rl} 
& -m a ?-\text { ma } \\
& -m a ? \text { occurs finally in the phrase } \\
& - \text { ma occurs elsewhere. }
\end{array}\right.
$$

With NP filler of Axis slot:
i) Jánd - ma? - mi do-tsa? child without rec she-come $\underset{\mathrm{CP}_{i i}}{\mathrm{Axis:}_{2}} \mathrm{NP}_{2}$ rolr past "She came without the child"

[^44]ii) gi-naagi - ma? - mi dodo?phaava $\frac{\mathrm{CP}_{\text {ii }}}{\text { Axis: } \mathrm{NP}_{2}}$

## With Nominalized Clause filler of Axis slot:



Once again, there is an apparent difference in the meaning of the relator, depending on whether the filler of the axis slot is an NP or a NomCl, and earlier comments are relevant (cf. 6.2.1.2., 6.2.2.2.). The difference is not as great as at first appears, the meaning being in both cases basically "negative".

### 6.2.5.2.3. Concomitant Phrase Type iii: -kapo?.

 The structure of this phrase type is as indicated in the formula in 6.2.5.2., above. To date, no cases of a nominalized clause filling the axis slot have been attested.i) gi-kspo? gi-patns-k8o gi?pl

Axis NPalone his-house-to he-go
$C P_{\text {iii }}$
"Alone he goes to his house"
ii) gi-nkagi-kbpo? tsa
his-brother-alone he

"His brother, he (is) alone"

### 6.2.5.3. Distribution.

The Concomitant Phrase is distributed in the Clause, where it fills the Concomitant or the Predicate slot, and in Verb Group type ii. Two sub-classes are set up on the basis of this distribution.

### 6.2.5.3.1. Sub-class 1.

This consists of all type ii CP's with a nominalized clause in the axis slot. The members of this sub-class are distributed in Concomitant tagmeme type i (which only occurs when the Predicate slot in the clause is filled by a VP containing ifl, "to fear").

```
e.g. dofa gi-nes do?pinat-ma?
    she-fearhim with she-go
```



```
"She is afraid to go with him"
```


### 6.2.5.3.2. Sub-ciass 2.

This consists of all other CP's, which are distributed in Concomitant tagmeme type ii (which has no co-occurrence restriction such that applying in the case of type i), in the Predicate, and in $V G_{i i .}$.

In the Concomitant slot (type ii):
e.g. Ñekañekaag1-musi o?doneme i?pi ginn6-nee Nekañekakgi-dual to-fish go his-wife with $\underset{\text { Conc }_{i i}: \mathrm{CP}_{2}}{\text { Axis: } \mathrm{NH}_{2}}$
"Ñekañekaagł went fishing with his wife"
(For further details, cf. 7.2.1.2.2.2. and 7.2.1.2.3.2., below.)

In the Predicate slot (type i):
e.g. do-nkad6 - nee ts6

(For further details, cf. 7.1.1.1.1.3.(i), below.)
In the Periphery slot in Verb Group ii.i:
Only type i CP has been observed in this construction.
e.g. taa - nee Jua

(For further details, cf. 4.1.2.2.1., above.)

### 6.2.6. Comparative Phrase.

6.2.6.1. Contrast.

The Comparative Phrase (CtvP) has the following contrastiveidentificational features:
i) Its axis tagmeme slot is filled by a recursive $\mathrm{NB}_{2}$ or by a back-looped clause which has been nominalized.
ii) Its relator tagmeme slot is filled by ve?aii, "more
than", or -pee? "like, same as".
iii) The relator is phonologically bound to the last constituent of the axis.
6.2.6.2. Variation.

Two types ${ }^{18}$ of Comparative Phrase are set up on the basis
of internal structure:-

$\operatorname{CtvP}_{1 i}=+$ Axis:NP/NomCl +relr: -pee? "same as, like"

### 6.2.6.2.1. Comparative Phrase Type i: -ve?ali.

The structure of this phrase type is as indicated in the formula in the preceding paragraph.

With NP filler of the Axis slot:
i) gi?ithe Jijang jabna - ve?mii de? jo that big child, more-than he-runs
Axis: $\mathrm{NB}_{2}$
$\mathrm{CtvP}_{\mathbf{i}}$ big child"
ii) pi - ve?ali tsein80? tsk you more-than tall he
$\frac{\text { Axis: } \mathrm{NP}_{2}}{\mathrm{CtVP}_{i}} \mathrm{relr}$ "He (is) taller than you"

With Nominalized Clause filler of Axis slot:
i) do?mitas . vo?ali da?mita

$\overline{18}$ ef. footnote 13 to section 6.2.5.2., above, on establishment of separate types.
ii) kapi či?vu ds joo? - ve?nii quickly he-walk she-run morethan
$\operatorname{CtvP}_{i}$
6.2.6.2.2. Comparative Phrase Tyoe ii: $\underbrace{19}$-pee?. ${ }^{20}$

The structure of this phrase type is as indicated in
6.2.6.2., above.

## With NP filler of Axis slot:

i) aneviids - pee? na-ke? 36

ii) iteevi?e-pee? gi-ke? jo
aguaje-tree like he-become

"He becomes like an aguaje tree"

With Nominalized Clause filler of Axis slot:
i) do?mitá--pee? da?mitt


```
\(\overline{19}\) This type of Comparative Phrase is to be distinguished
from the comparative clause (not a separate type) occurring
when the Fredicate is filled by hiivs? (a predicative ad-
jective).
ong. Kedsvil? aatysda? ami hiiva?mif tst
    red tree-leaves like rec he
                                    past
"He was like the red leaves of the aatydat tree" (cf. Lexicon)
\({ }^{20}\)-3t? has also been observed, with apparently the same
meaning as -pee?.
e.g. hantaka-? ?
    hamock like "like a hammock"
However, this is of very raxe occurrence.
```

ii) kapsad6 vits6ma-pee? phada?pa


### 6.2.6.3. Distribution.

The Comparative Phrase is distributed in the Clause, where it fills the Comparative slot.
e.g. no-j1igi - ve?nii dodo?phaavt


### 6.2.7. Conditional Phrase.

### 6.2.7.1. Contrast.

The Conditional Phrase (CondP) has the following contrast-ive-identificational features:-
i) Its axis tagmeme slot is filled by a recursive Ng or by a back-looped clause which has been nominalized. ii) Its relator tagmeme slot is filled by -tshi, "conditional marker".
iii) The relator is phonologically bound to the last constituent of the axis.

### 6.2.7.2. Variation.

CondP $=$ +Axis:MP/NonCl +relr: -tshi "conditional marker" With NP filler of Axis slot:

This is attested far less frequently than NomCl fillers of the axis slot in Conditional Phrases. The following ex-
ample has been noted:


## With Nominalized Clause filler of Axis slot:

i) anepuu? as?pe ee?phi kha-tshi-va, kašoo? va?mith
$\frac{\text { much father fish do }}{\text { Axis:MomCl }} \frac{\text { if }}{\text { CondP }}$ fut well we-eat
"If my father catches a lot of fish, we shall eat well"
ii) nil fa?va-tshi-va no?pi
$\underbrace{\underbrace{\text { Axis:NomCl }}_{\text {not rain }} \operatorname{lif}_{\text {relr }}^{\prime} \text { fut I-go }}_{\text {CondP }}$ "If it does not rain, I will go"

It will be recognized that the above are exanples of "simple" conditionals. Contrary-to-fact conditionals also occur, though these do not form a separate type of conditional phrase, as the differences are to be found at clause level -- though they are for convenienco listed hereunder, with examples.
i) "Simple" Conditional Phrases nay be and frequently are followed by the clitic -vt, "future".
ii) Contrary-to-fact conditionals, however, have to be followed by the clitic $\{-m a ?\}$ "unrealized" ${ }^{21}$, which becomes -ma before the following clitic. -ma in turn may be followed by one of the clitics -nf "recent past" or -?pe

[^45]"remote past". The clitic 㗐 "future" may not occur here (a logical, rather than a purely linguistic, restriction). Examples of contrary-to-fact conditionals:-
i) With NP filler of Axis slot:

ii) With Nominalized Clause filler of Axis slot:

"If my father had caught a lot of fish, we would have eaten wel."

### 6.2.7.3. Distribution.

The Conditional Phrase is distributed in the Clause, where
it fills the Conditional slot.
e.g. alme tro?vimu kavo? - tshif va va?mita

"If mother toasts the fariña (grated manioc), we will eat"
6.2.8. Adjunct Phrase.
6.2.8.1. Contrast.

The Adjunct Phrase (AP) has the following contrastivewidentificational features:-
i) Its axis tagreme slot is filled by a back-looped clause
which has been nominalized.
ii) The verb in the Predicate slot in the nominalized clause typically bears the inchoative suffix (of. 3.1.2.3.2., above).
iii) The relator tagmeme slot is typically filled by -tsi, "Adjunct Phrase marker". 22
iv) The relator is phonologically bound to the last constituent of the axis.

### 6.2.8.2. Variation.

$A P=+A x i s: N o m C l R \quad+r e l r:-t s i=A d j u n c t$ Phrase marker"
The restriction on the nominalized clause is that the verb manifesting its Predicate obligatorily bears the inchoative marker when the relator is omitted, and typically bears it when the relator is present.

The relator or the inchoative is on occasion onitted, but at least one of these must occur, and in the vast majority of cases, both do.
e.g. i) papokad-tsi foo pi-kht



[^46]

A more specific way of expressing the temporal relation implied in the second gloss, above, is to be found in the Directional Phrase construction, in 6.2.9.2.1., below.
iv) no?mitakat- $\varnothing$ no-tst?


No difference is found between the use of this construction with the verb tsf?(nu) in the Predicate slot of the matrix clause and the use of the verbal suffix -ki (cf. 3.1.2.4.2.).
6.2.8.3. Distribution.

The Adjunct Phrase is distributed in the Clause, where it
fills the Adjunct slot.
e.g. phaa? - mi oo hamo? gi-likhat-tsi gi-khe sent

slot is filled by a NomCl and with nee as relator. However, the Resigaro structure is clearly distinct, as indicated throughout this section and in section 6.2.5.2.1., above. 24 Since nominalization reduplicates the final vowel of the verbm but the addition of a suffix with a reduplicated vowel (Inchoative) causes deletion of a geminate vowel in one of the two syllables involved (generally the first), the mominalized and non-nominalized forms becone homophonous. However, unambiguous forms occur when the Inchoative is omitted, and this permits interpretation of homophonous forms.
"Ihen heating (it), he ate (it)"
On inter-sentential relator phaa? (hore glossed "then"),
cf. 7.2.1.2.6.1., below.

The Adjunct Phrase is also distributed recursively in the axis slot of the Directional Phrase. For further details, cf. 6.2.9.2.1., below.

6,2.9. Directional phrase.
6.2.9.2. Contrast.

The Directional Phrase (DP) has the following contrastiveidentificational foatures:-
i) Its axis tageme slot is filled by a recursive ND, by a recursive Adjunct Phrase in which the axis slot is filled by a nominalized clause, by a back-looped clause which has been nominalized, or by an interrogative.
ii) Its relator tagnome slot is filled by -khb "from", -koo "to" or gikne "out of".
iii) The ralator is phonologically bound to the last constituent of the axis.

### 6.2.9.2. Variation.

Three types ${ }^{25}$ of Directional Phrase are set up on the basis of internal structure:-
$D P_{i}=+A x i s: N g / A P / T o m C l / i g$ +xelr: -khs "from" ${ }^{26}$
25 cf. footnote 13 to section 6.2 .5 .2 . , above on justification
for establishent of types.
$26_{\text {These phen }}$ phase-level directional relators must be distinguished
$D P_{i i}=+A x i s: N P_{2} / i g$ +relr: -k6o "to"
$D P_{j i j}=+A x i s: N P_{2} i g$ trelr: -gikhe "out of"
6.2.9.2.1. Directional Phrase Type i: -kho.

The structure of this phrase type is as indicated in the
formula in the preceding paragraph.
With NP filler of Axis slot:
i) gi?ithe Jijéagi Jaana-kh6-mi do?pi

ii) Jakade-kh6 no-tst?


With AP filler of Axis slot:
i) no?mitak-tsi-mi-kh6 nopite

i.i) mitsha gizas-tsf-mi-kh6 da?pita

from the word-level directional verbal suffixes (Order 3), -kee "to go to" and -kt "to cone from". cf. 3.1.2.4., above. ${ }^{27}$ When an AP or a NomCl fills the axis slot in DP type $i$, the resultant form carries a temporal, rather than a directional, neaning. However, the same cover term is rem tained, for structural reasons.

## With Nominalized Clause filler of Axis slot:



With Interrogative filler of Axis slot:
e.g. hemet-kh8 gi-tsa?
where from he-come
${\text { Axis: } i_{g} \text { relr }}_{\mathrm{DP}_{i}} \quad$ "Where does he cone from?"
6.2.9.2.2. Directional Phrase Type ii: -koo.

The structure of this phrase type is as indicated in
6.2.9.2., above.

With NP filler of Axis slot:
i) gi?ithe Jixáag Jabnambo-m! do?pi

i.i) y̌akade-1sto no-tsa?


The lack of a mominalized clause filler of the axis slot for type ii Directional Phrases may be attributable to the availability of the complex Verb Piece (sub-type i) construction to convey relations of the type exenplified by "I go to eat" (ci. 5.1.2.2.1.), and the availability of the

[^47]Purposive Phrase for "I go in order to eat" (cf. 6.2.2.),
 like -kh() is not used in a temporal sense.

A relativized clause may occur in the $N P$ in the axis slot of the $D P$.
e.g. gi?p1 tee?1?aavi-nk Jo-vi-koomi. kbo

"He goes to the village which is on the river bank"
Wi.th Interrogative filler of Axis slot:

6.2.9.2.3. Directional Phrase Type iii: -gikhe.

The structure of this phrase type is as indicated in
6.2.9.2., above.

With NP filler of Axis slot:
i) tes?1-gikhe fitsర? nož
river out_of withdraw I-be "I come out of the river"
$D P_{i, i i}$
ii) ha? vafoond-gikhe ha? matshivaa?nthaah mameni i-khe


## With Interrogative filler of Axis slot:

e.g. here - gikhe-mi oova havana


### 6.2.9.3. Distribution.

The Directional Phrase is distributed in the Clause and in the Numeral Phrase. Subclasses of DP are set up on the basis of this distribution.
6.2.9.3.1. Sub-class 1.

This consists of three DP's:

${ }^{29}$ si- is clearly a noun stem in Resigaro, even though the English gloss "other" is not. It also occurs elsewhere, with the appropriate classifier in each case.
ecg. si - komi $\xrightarrow[\text { B:MnSt }]{\text { Other }}$ village "the other village"



These are distributed in Numeral Phrase type ii, sub-types ii and iii(cf. 6.1.3.2.2., above).

### 6.2.2.3.2. Sub-class 2.

This consists of all other Directional Phrases, which are distributed in the Clause, where they fill the Directional slot. Two sub-groups are established on the basis of this distribution.
6.2.9.3.2.1. Sub-class 2.1.

This consists of all sub-class 2 Directional Phrases with an NP or an interrogative in the axis slot. The members of this sub-class group are distributed in Directional tagmene type $i$ (which only occurs when the Predicate slot in the clause is filled by a verb of motion).
e.g. teer1-k8o do-tsa?


### 6.2.9.3.2.2. Sub-class 2.2.

This consists of all sub-class 2 Directional Phrases with a NomCl or AP in the axis slot. The members of this subclass group are distributed in Directional tagmeme type ii (which has no co-occurrence restriction such as that in the case of type i).
e.g. gi?dak - kh8 kama-kak tst

"From drinking, he got
drunk"

### 6.2.10. Locative Phrase.

6.2.10.1. Contrast.

The Locative Phrase (LP) has the following contrastiveidentificational features:-
i) It may consist of an Axis-Relator phrase, or of a locative word or an interrogative, alone. When consisting of the former, it has the following additional features:
ii) Its axis tagmeme slot is filled by a recursive $\mathrm{NP}_{2}$ or by a back-looped clause which has been nominalized. iii) Its relator tagmene slot is filled by one of the following clitics:-
i) $\mathrm{his}(+\mathrm{p} 6)$ "on, above"
v) -gi "in"
ii) -naapi "under"
vi) -nú "in"3l
iii) -a?n( "beside" vii) -giks "inside"
iv) -ipe "in front of" 30
iv) The relator is phonologically bound to the last constituent of the axis.
$\overline{30}$-hive? also occurs on a few occasions, with the meaning "in front of". (cf. Verb Group ii.i -- 4.1.2.2.1. $3 I_{\text {For }}$ the difference between this and the preceding relator, see exemples bolow. It may bo that gef is basically used in clauses indicating motion, whereas na is basically used in clauses indicating states. -nl may thus be better rendered as "at".

### 6.2.10.2. Variation.

Two types of LP are set up on the basis of internal
structure:-
$L P_{i}=+H: 10 c$ word/interrogative
$\mathrm{LP}_{i i}=+$ Axis: $\alpha N \mathrm{~N} /$ NomCl +relr: $\alpha\left\{\begin{array}{l}\text { One of the } \\ \text { set of Loc- } \\ \text { ative relators }\end{array}\right\}$
< reads: the choice of NP or NomCl is dependent on the choice of locative relator. cf. 6.2.10.2.2., below.
6.2.10.2.1. Locative Phrase Type i.

The structure of this phrase type is as indicated in the formula in the preceding paragraph.

## i) Locative filler.

e.g. ve?e gi-tst?


ii) Interrogative filler.
e.g. heres tsh

6.2.10.2.2. Locative Phrase Type ii.

The structure of this phrase type is as indicated in the formula in 6.2.10.2., above. Cases of nominalized clauses filling the axis slot have only been observed to comocur
with the relator -giks. (cf. section (vii); below.) Thus, all other relators are illustrated only with NP fillers of the axis slot.

Following the convention established in 6.2.5.2., above, seven sub-types of $L P_{i i}$ are set up, each sub-type corresponding to a different filler of the relator slot. It is considered unnecessary to give two examples in every case, if the meaning and form is sufficiently clear with one.
i) Sub-type i: - his $( \pm p 0)$, "on, above".
i) gi?ithe Jivéahú paginobtsink-hic ts6

ii) $\begin{aligned} & \text { k8?pida paniftsi-hiq(p8) } \\ & \text { bird } \\ & \text { house above }\end{aligned}$

"The bird (is) above the house"

## ii) Sub-type ii: -náaps, "under".


iii) Sub-type iij: -a?nt, "beside". 32

[^48]
iv) Sub-type iv: - Ipe, "in front of". 33

v) Sub-type v: $-\mathrm{ge}^{34}$ "in".
tsami tebahe-gi kantan
he rec jungle, in get-lost
past $A x i s: N B$ relr got lost in the jungle ${ }^{\prime \prime}$

## "Beside"

As indicated in sub-type ini, above, this relator may follow a noun bearing the classifier - ?aavi, "side, edge", when the resultant meaning is "beside".
e.g. tee?1-?aavi-ging?vu

"Temporal" use
-gi may combine with an NR consisting of temporal nouns, with a temporal meaning.
ative Phrase type ii, and relevant examples are to be found in the appropriate sections.
${ }^{33}$ There is no separate relator for "behind". This is ind. icated in a structure using mb. of. sub-type vi, below. 34 This relator is homophonous with the Instrument marker -- cf. 6.2.4., above.
e.g. atme - ?pe kainse 预 aptapl kbmika-gi
my-mother rem
past dead be other year(dl) in
"My mother died in the other year" (i.e., "Iast year")
vi) Subotype vi: $-n$ (t, "in, at".

This relator has a nore widespread meaning and use than
the preceding relator, as the following examples make clear.


As indicated in (iii) and (iv), above, this relator
moy indicate other locative relations, when co-occurring
with certain items in the NP in the axis slot. 35
"Beside"
e.g. tee? 1-?aavi-na ts - koomi


In this case there is no obvious difference between the use
of $-n$ and the use of gef, illustrated in the previous subtype.
"Behind"
e.g. paniltsi-vtai-nd ts 8

"She (is) behind (in back of) the house"

[^49]As well as its use in obviously locative phrases (as in the above examples), this locative marker is also used in phrases which are not glossed as locatives in Spanish or English, though they refer to situations which are conceptualized as containing a locative relation in Resigaro.

sickness him in "(There is) sickness in ${ }_{\text {is }}^{\text {him" }}$ (i.e., " "He
tapoogi Hoaa - na
sleepiness $\underbrace{\text { Ju }}_{\text {Axis: Nuan }}{ }_{\text {rell }}^{\text {in }}$ "John is sleepy"
vii) Sub-type vii: -giko, "inside". 36

Though "in" is occasionally the best English gloss, the difference between this relator and the preceding two, and the appropriateness of the gloss "inside", is clearly seen in the examples which follow. With this relator, both the NP and the Nominalized Clause may occur in the axis slot of the Locative Phrase.

With NP filler of Axis slot:


[^50]
iii) miata-giks ts 8

iv) hamáakt-giko tso


In all the above cases, -gikg is clearly a Locative relator. The following example raises the question whether it also occurs (or a homophonous relator occurs) in a Directional phrase.

```
e.g. tef?1-gik% nbka?phaava
    river in Imenter "I enter (go into) the weter"
    Axis: N\mp@subsup{N}{2}{\prime}
```

However, this appears to be no more than a consequence of the English gloss "I go into the water", overcome in the alternative gloss, "I enter the water". This is closer to the informant's Spanish gloss, "Entro en el agual". In both cases (and in the Resigaro) the phrase indicates the location in which the speaker entered. The different English gloss in this case is merely a consequence of the presence of a notion verb in the Predicate of the clause in which this LP occurs.

With Hominalized Clause filler of Axis slot:
e.g. Isabeel-mi Maanoel tshenf maa?ma da?mitáa-gikb

Isabel rec Manuel see past

"Isabel saw Manuel when he ate (the whole time he was eating cassava"

This construction is used to refer to two co-extensive, as opposed to concurrent, events. This latter is conveyed (as was indicated in 6.2.1.2., above) by the Dative Object Phrase:

Isabeel-mi Maanoel tshtni maa?ma da?mitáa-ke
Isabel rec Manuel see cassava he-eat dat past

"Isabel saw Manuel while he was eating cassava"

The difference between the two is that in the first case (co-extensive -- LP), Isabel saw the whole process from the beginning, whereas in the second, the DOP fills a function similar to the Imperfect tense of verbs in several languages of Latin origin -- setting the scene, against which an action occurs -- i.e., in the latter case, Isabel did not necessarily see the whole process. (cf. other examples in 6.2.1.2., above.

At this point it is also appropriate to indicate the difference between the above two constructions and the nominalized clause functioning as Object:

```
Isabeel-ril Mamoel tsheni maarmáda?mitáa
```



```
    "Isabel saw Manuel eat cassava"
Here, no temporal relation is specified at all. (For
extraposition, cf. 7.2.1.2.3., belown)
```


### 6.2.10.3. Distribution.

The Locative Phrase is distributed in the Clause, where it may fill the Predicate slot in non-transitive clauses, or the Locative slot in other clause types. Since all LP's (of both structural types) may occur in either clauselevel tagmene (subject to possible semantic restrictions), distribution sub-classes are not established.

## In Locative slot.

e.g. Peedrs Imá hamaaka-gikb

"Peter sleeps in the
hammock"

In Predicate slot.
e.g. Peedro hanaakt-gikb

Peter hammock, in "Peter (is) in the hamock"

## Chapter 7

CLAUSE LEVEL

The Clause is set up as a level of construction above the Phrase and below the Sentence. All clauses consist of a Predicate, plus or minus certain other clause-level tagmenes, such as Subject, Object, Causative Object, etc., according to clause type.

Clauses are divided into classes on the basis of their distributional possibilities in sentence types and other structures. In Resigaro the Declarative, Interrogative, and Imperative classes are distributed principally in the sentence, and the Nominalized and Relativized Clause classes are distributed recursively in the Declarative Clause and other lower-level structures.

Types are set up within each class on the basis of internal structure. These types correspond to varying degrees of transitivity, from non-transitive through to tri-transitive.

In the description which follows, the constituents of the Clause are described first, and the structure of each type of each Clause class is described next -- i.e.,
clause-level tagmemes are described one by one, and then the clauses in which these tagmenes function are described. This is followed by a description of the distribution of the Declarative clause.

After the description of the Declarative clause, Interrogative and Imperative clauses are derived by multi~ plication, and this section is followed by two which deal with dependent clauses: nominalization and relativization.

### 2.1. Clausemevel Tamemes.

In view of the varied structure and widespread distribution of clause-level tagmemes, it is advantageous to describe them consecutively before going on to the description of the clauses themselves, instead of describing them one at a time as they crop up in different clause types, which at the same time would have the disadvantage of overburdening the description of clause structure with detail not imnediately relevant and liable to distract attention from this structure.

Clause-level tagmemes are either nuclear or peripheral. Nuclear tagmemes are diagmostic of clause types, while peripheral tagmemes are not.

For instance, if an Object tagmeme occurs in a clause, that clause must be at least transitive. If a Dative Ob_

```
ject occurs, it must be at least ditransitive. Likewise,
if a clause cannot have an Object, it is intransitive (or
non-transitive). Thus, the presence (or obligatory absence)
of these tagmemes indicates (along with other tagmemes)
the type of clause in question.
```

Non-diagnostic tagmemes, on the other hand, may occur in most -- and in some cases in all -w clause types, without affecting in any way the identification of the clausc. Examples are the tagmenes that indicate the spatiotemporal context of an event or state described by a clause.

Non-diagnostic tagmemes are, by their very nature, optional. 1 Diagnostic tagmemes, however, are not always obligatory -- so long as they are understood in the context. A key example is the Object tagmeme, which is frequently oritted. But the very possibility of occurrence of a nuclear tagmeme in one construction, as opposed to its obligatory absence in another, is diagnostic.

A problen was encountered with the Dative or Dative Object tagmeme, which cannot occur in non-transitive and intransitive clauses when the DOP manifesting it contains an NP in the axis slot, but can occur in these clauses

[^51](without in consequenoe making them transitive) when the DOP contains a Nominalized Clause in its axis slot.

This could have led to the separation of NomCl + relator from $\mathbb{N P}+$ relator, and to the establishing of a separate Axis-Relator clause (or a set of such clauses), parallel to the Axis-Relator phrases. But this alter. native was rejected for the reasons given in chapter 6 , and the retention of one DOP followed from this.

The problem concerning distribution has been overcome by the establishment of two sub-classes of DOP, the first of which (with an NP or an interrogative filler of the axis slot) is distributed in Dative object tagneme (DO), which is diagnostic, and the second of which (with a NomCl filler of the axis slot) is distributed in Dative tagneme (Dat), which is non-diagnostic (and in consequence has a wider distribution). ${ }^{2}$

This solution also allows handling of the co-occurrence restriction on the filler of the Predicate slot in the case of Dative Object, and the same type of co-occurrence restriction is handled in identical fashion with the Purposive.

Contrast of clause-level tagmemes is dependent both

[^52]on the possible fillers of the slot of each one, and the occurrence possibilities of each tagneme, and is therem fore not described separately, sufficient evidence being clear both in the description of phrases, above, and in the subsequent description of clause structure.

All nuclear tagmemes are identified by their constituents (this separates the majority of Predicates from all other nuclear tagmemes) and/or by their position in the clause (this separates all other nuclear tagmemes), having no marker (with the exception of the Dative Object tagmeme, which is filled by $\mathrm{DOP}_{1}$, with the marker -ke ). Thus, the order of these tagmenes is quite rigid, as is indicated in Clause Structure (7.2.), below.

All peripheral tagnemes are identified by a phraselever marker, and their positions are variable, subject to linitations indicated below. (The marker is occasion. ally onitted with Adjunct, as described in 6.2.8.2., above. However, identity is clearly established on the basis of constituents.)

Variation in clause-level tagmemes is indicated in the sections describing each tagneme, which follow.

Distribution is sumarized in matrices 7.1. (nuclear) and 7.2. (peripheral). These indicate the cleuse types in
which each tagmeme nay occur. The actual position of the tagmene within any given clause type (and any possible permutations of this) is indicated in the description of the clause in question.
2.1.1. Nuclear Tagmemes.
2.1.1.1. Predicate (P).

There are five types of Predicate tagmene (three of which correspond to sub-classes of VP, plus Predicative Adjectives, etc., and a boosted VP). These result in five clause types. ${ }^{3}$

### 7.1.1.1.1. Type i Predicate: Non-transitive.

This is the only non-verbal Predicate. It may consist of an adjective, an $N p$, an $A-R$ phrase, or an intorrogative.

### 7.1.1.1.1.1. Sub-type i: Adjoctival.

This is the principal filler of the type i predicate slot. Adjectives of types ii and iii (i.e., distributional subclass 2) may occur (level-skipping, since there is no Adjectival Phrase).
e.g. i) aaii? mb


$\overline{3}_{\text {this }}$ is a case of the structural type corresponding almost exactly to the distributional sub-class in terms of the next level. If this were always the case, there would be no need to distinguish type and sub-class.
(When type iii adjectives occur, these may be followed by the inchoative suffix, as indicated in 3.4.2.3., above. e.g. ani-kas ab
incho "I am beginning to get bettex" )

### 2.1.1.1.1.2. Sub-type ii: Nominal.

The $\mathrm{NP}_{2}$ occurring here is of very limited expansion, generally consisting of a Head only, possibly prefixed by an assimilated pronoun indicating possession. The structure has an essive (or identificational) meaning. e.g. i) inádon fa

"We (are) women"
ii) ab-na oo tsonigi

I rest int her-father "I (am) her father"
In this second example, AO $^{(w h i c h ~ o c c u r s ~ i n ~ a n ~ N P ~ f u n c t i o n i n g ~}$ as Subject) bears the nominal restrictive suffix, while tson nigi co-occurs with the intensifier normally attested in the VP.

### 7.1.1.1.1.3. Sub-type iii: Axis-Relator.

Three different $\Lambda x i s-R e l a t o r ~ P h r a s e s ~ h a v e ~ s o ~ f a r ~ b e e n ~ a t-~$ tested in the Predicate slot: Concomitant, Locative, and Purposive.

## (i) Concomitant.

Of the three Conconitant relators, two have so far been attested in this construction:-
i) -nee
e.g. i) do - nee tsi

$$
\underbrace{}_{i}: C P_{i} \text { wer wh } \quad \text { He (ig) with her" }
$$


ii) -kápo?
egg. gi-kzpo? ts h
$P_{i}:$ CP $_{\text {ii j }}$ alone he $\quad$ He (is) alone"
(ii) Locative.

Both types $i$ and ii of the LP may occur in this construelion.
i) $L P_{i}=$
eng.
i) verse ts u

ii) hate tsp
$\frac{\text { where }}{P_{i}: L P_{i}} \quad$ "Where (is) he?"
ii) $\quad \underline{L P}{ }_{i i}$.

Various locative markers have been observed in this construction.
eng.

ii) k6?plida paniqtsi-hi£ bird house above "The bird (is) above $\mathrm{P}_{\mathrm{i}}: \mathrm{IP}_{\text {ii. } i}$
the house"



## (iii) Purposjive.

When the Purposive phrase occurs as Predicate, the result-
ing construction indicates possession. ${ }^{5}$
e.g. i) J̌i Jaani hilta gi - h $\delta$ big canoe $\underbrace{\text { him ppst }}_{P_{i}: P P}$ "He (has) a big canoe"
ii) Hoaa mo va?agaje? ${ }^{6}$
$\underbrace{\text { Juan ppsy }}_{P_{i}: P P}$ knife $\quad$ John (has) a knife"
2.1.1.1.1.4. Sub-type iv: Interrogative.

This consists of an interrogative only.
e.g. kthee pht
$P_{i}: \frac{\text { who }}{1 \text { ig }}$ you "Who (are) you?"
2.1.1.1.2. Type ii Predicate: Intransitive.

This tagmene consists of a sub-class $I$ ("intransitive") VP.
a.g. Peedrb imb

Pedro sleep $P_{i i}: V_{I} \quad$ Peter sleeps"
${ }^{5}$ The structure is quite different from that which indicates possession within the NP, as described in 6.1.2.2.1.2., above. Note the following gramatical "minimal pair":
Clausal possession: hapiita no-ho


Phrasal possession: 6 haplits


This NP may of course occur without modification as Subject of a clause. e.g. no hapiitsa no-h 8

(Assimilation of the pronoun in the Limiter slot to the

7.1.1.1.3. Type iii Predicate: Transitive.

This tagmeme consists of a subclass 2 ("transitive")
VP, or a subclass 1 VP boosted one degree on the transitivity scale by addition of the causative marker. ${ }^{7}$
2.1.1.1.3.1. Sub-type i: with $\mathrm{VP}_{2}$ :
e.g. ts 6 maa?ma a?mitb
she cassava eats $P_{\text {iii. } i}: V_{P_{2}}^{\prime} \quad$ "She eats cassava"
7.1.1.1.3.2. Sub-type ii: with VP + causative.
eng. twa ts pinot

2.1.1.1.4. Type iv Predicate: Ditransitive.

This tagmeme consists of a subclass 3 ("ditransitive") VP, or a subclass 2 VP boosted one degree on the transitivity scale by addition of the causative marker. 7.1.1.1.4.1. Sub-type i: with $\mathrm{VP}_{3}$. e.g. ts do-ke pišaan 1 aa?nı he her dat meat give, "He gives the meat $P_{\text {iv. } i}: \frac{\text { give }}{V P_{3}} \quad$ He gives the

[^53]
### 7.1.1.1.4.2. Sub-type ii: with $\mathrm{VP}_{2}+$ causative.

e.g. Isabeel Maanoel maarma a?mitoti

Isabel Manuel cassava eat-cstv

$$
P_{i v . i i}: V P_{2}+\operatorname{cstv}
$$

"Isabel makes Manuel eat cassava"

### 2.1.1.1.5. Type v Predicate: Tritransitive.

This tagneme (which is of infrequent occurrence) consists of a sub-class 3 VP boosted one degree on the transitivity scale by addition of the causative marker. Only aa?n1, "to give", has as yet been attested in this construction.
e.g. tsa Isabeel pišaan 1 no-ke o?t

"He makes Isabel give the meat to me"
2.1.1.2. Subject (S)

7.1.1.3. Object (0)

This tagmeme consists of an $\mathrm{NP}_{2}$, a nominalized clausc, or
an interrogative (for latter, cf. 7.2.2.1.2.2., below, especially Group 1). It is distinguished from 5 tagmene by its position in the clause, as indicated in
7.1., above, and in accordance with the details given
in 7.2.1.2., below.

$\frac{\text { that big child }}{0: \mathrm{NP}_{2}}$ he-hits "He hits that big
gi-va?aadegaǰa? ts68?ve gi-khat do-tshenc ${ }^{8}$
his.-knife sharpen he-do-(nor) she-see
0 : NomCl
"She sees hin sharpen his knife"
7.1.1.4. Causative Object (CO)

This tagmene has only been observed to consist of an
$\mathrm{NP}_{2}$ or an interrogative (cf. 7.2.2.2.2.2., Group 1).
The NP is of linited expansion. Mhis tagmeme is identified by its position in the clauso, and by its co-occurrence with a Predicate in which the verb in the VP bears the causative suffix.
e.g. tsa-mi tso i?pinoth
he rec she go-csty
past ${\mathrm{CO}: \mathrm{NF}_{2}}_{\text {she }}$ go-cstv "He made her go"

It nay be suggested, on the basis of the above and similar exanples, that there is no valid structural reason

[^54]for distinguishing Object and Causative Object, especially in clauses where the fomer does not (or cannot) occur. However, this distinction is maintained for the follow ing reasons:
i) It is necessary to distinguish these two in Ditransitive clauses, where they co-occur, and thus it is desirable to retain the distinction elsewhere.
ii) As indicated above, the Causative Object co-occurs with a different type of filler of the VP in the predicate slot.
iii) The Causative Object is not an Object in the same sense as the ("Direct" or "Simple") Object, as a study of the Deep Structure would reveal': the ("Direct") object


I'he postulated Causative Object, on the other hand, occurs in a semantically complex sentence consisting of two propositions, one governing the other.


Isabeel Maanoel maa?na amitota "Isabel causes Manuel to
is simply the object of the action described by the verb, whereas the Causative Object is the object of the causing, but the subject of the action described by the verbminus. causative. Thus, the filler of the $C O$ slot must be potentially an agent. For this reason, I have maintained the distinction between Object and Causative Object at all times, and have adopted the term Causative object, in common with some other tagrenicists. ${ }^{10}$


#### Abstract

2.1.1.5. Quotative Object (QO)

This tagmene consists minimally of a clause or a nominalized clause, and maximally of a sentence, or, potentially, a higher level unit such as a paragraph or a discourse (the analysis of which is beyond the scope of the present description). The clause is used for direct quotations, and the nominalized clause is usod in reporting the substance of what someone has said, with appropriate changes of person, etc.


eat cassava"
Here, Manoel is the Agent of the action referred to in the lower predicate, but also part of the proposition which is the object of the higher (causative) predicate. In the Surface Structure of Resigaro, these hgent and Object aspects are united in one tagmene, creating an entity clearly distinct from the purely complenental maa?nt ("cassava"). 10e.g. Longacre, 1965b. Another possible term would be Wise's "Indirect Subject" (1963:108, 1968:17). This highlights the tagmere's senantic status as subject of the act. ion caused by the ("Direct") Subject of the clause. Other possibilities would be "Objectas-Patient" vs. "Object-asAgert", or "Object Complement" va. "Agent Complement".
e.g. Manoelmi kema, ee?phi kheae no?pi ${ }^{l l}$

Manuel rec say
past $\frac{\text { fish do-to I-gor }}{\text { QO: CI }}$
"Manuel said, 'I'm going fishing'."
Maxnoel-ni kent ee?phi khene gi?pinat
Manuel rec say $\frac{\text { past }}{\text { ish do-to he-go-nom }}$
"Manuel said he was going fishing"

### 7.1.1.6. Dative Object (DO)

This tagmene consists of a DOP, sub-closs 1 , which has an NP filler of the axis slot, or of an interrogative (for examples of the latter, cf. 7.2.2.1.2.2., Group I, below).
e.g. gi?ithe Jabna-ke man?mb daa?ni that child dat cassava shemgive DO:DOF ${ }_{1}$ "She gives cassava to that child"

Dative Object (DO) is distinguished fron Dative (Dat) by its filler, and by its different distribution. DO only occurs when the Predicate of the clause is filled by aa?ng, "to give", and is diagnostic. No such restriction applies to Dat, which is non-diagnostic.

## Nuclear Idagnene Distribution Matrix.

The following natrix indicates the possibility of occurrence of clause-levol nuclear tagnenes in each of the clause types. It does not indicate co-occurrence possibilitios

[^55]between these tagmenes. Details are given below, in the description of clause structure.


Matrix 7.1.: Nuclear Tagmeme Distribution.

### 2.1.2. Peripheral Tagmemes.

In the majority of the following tagmemes, identity is dependent on the particular phrase-level tagneme which alone may fill the clause-level slot in question, and if there werc no exceptions to this, there would bo no need to describe clause-level peripheral taememes separately, since the result might merely be repetition, and circularity. Howevor, this separate section enables us to hondle such cases as that of the clauso-lovel Temporal tagmeme, which is filled by a sub-class 1 NP or on interrogative, without introducing this complication into the description of any particular clause type.

Even where no such complications exist, the prescnce of this section avoids constant repetition of information

```
for each tagmeme in each clause type.
```

Thus, it is preferable to follow the same procedure for all peripheral clause-level tagmemes, even where no inherontly new information is conveyed (though here the clause level slot is in focus, and not its fillex, as in chapter 6, above).

In the matrix which concludes this section, the distribution of all peripheral tagmemes is summarized.

### 7.1.2.1. Dative (Dat)

This tagmeme consists of a sub-class 2 DOP, which has a nominalized clause filler of the axis slot.
e.g. gimá - ke dodo?phaava
$\underbrace{\text { he-sleep-dat }}_{\text {Dat: DOp }}$ she-work "While he sleeps, she works" 12
7.1.2.2. Purposive (Ppsv)

This tagmeme consists of a PP or an interrogative. Three types of Purposive tagmeme are established on the basis of these fillers.
2.1.2.2.1. Type i Purposive.

This tagmeme type consists of a sub-class 1 PP (in which the axis slot is filled by an NP or an interrogative), and only occurs when the Predicate slot is filled by a VP con-

[^56]```
taining kemúu "to say, to tell".
e.g. phaipi殅 - ab - ?pe gimfi3 gi-taposgi
        old woman ppsy rem he-tell his-dream
    Pps\mp@subsup{v}{i}{}:P\mp@subsup{P}{1}{}}\mathrm{ past "He told the old woman his
                                    dream"
```

2.1.2.2.2. Type ii Purposive.
This tagmene type consists of a sub-class 2 PP (in which
the axis slot is filled by a nominalized clause), and
is not subject to the above occurrence restriction.
e.g. gi?veno5 - aठ gi?pi
$\frac{\text { he-field-burn ppsy }}{\mathrm{Ppsv}_{i \mathrm{i}}: \mathrm{PP}_{2}}$ he-go "He goes to burn a field"
7.1.2.2.3. Type iii Purposive.
This tagmeme type consists of the interrogative kove?hee,
"why?".
e.E. kope?hee gint.

(An interrogative may also occur in the axis siot of PP
sub-class l, which is distributed in type i Purposive
tagneme.)

### 7.1.2.3. Benefactive (Ben)

This tagmeme consists of a. Benefactive Phrase.

```
e.g. i) va-ke?vigi-pokb? hilt& gi-khú
    qur-chief ben, conoe homake
                                    "He makes a canoe for our chief"
```

13 The first syllable of kemf is deleted whon a pronoun is
assinilated to the verb
ii) naginagi-mi do-zza-pa angry rec she-be-prog
past
ts6 vatshootsifoohs-mil haama na-ichat-poki? her pot rec steall they-do ben

"She was angry because they had stolen her pot"
7.1.2.4. Instrument (I)

This tagmene consists of an Instrument Phrase.

```
e.g. tst do?mbtshb avbanai-gi
    him she-hits }\mp@subsup{\underbrace}{I:IP}{stick - with
```


### 2.1.2.5. Concomitant (Conc)

This tagmeme consists of a Concomitant Phrase. Two types of Concomitant tegmeme are established on the basis of internal and external differences.

### 7.1.2.5.1. Type i Concomitant

This tagmeme type consists of a subuclass 1 CP (i.e., a $C P$ in which the relator is ma? and the oxis is filled by a nominalized clause). This only occurs when the Predicate slot is filled by a VP containing Ift, "to fear".
e.g. dofú tsk dophotas - ma?


### 2.1.2.5.2. Type ii Concomitant

This tagmeme type consists of a sub-class 2 CP , and is not subject to tho above restriction.

```
e.g. do - nee gi?pi
    her with he-go "He goes with her"
Conc \(_{\text {ii }}: \mathrm{CP}_{2}\)
```

7.1.2.6. Comparative (Ctv)
This tagmeme consists of a Comparative Fhrase, or an in-
terrogative (for examples of the latter, cf. 7.2.2.1.2.2.,
Group 3, below).
e.g. do - ve?aii pitsinur? pht
she-more_than pretty you
Ctv: CtvP "You are prettier than her"

### 7.1.2.7. Conditional (Cond)

This tagneme consists of a Conditional phrasc.
e.E. nif fa?va-tshi-va vodo?pheavú not rain if, fut we-worit
Cond: CondP
"If it does not rain, we
shell wortr"
7.1.2.8. Adjunct (A)

This tagmene consists of an Adjunct Phrase.
e.E. nonb - kab tsi-mi ne? jo
$\underbrace{\text { they-spill-incho-adct }}_{A: A P}$ pec they-flee
"Spilling [the water], they fled"
7.1.2.9. Directional (D)

This tagmeme consists of a Directional Phrase. Two types of Directional tagmene are established on the basis of internal and external differences.
7.1.2.9.1. Type i Directional

This tagmeme type consists of a sub-class 2.1. Directional Phrase (i.e., one in which the axis slot is filled by an NP or an interrogative). This only occurs when the Predicate slot is filled by a VP containing a verb of notion.
e.8. no-pafnambo do?p1 $\underbrace{m y-h o u s e-t o}_{D_{i}: D_{2.1}}$ she-go "She goes to my house"
7.1.2.9.2. Type ii Directional

This tagmeme type consists of a sub-class 2.2. Directional Phrase (i.e., one in which the axis slot is filled by a nominalized clause or an $\mathbb{A P}$ ), and is not subject to the above restriction.
e.g. domak - kh8-mi Zane? tsb

"After sleeping, she got stronger"

### 7.1.2.10. Iocative (I)

This tagmeme consists of a Locative Phrase.

```
e.g. ve?e gi-tsta?
```

$\underbrace{\text { he-come }}_{\text {here }} \mathrm{He}$ comes here"

```
    paniltsl-a?nk dodo?phaavk
    house - beside she-work
    L:IP "She works beside the house"
```

7.1.2.1.1. Temporal (T)

This tagmeme consists of an $N P$ sub-class 1 , an interrogative, or a nominalized clause. Three types of Temporal
tagmene are established on the basis of these internal.
differences.

### 2.1.2.11.1. Type i Temporal

This tagmeme type consista of a sub-class 1 NP.
e.g. i) nokbtsa napiab? - mi Jaktide-kbo no?pi $\underbrace{\text { yesterday morning }}_{T_{i}: \mathrm{NF}_{I}}$ past $\begin{aligned} & \text { rec field - to } \mathrm{I} \text {-go }\end{aligned}$
"Yesterday morning I went to the field"
ii) abpana naapi?s? Jokkde-k80 no?ps $\underbrace{\text { tomorrow morning }}_{T_{i}}: \mathbb{N P}_{1}$ fiold - to I-go
"Tomorrow morning I shall go to the field"

### 7.1.2.11.2. Type ii Temporal

This tagmeme type consists of an interrogative.
e.E. hidee?tainee-?pe anobgi kointe pi-khk

(For more exmples of interrogatives in the Temporal slot, cf. 7.2.2.1.2.2., Groups 1 and 4, below.)
7.1.2.21.3. Type iij Tomporal

This tagmeme type consists of a nominalized clause.
e.g. i) asepulu nodo?phava-vt man?tsa p6

"When I work a lot, I get tired"

"When (each time that) my father catchos a lot of fish, we eat well"

As the glosses indicate, when the Tenporal slot is filled by a nominalized clause, the function is itcrative. 14 In such cases, the future terporal clitic always occurs.
7.1.2.12. Vocative (Voc)

This tagnene consists of a level-skipping vocative noun
(Noun word sub-class 2), or a name.
e.g. i) afme, no?nitsua?u mother, I-eat-desid Voc: $\mathrm{Nn}_{2}$
ii) Hoan, vee pi-ts 5 ? Juan, here youncome
"Mothor, I want to eat" Voc:name
"John, come here"

### 7.1.2.13. Negative (Neg)

This tagneme consists of the negative work nif, "not", only, level-skipping, sinco there is no nogativo phrase.
e. G. nis inatsanad ab

(The negative inperative is indicated by a vorb suffix, and so no separate clause-level tagmono occurs in that case. (of. 3.1.2.6.1.2. and 3.1.2.6.2.2., above.) This also

[^57]applies to other negatives functioning as relators, etc. (of. 5.1.2.2.2., 6.2.5.2.2.).)

## Interrogative

One tagmene not described here is Interrogative ( $I_{g}$ ), which only occurs in a derived clause. It is described in 7.2.2.1., below.

## Clitics

Clitics are structure-less constituents of the clause that are affixed to various tagmomes, without forming separate tagnemes of their own. Their occurrence is described in 7.2.1.2.6., below.

| Peripheral <br> Tagmemes <br> Clause <br> Types |  |
| :---: | :---: |
| i Non-trans | $-1-1-1-1 / 1 / 1-1 / 1,-1-1 / 1 /$ |
| ii | $1 / 1 / / / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1$ |
| iji | //i/1/i/i/1/i/i/1/i/i/1/ |
| i. |  |
| v Jritrans |  |

Matrix 7.2.: Perioheral Tameme Distribution

15 Sone in non-transitive clauses, instead of their usual slot (in $L$, Ppsv, etc*). However, this matrix is concerned with distribution of clause level tagmemes only, these atypiccl cases having been handlod undor distribution at phrose level, and in the description of the predicote tagmene at clause lovel (7.1.1.1.1., above).

It is irmediately obvious from the above matrix that though all peripheral tagmemes are attested in Intransitive and Transitive clauses, there is a conm siderable fall-off in Ditransitive ahd Tritransitive clauses, which can probably be attributed to the following two reasons:-
i) These clause types are of relatively infrequent occurrence.
ii) As the number of nuclear tagmemes increases, the number of peripheral togmemes diminishes, to ovoid ovorlonding structures. As the following sections indicate, overloading is relieved by measures such as replacemont of an independent manifestation of the Subject tagmeme by a pronoun assimilated to tho vorb in the Predicate; extroposition; deletion of Object; relativization to embed phrases within phrases (cf., for instance, 6.2.9.2.2., above), etc.

Information convejred by non-nuclear tagmomes thus tends to be omitted from the more highly-complex clauses, being given instend in adjacent, less complex clauses, in the sone or other sentencos. A description of this distribution is dependent on the postulation of a level higher than the Sentence -- often called the Poragraph by tagmomicists. Since the scope of the prescnt description is Iinited to tho Sentonco, no analysis of intersontential relationships is presented.

Where tagneraes have not been attested in Ditransitive and Tritransitive clauses, matrix cells have been left blank, to indicate that some of these tagmenes may possibly occur. Thus, one would expect Locative and Temporal tagmemes, at least, to be possible, though they have not yet been observed in these types.

Few peripheral tagmemes occur in Non-transitive clauses, either, since these are genorally of quite limited expansion, apparently only permitting such peripheral tagmemes as aro appropriate to the Predicate selected.
7.2. Cleuse Btructure. Five clause classes (Declarative, Interrogative, Imperative, Nominalized, and Relativized) are established on the basis of their distribution. Within each class, five types are set up on the basis of degrees of transit. ivity. ${ }^{16}$

Interrogative, Imperative, Nominclized and Rolativized can bo most economically describod by means of multiplication operating on tho Declorative, which is des-
cribed first. As well as being more economical, this is also more illuminating than the original (now discard-

[^58]ed) practice of describing every class and type of clauso exhaustively and independently, totally ignoring the forms already described, and thus introducing wholescale repetition.

Of these four derived clauses, Interrogative and Imperative are independent (i.e., they can fill the Base slot in simple sentencos), while Nominalized and Relativized are dependent, being embedded in other structures at clause level and lower.

### 7.2.1. Basic - The Declarative Clause.

7.2.1.1. Contrast.

The Declarative Clause (DeclCl) has the following con-trastive-identificational features:-
i) It consists minimally of a Predicate and a Subject tagmeme, the slots of which are typically filled by phrase-level units, most frequently a $V P$ and an $\mathbb{N B}_{2}$, respectively.
ii) The remaining constituent tagmemes are classified as either peripheral or nuclear ( $S$ and $P$ are also nuclear), the number and nature of the latter determining the type of clause.
iii) Tho slots of theso tagmemes aro also typically filled by phrase-level units.
iv) As well as consisting of tagmenes, the clause may contain non-tagmeme elements -.. clitics, which may be
affixod to any constituent tagmome (tho one chosen depending on the factors indicated in 7.2.1.2.6., below).

### 2.2.1.2. Variation.

Five types of Declarative Clause are set up on the basis of internal structure. These are dependent on which nuclear tagmemes may occur, and follow the distinctions of the Predicate types described in 7.1.1., above, reflecting varying degrees of transitivity in the clause.
7.2.1.2.1. Declarative Clause Type i, "Mon-Transitive". 17 7.2.1.2.1.1. Basic Structure.

Non-transitive declarative clauses have non-verbal predicates. They have two nuclear tagmenes, Subject and Predicate. The Subject slot may be filled by an $\mathrm{MP}_{2}$ or a NomCl. When the filler is an IPP type iii consisting of a type i pronoun only, the $S$ follows the $P$. When the filler is ony other manifestation of the NP, or a Nom Cl, the $S$ precodes the $P$. This is indicated in the following composito formula (in which peripheral tagmomes

```
aro not indicated):-
```

$\overline{17}$ There is no scparate meteorological clause type in Resfgaro, in contrast to some Mesoamerican languages (cf. Longacre, 1964a:57), and climatic conditions are described using various clause types.
e.g. ha?moo? fa


A more "literal" gloss may appear to be "we are hot", and this world be possible, too, in appropriato circumstances. However, the first person plural inclusive is used in all meteorological statenents, including some where a doublo
$C l_{i}= \pm S: N P-R / N o m C l \quad+P_{i}: A j / N P / A-R$ phrese/ig $\overline{+S}: N P_{i i} R$
In all casus, the NP or HonCl in the Subject slot tends
to be of quito limitod expansion.
e.g. i) deplitshí oo jojủ?
$\underbrace{\text { his-axe }}_{S: \mathrm{NP}_{i}} \frac{\text { small }}{P: A_{j}^{\prime}}$, "His axe (is) small"
ii) giva?aadegaja? tsठ8?ve gi-lthad oojaje?

"He sharpens his knife ${ }^{\text {(nom) }}$ (is) small"
i.e., "His knife that he sharpens (is) small"
iii) oo jag. tsk

$$
\frac{\text { small }}{P: A j} \underbrace{\text { he }}_{S: P_{i i i}\left(P_{n}\right)} \quad \text { Ho (is) small" }
$$

Two exceptions to the above general rule are to be noted:

1) When the Predicate is filled by an MP, the ITP filling the Subject slot is generally the variont of type iii consisting of a pronoun only, and the resulting construction has on essive, or identificational, function (cf. 7.1.1.1.1.2., above). In this construction, the pronoun in
```
interpretation would be more difficult.
e.g. fafvu, "It is raining"
    S:NP-P:VP'(Clause type ii)
I understand that Bora makes motearological statemonts
in a similar manner (personal communication from Wesley
Thiesen).
```

the $\operatorname{NP}$ functioning as Subject is frequently marked by the nominal suffix mat, "restrictive", which is usually followed by oo "intensifier" occurring initially in the Prodicate. Thus, in this case, the Subject tagmene precedes the Predicate.
e.g. tso-mat oo nobts
$\frac{\text { she-rest }}{\text { S: } \mathbb{N P}_{\text {iii } i(P n)}} \frac{\text { int ny-daughter }}{P: \mathrm{FP}_{i}} \quad$ "She (is) my deughter"
2) When the Predicate is filled by an Lif, the $\mathrm{NP}^{18}$ filling the Subject slot has been obsorved to follow tho predicate, even when it contains a noun and not a pronoun (i.e., an $N P_{i}$ and not an $\left.N P_{i i i}\right)$.
e.g. gi-nt vainhouaktatsi


In this construction, the Subject may also precedo, instead of following, the Prodicate, in accordance with the general rule.
7.2.1.2.1.2. Peripheral Tagnenes.

Negative, Dative, Comparative, Conditional, Directional, and Vocative tagmes are attosted in this clouse type, though it is rare to find more than the Vocative, the Negative, and one other peripheral tagmeme occurring in any given non-transitive clause. Peripheral tagmemes occur either initially or finolly in the clawe -- never between $S$ and

[^59]P. Initial position is by far the most frequent. 19

Dative, Negative.
The Negative always precedes the Predicate, though the
Subject, and other peripheral tagmemes, may occur be-
tween these two tagmenes,
e.g. anepuu? dodo?pharaa-kê, nis maa?tst tsk

"Although he works a lot, he is not tired"

Comparative, Vocative.
e.g. čhomi, gi - ve?afi tseinoo? phti
$\underbrace{\text { sister }}_{V o c: \mathrm{Nn}_{2}} \underbrace{\text { hinamore than }}_{\text {Ctv }: \mathrm{CtvP}} \underbrace{\mathrm{S}_{\mathrm{S}}: \mathrm{NP}_{2}}_{\mathrm{P}: \mathrm{Aj}_{\mathrm{j}}^{\mathrm{tall}}}$
"Sister, you are taller than hin"
No tagmeme other than $S$ may separate the Comparative and Predicate tagmemes, whether the former precedes or follows the latter. The Vocative is only attestod in initial position.

Conditional.
e.g. nodo?phaavan-tshi-va maltsanak no

"If I work, I shall get tired"

## 19posi

on highor leve featurce, such initial sttin (with on highermevel features, such as initial setting (with spatio-temporals), given vorsus new information, focus, and preserving the thread of discourse. However, analysis of this is beyond the scope of the present discussion.

## Directionel.

e.g. gi-pedo?nat-kh6 neke? tst
$\frac{\text { he-lick }}{D_{i i}: \mathrm{DP}_{2}} \frac{\text { from }}{\mathrm{P}: \mathrm{Aj}^{\mathrm{h}}} \underset{\mathrm{S}: \mathrm{NP}_{2}}{\mathrm{he}^{\text {he }}}$
"From licking (it), he got better"

Other peripheral tagmemes can probably also occur in this clauso type, especially I ard $T$, which indicate the spatio-temporal axes of any action or state. How over, Non-transitive clauscs are generally of quite liniited expansion, and no occurrences of such clauses conm taining these or other peripheral tagmos havo so far been observed.
7.2.1.2.2. Declarative Clause Type ii, "Intransitive" 7.2.1.2.2.1. Basio Structure. $\mathrm{Cl}_{\mathrm{ii}}=+\mathrm{S}: \mathrm{VP}_{2}+\mathrm{P}: V \mathrm{P}_{1}$

The Intransitive Declarative Clause has two nuclear tagmenes, $S$ and $P$, both of which are obligatory, $P$ is filled by an Intransitive VP (sub-class 1 ). $S$ is filled by an NP (sub-class 2). If this consists of a pronoun, the plonological form of the two tagmemes may be fused, as the pronoun may be assimilated to the following verb (for asm similation, cf. 3.3.2.1.1., above). However, this fused form still manifests the two tagmemes, though it is sonetimes difficult to indicate the boundary between the realizations of the two tagnemes.
e.g. tsa imb


No cases have been observed of a nominalized clause filling the $S$ slot in the Intransitive Clause.

### 7.2.1.2.2.2. Peripheral Tagmemes.

All peripheral tagmenes have been observod in the Intransitive Clause, though rarely do more than two or three cooccur in any given clause. For this reason, no formula. is given, as this co-occurrence restriction and the posse ible permutations described below make it impossible to present a meaningful order of occurrence of all tagmemes.

Some tagmenes occur more than once in the Intransitive Clause. The following examples and coments account for those peripheral tagmemes which most frequentiy occur in the Intransitive Clause. Examplas of the other tagmemes are to be found in the descriptions of these tagmemes (in section 7.1.2, above) and of their fillers (in section 6.2., etc., above).

## Negative.

This tagmeme always comes near the beginning of the Intransitive Clause, only being preceded by Vocative and Temporal tagmemes, when thess are present.
e.g. nif tsa fma


## Concomitant.

Since this tagmeme indicates accompaniment or associatod action, it is always related to another tagmene in the same clanse -- the tagmene manifesting the person, object or action which it accomponies or is associated with. ${ }^{20}$ Its position in the clause is a consequence of this relationship: it normally immediately follows the tagmene to which it is related. Variations on this basic position are described at the appropriate points in this and the following sections.

In the Intransitive Clause, the Concomitant may be related to the subject. e.g. Hoaa Mamoel-nes odo?phaavi $\underbrace{J_{2}}_{S: \mathbb{V P}_{2}} \underbrace{\text { Manuel-with }}_{\text {Conc: }^{\prime} \mathrm{CP}_{i}} \underbrace{\text { work }}_{P: V P}$, "John works with Manuel"

The Concomitant may also be moved by extraposition to clause-final position, and if this is realized, its relationship to the Subject is indicated by the addition of the dual marker -musi ( $f:$-mupi) to the subject. e.g. Hoaa-musi odo?phawt Manoel-noes
$\underbrace{\text { Juan dual }}_{S: \mathrm{NP}_{2}} \underbrace{\text { work }}_{\mathrm{P}: \mathrm{VP}} \underbrace{\text { Manuel-with }}_{\text {Conc: } \mathrm{CP}} \quad$ "John works with

[^60]Ad.junct.
This would appear always to precede the Predicate, and generally to occur initially in the clause (unless Vocative is present). It occurs frequently in texts.
e.g. avtana niska gi-khá-kat - tsi no-jíigi

"Eating the fruit of the tree, my husband became like an aguaje-tree"

## Temporal.

When present, this tagmeme always occurs initially in the clouse (except when Vocative is present, when $\mathbb{T}$ occurs in second position after Voc).

"Yesterday morning the thunder spoke" (i.e., "Yesterdey morning it thundered/there was thunder")

## Locative.

This tagmeme occurs either after the $T$ and before the $S$, or after the $P$.
 yesterday ree night river-sidemon Pedro sleep

"Last night Peter slopt on the riverbank"
In the same clause, the Locative may alternatively occur after the Predicate.

The Locative tagmeme may occur twice in the clause, both realizations occurring contiguously, either before the $S$ or after the $P$, or one in each position. However, the most nomal permutation is with both Locative tagmemes occurring contiguously, after the Predicate tagmeme, as in the following example:-
nokotsa - mi neapi Peedrb ima kašoo? hamaktagikb yesterday rec night Pedro sleep well hamock - in $\underset{\mathrm{T}: \mathrm{NP}_{1}}{\text { past }} \underset{\mathrm{S}: \mathrm{NP}_{2}}{\text { C. }}$


## Directjonal.

This tagreme nornally occurs after the Predicate tagmone, though it has been attested elsewhere, as nay be seen in the Benefactive example, below.
"Tomorrow afternoon she is going to the other village"

The Directionol tagmeme may occur twice in the clause, in which cose the first occurrence usually indicates source,
and the second, destination or goal. Both occurrences are contiguous and follow the Predicate in the examples so far observed.

```
e.g. afpana nook6 - va nobn6 i?pi
```



```
    hi - koomi - kh8 si - koomi - k6o
    \(\frac{\text { this-village-from }}{D: D P} \frac{\text { other-village- to }}{D: D P}\)
"Tomorrow afternoon my wife is going from this village to
the other village"
```


## Benefactive.

This tagmeme may occur in various positions within the clause, as the following example and others elsewhere (cf. 7.2.1.2.3.2., below, etc.) illustrate.
e.g. tsanta - poka? gi-patna-kbo gi-tsa?nu
$\xrightarrow[\text { Ben: } B P]{\text { his-mother-ben }} \frac{\text { his-house-to }}{D: D P}{ }_{S: N B_{2}-P: V P}^{\text {he-come }}$
"He comes home for (because of) his mother"
7.2.1.2.3. Declarative Clause Type iii, "Transitive"
7.2.1.2.3.1. Basic Structure.

Three sub-types of Transitive Clause are set up on the
basis of internal structure:-
$\mathrm{Cl}_{\text {iii. } i}=+\mathrm{S}: \mathrm{NP}_{2} / \mathrm{NomCl} \quad \pm 0: \mathrm{NP}_{2} / \mathrm{NomCl} \quad+\mathrm{P}_{\text {iii }}: \mathrm{VP}_{2}$
$\mathrm{Cl}_{\text {iii. } i \mathrm{i}}=+\mathrm{S}: \mathrm{NP}_{2} / \mathrm{NomCl}+\mathrm{CO}: \mathrm{NP}_{2}+\mathrm{P}_{\text {iii }}: \mathrm{VP}_{1}+$ cstv
$\mathrm{Cl}_{\text {iii. } \mathrm{iii}}=+\mathrm{S}: \mathrm{NP}_{2}+\mathrm{P}_{\text {iii }}:\binom{($ hemk }{ hetsanot }$\quad+\mathrm{QO}: \mathrm{Cl} / \mathrm{NomCl}$
(Peripheral tagnemes are not shown.)

### 7.2.1.2.3.1.1. Transitive Clause Sub-type i, "Basic"

 This sub-type consists minimally of a Transitive Predm icate filled by a transitive Verb Phrase (sub-class 2)and a Subject. As with the intransitive clause, the realizetion of the Subject may be fused with that of the Predicate.
e.g. tsб-?pe gi-vt?nu
hor rem he-command "He gave her an ordex"

The Object is optional in terms of the structure of the clause (the "surface structure"), but is semantically obligatory -- i.e., an object is understood in the context. Thus, for instance, gi-tsheni "he sees" or da?mith "he eats" are complete transitive clauses, but the objoct of his seeing or eating is implicit in the meaning, and may, of course, be made explicit by a linguistic (as opposed to an extra-linguistic) reference: e.f. a?mithobtsf da?mith
$\frac{\text { meal/food }}{0: \mathrm{NP}_{2}} \frac{\text { he-eat }}{S: \mathrm{NP}_{2}-P: V P}$ "He eats the meal/food"

As in the case of the Subject, if the object is manifested by an NP consisting of a pronoun only, this may in certain cases be assimilated to part of the filler of the Predicate slot - this time to the filler of the periphery slot of a Verb Group type ii, sub-type i, as indicated in 3.3.2.1., above. (cf. 4.1.2.2.1. on the Verb Group.)
e.g. dofte gi-khí

"He helps her"
(Contrast


A further example of this is to be found in the comments on extraposition (with manta t8? "to know") which follow.

In the Transitive Clause, the order S O P is quite rigid (though other, peripheral, tagmenes may occur between these constituents). The Subject may only move from its position before the Object if its realization is fused with that of the Predicate. When extraposition of the Object operates, a "dumm" Object consisting of a pronoun (or occasionally of a name) fills tho noxmal object slot in the clause, and a second Object slot occure after the predicate, containing the object moved by extram position.

Extraposition may operate if the Object is of complex structure -- generally one manifested by an NP

[^61]containing a relativized clause, or by a nominalized clause functioning as object. The pronoun filling the dumn Object slot is co-referential with the subject of the noninalized or relativized clause.

1. Object slot filled by NP containing a RelCl:-
e.g. no-mi 1fotovigi - mi giembtshb

"He hit the one who frightened me"
With extraposition, this becones:


## 2. Object slot filled by a Nominalized Clause:-


With extraposition, this becomes:


A verb with which extraposition is widely used is manta $t \delta$ ? "to know". Here, the Subject, if a pronoun, is assinilated to the filler of the Head slot in the Verb Group (tb?), and the dumin Object is assinilated to the filler of the Periphery slot (manaa) in the same Verb Group.

$$
\begin{aligned}
& \text { e.g. gi-manta no-t } 8 ?^{22} \text { da?mitá }
\end{aligned}
$$

$$
\begin{aligned}
& \text { "I know that he eats" }
\end{aligned}
$$

kaašoja? i kht "to want"
When the Predicate is filled by kaaso ${ }^{\text {Ja? }}$ i khe " to want", the Object may, as elsewhere, contain an HP or a NoinCl.
e.g. i) maa?ma kaašoja?i no-kha
$\underbrace{\text { cassava }}_{0: \mathrm{NP}_{2}} \underbrace{\text { want }}_{\mathrm{S}: \mathrm{NP}_{2}-\mathrm{P}: \mathrm{VP}} \quad I-$ do $\quad$ I want cassava"
ii) da?mitaá kaašo ja?i no-kht
$\underbrace{\text { he-eat (nom) }}_{0: \text { NomCl }} \underbrace{\text { "I want him to eat" }}_{\underbrace{\text { want }}_{S: N P} \quad I-\mathrm{F}: \mathrm{VP}}{ }^{23}$
An alternative way of expressing the same idea as that contained in the second of the above exemples is by embedding within a Purposive Phrase the nominalized clause referring to the action desired, in which case on Object does not occur in the clause, this being replaced by the Purposive tagmeme. (This may occur in various positions in the clause, as indicated in the paragraphs on the Purposive tagreme in 7.2.1.2.3.2.

[^62]("Peripheral Tagmernes"), below.)
2.2.1.2.3.1.2. Transitive Clause, Sub-type ii, "Causative"

When the Predicate slot is filled by an Intransitive VP (sub-class 1) to which the causative has been added, the Causative Object (cf. 7.1.1.4., above) must occur. This may not be omitted, and assimilation of a pronoun in the CO to the filler of the peripheral slot of a Verb Group has not been observed.

Tho comments on occurrence of the Subject tagmeme made in the preceding section apply equally in this case. eeg. giva?aadegayt? ts b6?ve gi-khaa - mi sab i?pixoth
 "His sharpening his knife made me go"

The order S CO P is rigid, though, as in the case of subtype $i$, peripheral tagmemes may occur between the nuclear ones, and extraposition may occur, though few cases of this have been observed, since attested Causalfive Objects tend not to have very complex structure.
eeg. no-ini ifotovigi - mi gi?pinot me rec frighten-one-who rec he-go-cstv $\underbrace{\text { past }}_{C 0: N P_{i i i}(\operatorname{RelCl})}$ past $\operatorname{S:NP}_{2}-\mathrm{P}: V P_{1}+c \operatorname{cstv}$
"He made the one who had frightened me go"
With extraposition, this becomes:

7.2.1.2.3.1.3. Transitive Clause Sub-type iji, "Quotative" When the predicate slot is filled by kema "to say, to tell" or hetsanot\& "to ask", the Quotative Object may occur. ${ }^{24}$ It follows the predicate. The comments on the realization of the $s$ tagmene made for sub-type $i$ apply equally in this case. Since only animate beings can speak or ask questions, nominalized clauses do not occur in the Subject slot. The QO is manifested by a clause or a nominalized clause.

```
e.g. doma - mi tet?1-kరo-ma no?p1
    S:NE-P:VP
        "She said, 'I want to go to the river'."
```

This is equivalent to English "Direct Speech". "Reported Speech" is also expressed by this sub-type 24Alternatively, an ordinary Object may occur, as in do-ho-?pe gima gi-tapotgi
$\underbrace{\text { her ppsv }}_{\text {Ppsv:PP }}$ past he-tell $\underbrace{\frac{1}{2} P: V P}_{\text {ND }} \underbrace{\text { his-dream }}_{0: \mathrm{NP}_{2}}$
But this is not then the Quotative sub-type, in which the QO must by definition occur.

As already indicated elsewhere, the initial syllable of kem is deleted when a pronoun is assimilated to the verb. cf. 3.1.2.1., above.
of the Transitive Clause, the only changes being that the QO slot is filled by a nominalized clause, and appropriate changes of person are made, as indicated in 7.1.1.5., above.
e.e. dona - mi tet? $1-k 80-\mathrm{ma}$ do?pinad $\frac{\text { she-say }}{\frac{\text { Nec }}{1}-\mathrm{P}: \mathrm{VP}}$ past $\frac{\text { river-to-dosid she-go-nonh }}{\text { QO:NomCl }}$
"She said that she wanted to go to the river"

When the QO occurs with hetsamotu "to aslr", there is the (logical) restriction that the clause in the QO is interrogative.
e.g. tsetsanoti hapht pant?kaoni

"He asked, "Are you hungry?"

### 7.2.1.2.3.2. Peripheral Tagnemes.

All peripheral tagmemes may occur in any sub-type of the Transitive Clause, though, as in the case of the Intransitive Clause, rarely do more than two or three comoccur in any given clause. Hence, no meaningful formula can be given. The following examples and comments refer to some of the peripheral tagmenes that axe most frequently observed in the Transitive Clause. Further examples are to be found throughcut the thesis.

Merotive.
As always, this precedes the Predicate.
e.g. nil pišaan 1 gi-šk


## Purposive.

This may occur in various positions in the Transitive Clause. Since it is of varied structure and frequent occurrence, examples are given for each sub-type.

In Sub-type i.
The Purposive tagmeme frequently occurs in sub-type i of the Transitive Clause when the Predicate is filled by kaačoja?i kha "to want" or varnu "to command". 25 Since in these cases it tends to express an action (with a NomCl in the axis slot of the Purposive Phrase), and is in consequence longer and more complex than when the axis slot is filled by an NP, it generally occurs after the Predicate.
e.g. i) kaašo J̌a?i gi-kht do?mitad - mb $\underbrace{\text { want }}_{\mathrm{S}: \mathrm{NP}_{2}-\mathrm{P}: \mathrm{VP}} \frac{\text { he-do }}{\text { Phemeat (nom) ppsv }} \frac{\mathrm{PP}}{\text { Ppser }}$
"He wants her to oat"
${ }^{25}$ It may also occur when other verbs fill the predicate. e.g. do-hó gimfi do?mitaa-mb

"He speaks to $h=r$, so that she will eat", "He tells her to eat"
In this example, the purposive tagmeme occurs twice, once with an NP in the axis slot of the PP , and once with a NomCl in the axis slot of the PP.
ii) tso-?pe gi-va?nu paniltsi boto? khat-aठ
$\frac{\text { hor }}{\frac{1}{2}}$ rem past $_{S: N P-P: V P}^{\text {he-comand }} \underbrace{\text { house sweep do - ppsv }}_{\text {Ppsv: } \mathrm{PP}}$
"He commanded (told) her to sweep the house"
In the second of the above examples, subject is not marked on the nominalized verb in the Purposive Phrase, since this is indicated in the Object slot.

In Sub-tyoe ii.
Since the Causative sub-type of the Transitive Clause tends to be of more complex structure than the basic sub-type, less peripheral tagmemes goncrally occur, and the Purposive is no exception to this rule. When it occurs, it tends to follow the Predicate, as in subtype i.
e.g. tsa-mi do?pinotG ee?phi gi-khak-n6

"She made him go fishing"
In this case, subject is marked on the nominalized verb
in the Purposive Phrase, since the tsa in the $C O$ slot
is object of the causative and (semantically) agent of the going, not the fishing (cf. description of Causative Object in 7.1.1.4., above).

In Sub-type iij.
In this sub-type, the long quotative Object is final, and since this imrodiately follows the Predicate, peripheral tagmemes must occur earlier in the clause, and generally are quite short. This applics equally to the Purposive.

```
e.g. i) gi-h6 - mi domf tet? \(\mathrm{g}^{i-k 60-m a}\) no?p1
    \(\underbrace{\text { him-ppsv }}_{P p S V: P P}\) past she-say, \(\underbrace{\text { river-to-desid I-GO }}_{S: N P-P: V P}\)
    "She said to him, 'I want to go to the river'."
ii) Hoaa-no - mi domi no?pina-má? \({ }^{26}\)
```



```
    "She said to John, 'I want to go'."
```


## Concomitant.

See coments on this tagmeme in the section on the Intrans itive Clause.

In the Transitive Clause, Concomitant tagmene type i is rolated to the Predicate, which it imediately follows.

"He is afraid to awaken her"

It is also occasionally attested to precede the Predicate.
e.g. tsok6doo? ${ }^{27}$ - ma - mi dofu $\underbrace{\text { she-return }}_{\text {Conc }{ }_{i}: C P_{1}}$ relr past $\underbrace{\text { she-fear }}_{S: N R-P: V P}$
"She was afraid to return"
$\overline{26}$ On presence of $\frac{\text { na }}{}(<-n a)$ when $i$ ?pi is suffixed, cf. 3.1.2.5.1., above.
${ }^{27}$ From hekt?do "to return". In the nominalization of this verb there is ? -movement one syllable to the right before suffixation. In this case the glottal of the relator is missing -- no doubt a joint consequence of the presence of the temporal clitic affixed to it, and the proxiaity of the glottal in the verb.

As indicated in 7.1.2.5., above, when type i Concomitant occurs, the VP filling the Prodicate slot must contain ife "to fear". Furthermore, in this construction, the CP acts as a semantic object of the Verb in the Predicate, and no surface structure Object tagneme is observed to occur.

Concomitant tagmerne type ii is related to other tagmemes in the Transitive Clause -- principally the Subject or the Object.
e.g. i) Hoaa-mi Manoel-nee kajijigi hani

"John and Manuel brought yucca"
ii.) Hoaa-mi kaǰigi sokoo?gi-nee hanf

"John brought yucca with (i.e., "and") bananas"

In either case, above, the Concomitant nay be moved by extraposition to clause-final position, in which case the dual marker -musi ( $f:$-mupi) is added to the tagmeme to which the Concomitant is releted, if the referent of the tagmeme in question is animate, (But since Concomitant ii is not considered as an Object, no dummy Object occurs with extraposition -- though the dual marker occurring in the case of animates could be viowed as a "Dumny Concomitant".)

"John and Manuel brought yucca"
ii) Hoaa~mi kayiigi hans šakoo?gi-nee
$\underbrace{\text { Juan }}_{S: \mathrm{NP}_{2}} \underset{\text { past }}{\text { rec }} \underbrace{\text { yucca }}_{0: \mathrm{NP}_{2}} \underbrace{\text { bring }}_{\mathrm{P}: \mathrm{VP}} \underbrace{\text { bananas-with }}_{\text {Conc }_{\text {ii }}: \mathrm{CP}_{2}}$,
"John brought yucca and bananes"
iii) Maenoel-musi-mi no-tsheni gifns-nes

"I saw manuel with (and) his wife"

## Temporal.

As in the Intronsitive Clause, the Temporal tagmeme
almost always occurs initially.

"That day the men ate a lot of wild boars"

In one case, the Temporal tagmeme is observed to be preceded by the Locative tagmeme, occurring clause-initially (this could altermatively occur finally in this clause) : ${ }^{28}$

[^63]
Kainee kha
$\frac{k i l l}{\text { Fil }}$ do $\quad$ "In the jungle that night the men

## Locative, Instrumental.

These tagnenes may occur in various positions in the
clause. The following example shows one of the longest
Transitive Clauses observed:

```
nokbtse naapi?6?-mi nobn6 kadats m6tsh6 va?aga - gi
```



```
peniftsi-a?nt
house-beside
    L: Ip
"Yesterday morning my wife killed a chicken with a machete beside the housell
```


## Benefactive.

This mey occur in various positions within the clause.
e.g. Jakade himiftsi do-khu do-tsáate-pokt?
$\frac{\text { field }}{0: N P_{2}}, \frac{\text { cultivate she-do }}{S: N P_{2}-P: V P}, \frac{\text { her-brother-ben }}{B e n: B P}$
"She cultivates the filed for her brother"

Adjunct.
This is of quite frequent occurrence in the Tronsitive
Clause. It generally occurs initially.
e.g. phaa? - mi oo hamo? gi-khat-twi gi-kht

"Then heating (it), he ate (it)"
7.2.1.2.4. Declarative Clause Type iv, "Ditransitive" 7.2.1.2.4.1. Basic Structure.

Two sub-types of Ditransitive Clause are set up on the basis of internal structure:$\mathrm{Cl}_{\text {iv.i }}=+\mathrm{S}: \mathrm{NP}_{2} / \mathrm{NomCl} \quad \pm \mathrm{DO}: \mathrm{DOP}_{1}+0: \mathrm{NP}_{2} \quad \mp \mathrm{DO}: \mathrm{DOP}_{1}$ $+p_{i v}: a a ? n q$
$\mathrm{Cl}_{\text {iv.ii }}=+\mathrm{S}: \mathrm{NP}_{2} / \mathrm{NomCl}+\mathrm{CO}: \mathrm{NP}_{2}$


Where the tie bar in $\mathrm{Cl}_{\mathrm{iv}}$.ii indicates that either the Object occurs optionally or the Quotative Object occurs obligatorily, but both cannot occur, and where $\alpha$ indicates that if the Predicate is filled by kema "to say" or hetsaeta "to ask" + causative, the $Q 0$ or the 0 may occur, but if the Predicate is filled by any other $\mathrm{VP}_{2}+$ causative, only the 0 may occur.

Because of the more complex structure of this clause type, the constituents tend to be less complex. This shows itsclf in an almost total absence of recursive NomCls, except on rare occasions.

### 7.2.1.2.4.1.1. Ditransitive Clause, Sub-type i, "Basic"

 The only verb attested in the Predicate of this sub-type of the Ditransitive Clause is aa?ni "to give".Intransitive and Transitive clauses apply equally here.

The object can only consist of an $\mathrm{NP}_{2}$ (i.e., no NonCl occurs in this slot in this sub-type). The Object has nowhere been observed to be assinilated to the verb in the Predicate (nor, indeed, would this be expected, since assimilation is to the filler of the Periphery in Verb Group type ii (complex) only). Nor has it been observed to be omitted. It is therefore regarded as obligatory in this construction.

The Dative Object tagmeme occurs either immediately before or immediately after the object, generaliy in the latter position.
e.g. i) naikoogigimi tipphootsi phaipije-ks aa?ni

"The shaman gave the medicine to the old woman"

"He gave the meat to her"
7.2.1.2.4.1.2. Ditransitive Clause, Sub-type ii, "Causative" This sub-type of the Ditransitive Clause has the following distinctive characteristics:-
i) The Predicate is filled by a transitive verb to which the causative suffix has been added.
ii) As tho formula and statement, above, indicate, if
the filler of the Predicate slot is kema "to say", or hetsanota, "to ask", + causative, the Quotative object or the Object may occur. iii) If the filler of the Predicate slot is any other transitive verb + causative, the object may occur, though this may be omitted in the surface structure.
iv) The second object tageme in the clause is the Causative Object, which always follows the Subjoct (if this is not assimilated to the Predicate) and precedes the object (if present).
e.g. i) tsami ts6 kemota pi?pi

"He made her say, 1 Go away!'"
ii) $n t-h o-m i ~ t s 6$ do-tapo6gi gimota

"He made her tell them her droam"
iii) ginnenikena Joksde himiqtsi gimkhota
$\frac{\text { his-sister }}{C O: N P_{2}} \frac{\text { fiold }}{0: N P_{2}} \frac{\text { cultivate hemdo-csty }}{S: N P_{2}-P: V P}$
"He makes his sistor cultivato tho field"

> iv) ts6 tss a?mitotね
> $\underbrace{C_{0: N P_{2}}^{\text {him }} \underbrace{\text { eat-cstv }}_{\text {P:VP }}}_{S_{S: N P_{2}}^{\text {she }}}$
"She malres him eat"
7.2.1.2.4.2. Peripheral Tagmomes.

As indicated in the Peripheral Tagmeme Distribution Matrix and accompanying commonts at the end of section
7.1.2., above, relatively few paripheral tagmemes are attested in Ditransitive Clauses. In fact, not even the Locative and Temporal tagmemes have becn obsorved in this clause type, though no doubt they may occur. Some raasm ons for this are given in the coments following the matrix. Likewise, it is most probable that most other periphoral tagmemes potentially nay occur in this clause type, though they have not yet been attested. Two examples of Ditransitive Glauses with periphoral tagmemos follow, and some other eramples are to be found in section 6.2. (Axis-Relator Phrasos), and elsowhere.
i) máube ampura-mí oe?phi gi-khaá-ke - mi brother wuch rec fish he-do - dat-rec $\underset{\text { Voc: } \mathrm{Tn}_{2}}{\text { U.__ }}$ Dat: $\mathrm{DOP}_{2}$ past

"Brother, though ho had caught a lot of fish, he did not give her fish"
ii) do-kt-mi pišani daa?ni tsonava - poka?

"He gave her meat for her mothor"
7.2.1.2.5. Declarative Clause Type v, "Tritransitive"

### 7.2.1.2.5.1. Basic Structure.

This clause type, which is of infrequent occurrence, consists minimally of a Prodicate containing the ditrans-
itive verb aa?ni "to give" + causative, Subject, and three Objects:
$C I_{V}=+S: N P_{2}+C O: N P_{2}+0: N P_{2}+D O: D O P_{1}+P_{v}: a 0 ? n 1+\operatorname{cstv}$ e.g. no-mi naikoogigi ti?phootsi phaipije-ke o?tfig

"I mado the shoman give tho medicine to the old womon"

### 7.2.1.2.5.2. Peripheral Tagmemes.

As with the Ditronsitive Clause, very few peripherol tagmemes are observed to occur. In the Tritransitive Clause, never has more than the Negative and one other peripheral tagmeme been observed in any given clause, and then the Subject tagmeme has been fused with the Prodicate.
e.g. nil-mi gi-nági pišani do -ke do?t

tsonsva-poka?
her-mother-ben
Ben: BP
"He didn't make his brother give meat to her for her mother"

### 7.2.1.2.6. Clitics.

There are five orders of clause-level clitics, 30 These
29The final syllable of aa?ni "to give" is omitted here,
as on many occasions, The change of vowel from a to o
is regular with the causative suffix, but the shortening
of the vowel is not. This would appear to be an except-
ion to the general rule.
30 As clitics have no structure, distribution is the key
fact concerning them. The distribution of these clitics
is at clause level mence the description here.
are suffixed to the first tagmene after the Vocative in the clause. When the Predicate is the only separate tagmeme in the clause (i.e., when the subject is fused to the Predicate, and no other tagmemes occur), there are two possible positions for the clitics: finally, and -only if the Predicate contains a Complex Verb Group subtype i -- suffixed to the peripheral element of the Group (cf. 4.1.2.2.1., above).
e.g. boto? do-khá-pa? -mi
sweep she-do-frus - rec
past
OR boto?-pa? - mi do-kht sweep-frus -rec she-do past
"She wanted to sweep (but didn't)"

When one clauses is embedded within another (whether by nominalization or relativization), clitics may occur both in the matrix and the embedded clause.
e.g. i) With Nominalizod Clause:-


$$
\frac{\text { tsa }}{\frac{\text { doo?n }}{\text { it }}} \underset{0: \mathrm{NP}_{2}}{\text { she-give }} \mathrm{S:NP}_{2}-P: V P
$$

"Though she has toasted the fariña, she won't give it to him"
ii) With Relativized Clause:-

"Ihe one who frightened you will go away"

### 7.2.1.2.6.1. Clitic Order 1: Reportative: -tsa.

e.g. tef?i-k8o do?pi
river-to she-go "She goes to the river"
$D: D P \quad S: N P_{2}-P: V P$
te6?i-koo-ts6 do?p1
$\underbrace{\text { river-to- rep }}_{D: D P} \underset{S: N P_{2}-P: V P}{\text { she-go, } I t}$ is said that she goes

This clitic is homophonous with the third person singular masculine pronoun in non-final position, though the very difforent distribution and positions in the clause of the two morphemes precludes confusion, as is illustrated in the following two examples:-
tsk-?pe kemi ha?moo? a 8
he rem say hot
$S: \mathrm{NP}_{2}$


Having the two morphemes in sequence is here avoided by assimilation to the verb in the Predicate of the pronoun manifesting the Subject tagmeme, though such a sequence may occur when the third person singular masculine pronoun functions as object:-


The first morpheme raust be the third person singular masculine, since the reportative is a clitic suffix, and thus cannot occur initially. This becones clear when the feminine tso is substituted for tss:-


For a while it was thought that this clitic could occur initially in the clause, in an apparently variant form, phaa?tsk. This form is used very much in storytelling (cf. chapter 9).
e.g. phaa?-tsa-?pe foo na-kht rep rom $\underbrace{\text { fire theymake }}_{\text {past }}$
"It is soid that they mode a firc"
However, it is now clear that phaa? is an inter-sentential relator, since it occurs sentence-initially or after a connector in a compound sentence, but never initially in a discourse.

### 7.2.1.2.6.2. Clitic Order 2: Frustrative: -pa?.

e.g. i) Host-tst-pa?-mi a?miti

$$
\underbrace{\text { Jose }}_{S: \mathrm{NP}_{2}} x \in \underbrace{\text { frus rec }}_{\text {past }} \frac{\text { eat }}{\mathrm{P}: \mathrm{VP}}
$$

"It is said that Jose wanted to eat but didn't (couldn't)"
ii) gi?pi-pa? - mi
$\underset{S: N P_{2}-P: V P}{\text { he-go frus rec }}$ past "He wanted to go but didn't

The frustrative is often accompanied by the desiderative, but not obligatorily so.
e.g. gi?pi-pa? - ma-mi
 Negative tagmeme cannot co-occur in a clause with the frustrative.

Homophony may occur between the frustrative clitic and the verbal progressive suffix -pa (cf. 3.1.2.5.), if either of these is followed by a morpheme beginning with a glottal stop or a vowel, since if the former is followed by a glottal, its om final glottal is not distinguished from this, and if the latter is followed by a vowel, a glottal is interposed in accordance with the morphophonemic rules (cf. I.2.3.3.2., above).
e.g. da?mits-pa? - ?pe

$$
S: \underbrace{\text { he-eat }}_{2} \underbrace{\text { fem }}_{\text {frus }}{ }_{\text {past }}
$$

"He wanted to eat but didn't (couldn't)"
darmits-pa-?pe
he-eat $-\frac{\text { prog rem }}{\text { mast }}$
However, this homophony usually does not lead to ambiguity, since the desiderative is often present with the frustrative, and this begins with neither a vowel nor a
glottal. Also, if the reportative is present, it prew cedes the frustrative, but follows the progressive. Furthermore, the progressive may be followed by $\underline{-n a}$ (cf. 3.1.2.5.1., above).
e.g. da?mita-tsa-pa? - ma - ?pe
$S_{S: N P_{2}-\mathrm{F}: V \mathrm{VP}}^{\text {he-eat rep frus desid-rem }}$ past
"It is said that he wanted to eat but didn't (couldn't)"
da?mita-pank-tst-? pe
he-eat-prog-rep-rem
$: N P_{2}-\mathrm{P}: \mathrm{VP} \quad$ past
"It is said that he was eating"
The occurrence of the progressive is in any case very closely tied to the context, which precludes wimiguity.
7.2.1.2.6.3. Clitic Order 3: Desiderative/Stated Intention. 7.2 .1 .2 .6 .3 .1 . Desiderative: $\{-m a ? u\}$.

The first and most obvious fact about this morpheme and its allomorphs is that it is (and they are) homophonous with the negative imperative clitic described in 3.1.2.6.1.2., above. However, it has less allomorphs, and differences of distribution avoid anbiguity.

## Allomorphs

$\{-m a ? u\}:-m a ? u \cdots-m G^{31}$
-ma?u occurs finally on all verbs
-ma " elsewhere (i.e., non-finally on verbs,

[^64]
## and finally anywhere else)

## Distribution

Whereas the negative imperative clitic is applied only to verbs where the Subject of the clause is the second person (singular, dual, or plural), the desiderative is alnost never applied to clauses where the Subject is in the second person; ${ }^{32}$ it occurs principally with reference to the first person, though it may occur with reference to the third person, as examples in the preceding section illustrate.

A further difference between the negative imperative and the desiderative is that whereas the former can only be applied to a verb or the peripheral element in a complex vorb group (sub-type i), the latter is suffixed to whichever clause-level tagmeme except the Vocative (or Interrogative, in on Interrogative Clauso) that occurs initially in the clause, and only to the verb or the perjphery of a complex verb group if there is no other separate tagmeme in tho clause.
e.g. tsa-ma ee?phikht
${\underset{S: N}{N_{2}}}_{h^{\text {he }}}^{\text {desid }} \frac{\text { fish do }}{P: V P}$

[^65]OR ee?phi gi-kha-ma?u
$\underbrace{\text { fish } \quad \text { he-do }}_{S: N P_{2}-\mathrm{F}: \mathrm{VP}} \xrightarrow{\text { desid }}$
OR ee?phi - ma gi-kht
$\underbrace{\text { fish }}_{S: N P_{2}-P: V P} \frac{\text { desid }}{\text { he-do }}, \quad$ He wants to fish"

The desiderative may only be uscd when soineone wants to do something him. or her-self; it may not be used to indicate a person's desire that someone elso do something. In this case, the verb kaašoja?i kha "to want" must be used (cf. 7.2.1.2.3.1.1., above).

Further examples of this clitic are to be found throughout this section on clitics, and elsewhere in this thesis.
7.2.1.2.6.3.2. Stated intention: -payake.
e.g. i) phá-pa jatáa no?mbtsh6

"I threaten to kill you"
ii) da?mits-pa?-pay̌aka-mí
$\underbrace{\text { he-eat }}_{S: N P_{2}-P: V P}$ frus intent rec
"He said he intended to eat, but he didn't"
2.2.1.2.6.4. Clitic Order 4: Temporal.

This is the clitic order of most frequent occurrence, and
$33_{\text {This }}$ verb may mean both "to hit" and "to kill"

```
examples abound throughout the description. There are
three temporal clitics:-
-mi "recent past"
-?pe "remote past"
-va "future"
e.g. i) ab a?mitu
```



```
"I eat"
ii) no-mí a?mita
```



```
iii) \(n \delta-? p e \quad a ? m i t\}\) S: NP \(\frac{I}{2} \frac{\text { rem }}{2} \underbrace{\text { eat }}_{P: V P}\) "I had eaten"
iv) mo-va a?mita
```



```
v) tsana 00 no-ndagi
he-rest int my-friend "He is my friend"
vi) tsa-ma-?pe oo no-ntagi \(\frac{\text { he-rest }}{S_{S}: \mathrm{NP}_{2}} \frac{\text { rem }}{\text { past }} \frac{\text { int my-friend }}{\mathrm{P}: \mathrm{NP}_{2}}\) "He was my friend"
```

The future clitic is frequently followed by the order 5 dubitative clitic:-

$$
\begin{aligned}
& \text { Hose-va-eke?tsi a?mita } \\
& \underbrace{\text { Joss fut dub } \underbrace{\text { eat }}_{\mathrm{P}: \mathrm{VP}}}_{\mathrm{S}: \mathrm{NP}_{2}} \\
& \text { "Perhaps Jose is going to eat" }
\end{aligned}
$$

7.2.1.2.6.5. Clitic Order 5: Dubitative/Incompletive 7.2.1.2.6.5.1. Dubitative: $\{$-eke?tsi\}.

$$
\{- \text { ekétsi\}: -okéttss }- \text {-ek๔? }
$$

This variation appears to be conpletely free. 34
e.g. i) tsa-mi-eke?tsi tsa?na
$\underset{\text { S: } \mathrm{NP}_{2}}{\text { he past }}$-rec $\quad \frac{\text { dub }}{\text { come }}$
"Perhaps he has come"
ii) nii gi - mania no-ts?


"I don't know who could have killed the tapir"
7.2.1.2.6.5.2. Incompletive: -kh6?.
e.g. no?mita-va - khe?
$\frac{\text { I-eat fut incomp }}{S: \mathrm{NP}_{2}-\mathrm{P}: \mathrm{Vp}}$
"I am still going to eat" OR "I an going to go on cating"
"Still" and "yet" are the best glosses for this (todavia in Spanish). This clitic frequently occurs with the negative.
e.g. nif-khe? da?mitu
$\underbrace{\text { not }}_{\text {Neg:neg }}$ incomp $\underbrace{\text { he-eat }}_{S: N P_{2}-\mathrm{F}: \mathrm{VP}}, \quad$ He hasn't eaten yet"

### 7.2.1.3. Distribution.

The Declarative Clause is distributed in the Base slot
in simple and compound sentences, and in derived clauses (Interrogative, Imperativo, Nominalized and Relativized). Since all Declarative clauses share the sane distributional possibilities, it is not necessary to establish subclasses.
e.g. i) (In Sentence Base):

"I work but she sleeps"
ii.) (Nominalized, and in Sentence Base):
 B:DeclCI
"I gave her food so that she wouldn't die"

### 2.2.2. Derived Clauses.

There are four classes of derived clauses: Interrogative, Imperative, Nominalized and Relativized.
7.2.2.2. The Interrogative Clause.
2.2.2.1.1. Contrast.

The Interrogative Clause (IgCl) has the following con-trastive-identificational features:-
i) Its Base is filled by a Declarative Clause of any of the five tyres described in 7.2.1.2., above. ii) An additional Interrogative tagmeme occurs, or an interrogative manifests one of the tagmomes of the Den clarative Clause in the Base, or an interrogative occurs in the Quantifier slot in an NP manifesting one of the tagmemes of the Declarative Clause in the Base, or in the Axis of an Axis-Relator Phrase.
2.2.2.1.2. Variation.

Two types of Interrogative Clause are set up on the basis of internal structure:-

$$
\begin{aligned}
& I_{g C l}^{i}=+I_{g}: \text { hath }+ \text { B:DeclCl } \\
& I_{g C l}^{i j} \\
& =+\operatorname{D}: \text { DeclClR }
\end{aligned}
$$

where $R$ indicates the restriction that one of the constituent tagmemes in the DeclCl must be monifostod by or contain an interrogative.
7.2.2.1.2.1. Interrogative Clause Type i: Corroborative.

To form corroborative interrogative clauses from declarativo clauses, the interrogative word hapha is preposed to the latter clause.
0.g. i) haphb ma?tsnak phi

$$
\operatorname{Ig} \prod_{\text {gig }}^{\text {B:DeclCl }}(i) \quad \frac{\text { tired }}{\text { you }} \text { "Are you tired?" }
$$

ii) hapht nisi pisan gišdpa
$I_{g}: i_{\mathrm{g}} \frac{\text { not meat he-oat-prog }}{\mathrm{B}: \operatorname{DecICl}(i i i)}$
"Isn't ho eating tho meat?"

7.2.2.1.2.2. Interrogative Clause Type ii: Information.

To form the Information Interrogative, various clauselovel and phrase-level tagnemes are manifested by appropriate interrogatives. If a clause-level tagmeme containing an interrogative is one of those defined above as peripheral for the Declarative Clause, it is placed initially in the Interrogative Clause (unless Vocative or Temporal are present, since both may precede the tagmeme containing or manifested by an interrogative). If it is one of those defined above as nuclear, it occupios its usual place in the clause.

Tagmemes manifested by interrogatives have a portmanteau function, i.e., they are simultoneously interrogative and Subject, or Object, etc.

The interrogatives are bost described in various groups.

Group 1.
$\left.\begin{array}{l}\text { keene } \\ \text { ke-hee }\end{array}\right\} \quad$ "who?"/"whom?"
35 The hyphens indicate apparent morphome breais, though a complete analysis of the structure of interrogatives is not attempted.


```
These interrogatives may fill Subject, Object, and Causm
ative Object slots at clause level.
e.g. i.) nok\deltatsa-mi kehee Maonoel tsheni
```



```
            "Yosterday who sow Manuol?"
    ii) nokbtsa - mi Mamoel kthoe tsheni
    yesterday roc }\frac{\mathrm{ Manuel }}{T:\mp@subsup{\mathbb{NP}}{1}{}
            "Yesterday whon did Manucl see?"
    iii) kthee maa?ma do?mitota
        CO:ig
            "Whom does she make eat cassava?"
```

They may also fill the axis slot in DO, Benefactive, Purposive, Instrument and Concomitant phrases (which are disw tributed in $\mathrm{DO}_{9}$ Bem Ppev $\mathrm{I}_{4}$ Conc and $P$ slots at clause level).
e.g.

"Whom did he give the banana to?"
ii) kthee-poks? - mi tst?vota

$36_{\text {Related to }}$ demonstrative he?e-"that", apparently. cf. 3.6.2., above.

```
"Fox whom did he moke it rain?"
```



```
            "To whom did he say that he was going fishing?"
iv) Kohee - gi -mi tso giombtsho
```



```
"What did he hit her with?"
    v) kthoe - nt odo?phaavtmusi
```



```
"With whom do you (dual) work?"
```




```
"Who has a pig?" (cf. 7.1.1.1.1.3.(iii) and
7.2.1.2.1., above.)
```

Another form of interrogative apparontly derived from ke-hee is
ke-(classifier)-hee "which?"

The classifier may refer to people or things (cf. 3.2.2.2.1., above).
e.g. i) kt-pije-hee-mi kdatd kainde kha

"Which (of the women) killed the chicken?"
ii) ke-pasi-hee kacso ja?i pi-khe

"Which (of the rings) do you wont?"
iii) ke-hugi-hee-va ve?pi

"Which (path) shall we toke?"
Here, this interrogative is seen in tho Head slot of LP type i. It may also occur in the Temporal slot, when the classifier is -pels, "day":
iv) n6-pek 6 -hee-vt gi-tst?

"Which (day) is he coming?"

## Group 2.

This consists of two interrogatives:-
he?ee "whore? (near)"
hende "where? (far)"
The first of these interrogatives is no doubt related to he?e "what?" in Group 1. Those occur in Lp type i, which fills the Locative slot at clauso level for clause typos ii-v. 37
o.g. i) he?ee-mi no-ndagi pi-tsheni

"Where did you see my brother?"

[^66]

These interrogatives also fill the axis slot in the DP (which is distributed in the Directional slot at clause level).
e.g. i) heact-kh $-m$ m na-tstanu

"Where did they come from?"
ii) heate-koo-va ve?pi

"Where are we going to?"

## Group 3.

This consists of two interrogetives:-

$$
\left.\begin{array}{l}
\text { hide?-hee } \\
\text { hidee?-gi-hee }
\end{array}\right\} \quad \text { "how?" }
$$

They fill the Comparative slot at clause level.
e.g. i) hids?hee i?dakkatsf pi-kha
$\frac{\text { how }}{\text { Ctv: } i g}, \frac{\text { yucca-juice }}{0: N P_{2}} \frac{\text { you-make }}{S: N_{2}-P: V P}$
"How do you make sweet yucca juice?"
ii) hidee?gihee anogimu na-miatpavi

"How do they hunt tapirs?"

## Group 4.

This consists of the interrogative
hidee?-tsl-hee "when?"
hidee? is apparently relatod to the firct olement of the interrogatives in Group 3. -hee occurs also in interrogativos in Groups 1, 3, and 5.

This interrogative fills the Temporal slot at clause Level. 38

"When did Isable see Manuel?"

Group 5.
This consists of the interrogative
kope?-hee "why?"

This fills the Purposive slot at clauso Level.
e.g. kope?hee jabnt ktní


## Group 6.

This consists of two interrogatives: $\left.\begin{array}{l}\text { ht?e anepuu? } \\ \text { hidt? anepuu? }\end{array}\right\}$ "how much?"/"how many?" 40

[^67]he?e is apparently related to interrogatives in Groups 1 and 2, and hids? to interrogatives in Groups 3 and 4, above. These interrogatives fill the Quentifier slot in the Noun Phrase.

```
e.g. he?e anepuu? hi{t{miihimi pi-tsheni
```


"How many canoes did you see?"

From the above, it is clear that all clause-level slots except Vocative, Negative, Quotative Object, Adjunct and Conditional may be filled directly or indirectly by information interrogatives.

### 7.2.2.1.3. Distribution.

The Interrogative Clause is distributed in the Base slot in simple and compound sentences and in nominalized clauses. e.g. i) (In the Sentence)


[^68]
"I don't know who killed the tapir"

### 7.2.2.2. The Imperative Clause.

### 7.2.2.2.1. Contrast.

The Imporative Clause (InpCl) has the following contrast. ive-identificational features:-
i) Its Base is filled by a Declarative Clause of any of the types describod in 7.2.1.2., above, excopt type $i$, "Non-transitive".
ii.) The performer (or proposed perfomer) of the action must be in the second person.
iii) Thoro is no separato Subject tagme, as Subject is always monifested by an NP corsisting of a pronoun, which is obligatorily assimilated to the ver'b in the Predicate. iv) The verb filling the Predicate nust have the appropriate imperative form, as described in 3.1.2.6., abovo.

### 2.2.2.2.2. Variation.

Few peripheral tagmemes tond to occur in the Imperative Clause. Temporal can only be filled by words referring to the present timo or tho imediato future, as indicatod in example (i), below.

```
e.g. i) (Intransitive)
            noohtna tet?i-kbo pi?pi
```



```
    ii) (Transitive)
    man?mb pfomjta
    cassava
    iii) (Ditronsitive)
    DO:DOP 
    iv) (Tritransitive)
    tsh nandant?8 phonfta - ke pottd
    hin pineapple your-mother-dat you-give-cstv
```



```
"Make hin give the pineapple to your mothorb"
```

If the Declarative clause is in the negative, the Negative tagnere is deleted and replaced by the appropriate form of the negative inperative clitic, $2 s$ indicated in 3.1.2.6.1.2. and 3.1.2.6.2.2., above. e.g.i)nif pha a?uita

$\rangle$ pasmitand?
$\frac{\text { you-eat-neg inpty }}{S: N P=F: V P} \quad$ "Don't eats"
ii) ve?e i-tstna?-nia?

"Don't (you (pl)) cone here!"

### 2.2.2.2.3. Distribution.

The Inporative Clause is distributed in the Bose slot in sirple and compound sentences and in the Quotative Object slot in Declarative, Interrogativo and Inperative Clauses.
e.g. i) foo pi-kheo?kt mik6 tso?v6nu pi-ktv6?nt? fire you-moko-come but fariña you-toast-neg inptv $\mathrm{B}:$ IrpCl conn $\mathrm{B}: \operatorname{InpCl}$ (Sentence)
"Cone and nake a fire but don't toast the fariñal"
ii) giáa - tsá kaince pi-khe

S:NP $\underbrace{\text { he-say } P: V P}_{2}$ rec $\underbrace{\text { ho: ImpCl }}_{\text {hint kill you-do }}$
(DeclCl)
"He said, 'Kill hin!'"
iii) haphe tsami rena pi-patnt-kto pl?pi

"Did he say, Go to your housel'?"
iv) pima pi?pi
you-say you-go, "Say 1 Go awayl'!"
( ImpCI)

### 2.2.2.3. The Nominalized Clause-

7.2.2.3.1. Contrast.

The Nominalized Clause (NonCl) has the following contrast-ive-idestificational foatures:-
i) It consists of a madified Declarative or Interrogative Clause (types ii-v).
ii) No tagmenes in this clause nay follow the Predicate. iii) There tend to be few if any periphoral tagnenos in this clause.
iv) Whereas proviously-describod derived clauses (i.e., Interrogative and Imporative Clauses) are indeqendent, though derived, the Noninalized Clauso is dependent. That is to say, it connot stand on its own as a conplete statenent. Whilo Declarative, Interrogative, and Irperative Clauses have their principal distribution in the Sentence, the Nominalized Clause is distributed backlooped in lower-level structures (in the clause and the phrase -- details of its distribution are given in 7.2.2.. 3.3., below).

### 7.2.2.3.2. Variation.

Clauses are nominelized by doubling the final vowel of the verb in the Predicate and adding to this a rising
41. tone. If the final vowel is $\underline{u}^{4}$, this becomes $\mathfrak{a}$. No other vowels change their quality. A glottal closing the penultimate syllable of the verb moves right one syllable (cf. second example, below).
Q.g. i) ts6 gi-tshen 1 do-khonit
her he-see shemlaughmom
"He sees her laugh" (from khoni "to laugh")

[^69]ii) do-tstna?-mi tsodapas? - mb

"She has come in order to sing" (from hada?
"to sing")

Many casos of Nominalized Clauses are to be observed throughout the present description.

### 7.2.2.3.3. Distribution.

Nominalized Clauses are distributed in Subject, Object, Causative Object and Quotative Object slots at clause level, and in the Axis slot in Axismelator phrases.
e.g. i) Isabeel Manoel tshenf maa?m da?mitad

"Isabel sees Manuel eat cassava"
ii) gi-patna-koo gi?pi gintado tst manta - pokt?

"He goes to his house because his wife calls him"
7.2.2.4. The Rolativized Clause.

### 7.2.2.4.1. Contrast.

The Relativized Clause (RelCl) has the following contrast-ive-identificational features:-
i) Its Base consists of a Declarative Clause of limited expansion, containing no peripheral tagmemes
ii) No type i Declarative Clause ("Non-transitive") may be relativized, ${ }^{42}$ and no intransitive clause may be object. relativized.
iii) The Relativized Clause is of minimal expansion, consisting only of a Predicate and a Subject or an Object. iv) Either Subject or Object is deleted to form the Relativized Clause, depending on whether it is subjectrelativized or object-relativized (cf. 7.2.2. .2., below). v) Like the Nominalized Clause (but unlike the Interrogative and Imperative Clauses), the Relativized Clause is dependent as well as being derived. That is to say, it cannot stand on its own as a complete statement -- i.e., it cannot be distributed in the Sentence, but only backlooped in the NP. (For distribution, cf. 7.2.2. .3., below.)
vi) The Relativized Clause conveys the meaning "the one who did something", as opposed to "(I saw) him do something" in the Nominalized Clause.
7.2.2.4.2. Variation.

There are two types of relativization: Subject-relativization and Object-relativization. ${ }^{43}$ Two English examples

[^70]will clarify the distinction:-
i) "The one who frightened him ..."

Here the relativized clause refers to the one who did the frightening -- the Subject of the Predicate "frighten".
ii) "The one whom he frightened ..."

Here the relativized clause refers to the one who was frightened -- the Object of the Predicate "frighten".


Object-relativization (O-rel) is indicated by deleting the Object of the clause being relativized, changing the final vowel of the verb in the predicate of that clause to - Ba (except -i, which becomes - ifi), and adding the Objectrelativization indicator $\underline{\underline{n} i}$, which is followed by the ap-

[^71]propriate classifier andor number indicator (cf. sections 3.2.2.2.1. and 3.2.2.2.3., above). 45
e.g. tsa-m1 1fotanigi


In the first of the above examples, the initial tsa "he/him" must be the object of the frightening, since the Subject is =o-v1, and a separate Subject tagmeme cannot occur. The emphasis is on the one who did the frightening -- the Subject. Whoever happened to be frightened is incidental (or at least linguistically peripheral to the structure in question).

In the second of the above examples, the initial tsa must be the Subject of the Predicate "frighten", since the Object is -anin, and a separate object tagmeme cannot occur. The emphasis is on the one who was frightened -- the Object. Whoever happened to do the frightening is incidental (or at least linguistically peripheral to the structure in question).

In this second example, a separate Subject tagmeme need not occur, since the Subject (which must be indicated) may be manifested by a pronoun assimilated to the verb. (In this case, the temporal clitic has to move to the end of

[^72]the Predicate.)

"The one whom he frightened ${ }^{\prime \prime}$

In the Subject-relativized clause, if the verb is transitive, more specific information may be given about its object -- but not about the subject, which is indicated only by -o-v1.
e.g. gi?ithe jasna- ja-mi ifoto-vi-gi

"The one who frightened that little child..." 45

In the Object-relativized clause the converse is
the case: more specific information may be given about the subject of the verb -- but not about the object, which is indicated only by $-\mathbf{x}$ amp.

e.g. gi?ithe atskagi-mi fotaa-ni-gi

"The one whom that man frightened ..." 47

All the above examples have dealt with animate masc. uline subjects and objects in the singular, all based on the same verb, for ease of comprehension and comparison. We must now look at the changes that occur when the subject or object is feminine, or inanimate, or dual or plural, and some changes that occur with certain specific byt frequent-ly-used verbs. Most of this information is best presented (and compared with what has already been described) in tabular form.

In the matrices that follow, the notation "(Cl)-o" and "(Cl)-Aa" indicates that the final vowel of the verb
$47_{\text {If }}$ it is desired to give more information about the object of an object-relativized clause, this is given in the NP in which the relativized clause is embedded, but the lexical items which express this information are not part of the relativized clause itself.


"That littie child whom that man frightened"
For further details, cf. description of NP type i in 6.1.2.2.1.5., above.
in the Predicate (except i, as indicated above) becomes ㅇ(S-rel) or Ea (O-rel). It does not imply that this o or Ea is something added to the Declarative Clause, but that it replaces a part of the latter.

The numbers in the matrices refer to the examples given subsequently.

|  | SIITGULAR | NON-SINGULAR |
| :---: | :---: | :---: |
| $A$  <br> $N$  <br>  $M$ <br> $M$  <br>   | (CI)-0-vi-gia |  |
| $\left.\begin{gathered} A \\ T \\ E \end{gathered} \right\rvert\, F$ | $(c 1)-0\left\langle_{-t s \delta_{5}}^{-v i-p i y^{y} t}\right.$ |  |
| INAN | (C1) -0-vid | $\text { (Cl) -o-jo-v£ } \begin{aligned} & -\mathrm{clsfr}-\mathrm{dl} \text { pual } \\ & -\mathrm{pl} \mathrm{sx}_{10} \end{aligned}$ |

Matrix 7.3. Subject-relativization Formation.

Matrix 7.3. is selfexplanatory excopt for the midde left-hand cell. Here,-ts6 varies with -vi-piye. The latter may occur with all verbs; the former is in free variation with this on kht "to make, to do" and 道 "to be" only.

|  |  | SINGULAR | NON-SINGULAR |  |
| :---: | :---: | :---: | :---: | :---: |
| $A$ $N$ $I$ $M$ | M | (C1)-6a-ni-gi 11 | $\text { (Cl)-aanni< } \underset{-9 a_{13}}{- \text { musi }_{12}}$ | Dual <br> plurai |
| $\left.\begin{aligned} & A \\ & T \\ & E \end{aligned} \right\rvert\,$ | F | (C1) -ata-ni-pijt 14 | $\text { (Cl) -aa-ni< } \operatorname{mupi}_{15}^{- \text {pijeni }_{16}}$ | Dual Plural |
| INA |  | (C1) -6a ${ }_{17}$ |  | Dual plural |

Matrix 7.4. Object-relativization Formation.

Matrix 7.4. is self-explanatory.

Examples relating to Matrices 7.3. and 7.4.
Subject-relativization.

1) (M.sg.) J̌atna nlthiga kho-vi-gi
child shelter do-S-rel
"The one (m) who shelters (OR: shades) the child"
2) (M.d..) Jaßñ ntilhiga kho jovimusi
"The ones (OR: the two ( $m$ ) ) who shelter the child"
3) (M.pl.) Jatand ntthiga khoyovi?a "The ones ( $p$ l - m) who shelter the child"
4) (F.sg.) a?mitovipiyt
"The one (f) who eats"
5) (F.Sg.) J̌atna nithiga kho ( $\begin{aligned} & -t s 6 \\ & -\vee 1-\mathrm{pije}\end{aligned}$
"The one (f) who shelters the child"
6) (F.di.) Jaánd nathiga khovimupi.

The ones (OR: the two (f)) who shelter the

## child"

```
7) (F.pl.) Ja{na ntthigk khovipijeht
    "The ones (f.pl.) who shelter the child"
8) (Inan.sg.) haa-?pe jo-vi
    sink rem be-S-rel
        past
    "The one that had sunk" (from haa 道 "to
        sink"(intrans))
9) (Inan.dl.)
            i) haa-?pe jo - jo - vi - miikl
                                    non- Srel canoe-dI
                                    Sg
            "The ones (the two canoes) that had sunk"
            (-mi is the classifier for canoes; E?k{
            is dual. cf. sections 3.2.2.2.1. & 3.2.2.2.3. .,
                                    above.)
            ii) ha?vano-jou vi - uuka-mi
                fall non-Srel dl rec past
                                    sg round things
            "The round things (dl) that fell"
            (from hasvand "to fall", -a classifier for
            spherical objects, and y?kd dual)
10) (Inan.pl.)
            i) haa-?pe yo-jo-vi-miihf
                                    pl
            "The canoes (pl) that had sunic"
            ii) ha?vano-jo-vi-uuh1-m{
            "The round things (pl) that fell"
```


## Object-relativization.

11) (M.sg.) n*fhiga gi-khta-ni-gi shelter he~do-Orel-m
"The one (m) whom he shelters"
12) (M.dI.) nathiga gikhtansmusi
"The ones (the two (m)) whom he shelters"
13) (it.p1.) refihigt gikhfanf?a
"The ones ( $p l, m$ ) whom he shelters"
14) (F .sg.) ntahiga gi-khaani-piye
shelter he-do-Orel-f
"The one ( $f$ ) whom he shelters" ${ }^{48}$
15) (F.d1.) ntihigs gikhaanimupi
"The ones (the two (f)) whom he shelters"
16) (F.pl.) ntthiga gikhtanfpiythi
"The ones ( $p l, f$ ) whom he shelters"
17) (Inan.sg.) tsopáa
she-wash-Orel
"That which she washes" ${ }^{49}$ (from hing
"to wash")

48 Note that here the $M$ or $F$ refers to the object of the verb, as indicated in the object-relativization present in the structure, and not to the Subject (in this case, gi-, "he"), which may be of any person, number, or gender.
${ }^{49}$ In this case the singular inanimate form of object-relativization is homophonous with the nominalized form of the same verb. However, the difference is clearly estabfished by -ni in the dual and plural (exceptionally deleted in the inanimate singular), and elsewhere is genesally indicated by distributional differences.
e.g. i) tsopáa oo juju?

ii) tsopata no-tsheni


In addition to this, in certain contexts (cf. 7.2.2.3.2., and examples in Axis-Relator phrases) most NomCls are distinguished from RelCls containing the same verb by differont tone. Note the following example, which is typical:-


```
18) (Inan.dl.) tsopam-nIm?i.jbk}
            "The vessels (dl) that she washes"
                (-q2Y8 is the classifier for "earthenware
                    container for liquid")
19) (Inan.pl.) tsop&anf?ij8h1
                            "The vessels (pl) that she washes"
```

When the verb in the Predicate bears the reflexive suffix -phaavi (cf. 3.1.2.2.1., above), one would expect only Subject-relativization to operate. However, this is not the case; both Subject- and Object-relativization may occur, thus yielding a difference of emphasis not paralleled in English, since the Subject and Object refer to the same person. The following examples illustrate this:-
i) Subject-relativization:

```
haa?- phoo - vi - piyt
```

comb reflex Srel f
"The one who combs (herself)"
ii) Object-relativization:

> daa? - phaava -ni-piye -comb reflex Orel "The one (herself) whom she combs"

As these examples (and others not reproduced here) indicate, the normal Subject- and Object-relativization rules apply, with two modifications:-
i) In the case of Subject-relativization, the final syllable of -phaavt is deleted, and relativization therefore
operates on the now-final -aa.
ii) In the case of Object-relativization, the final syll. able is not deleted, but neither is it lengthened, since the the preceding syllable is long, and sequences of two long syllables are generally avoided where possible. Apart from this, the usual Objectrrelativization rules apply.

### 2.2.2.4.3. Distribution.

The relativized clause (of either type) is distributed back-looped in the NP only, either as Modifiex in $N P_{i}$ or $N P_{i v}$, or as Head in $N P_{i i i}$.
e.g. i) atshagi tso-mi kainte khovigi

ii) tso-mi kainee khovigi her rec kill do-Srel past
H: Relcl "The one who killed her" 50 $\mathbb{N P}_{i i}$

Further details are to be found in the description of the $N P$ in 6.1.2.2.1.5., 6.1.2.2.3. and 6.1.2.2.4., above. NP's containing relativized clauses are attested in all the Clauselevel and Phrase-level slots where other NP's may occur.

[^73]
## Chapter 8

## SENTENCE LEVEL

The Sentence is set up as a level of construction above the Clause and below the Paragraph. Sentences are either Simple or Compound. ${ }^{2}$ A Simple sentence consists of a Base filled by an Independent Clause, and an intonation tagmeme. A Compound sentence consists of two or more Bases (each of which is filled by an Independent Clause), joined by connectors, plus an intonation tagmeme.

In the Distribution mode of the Sentence, details of distribution in terms of the Paragraph are not given, since the present description does not include an analysis of Paragraph structure.

### 8.1. Contrast.

The Sentence (Snt) has the following contrastive-identificational features:-

[^74]i) It consists of one or more Bases, each of which is filled by an independent clause.
ii) It is marked by a supramegmental Intonation tagmeme. iii) If more than one Base occurs, each pair of Bases is joined by a connector.
8.2. Variation.

Two types of Sentence are set up on the basis of internal structure.

$$
\begin{array}{r}
\text { Snt }_{i}=+B: \text { Indep CI }+ \text { Inton: Intonation Contour } \\
\text { Snt }_{i i}=+B: \text { Indep CI }+(+\operatorname{conn}+B: \text { Indep C1 })^{r}+\text { Inton: } \\
\text { Intonation Contour }
\end{array}
$$

where $r$ indicates that the part of the formula within brackets may be repeated an indefinite number of times.
8.2.1. Sentence Type i, "Simple".

The Simple Sentence may be Declarative, Interrogative, or Imperative, with a different Intonation Contour in each case. This leads to the establishment of three sub-types of Simple Sentence:-

$$
\begin{array}{ll}
\text { Snt }_{i . i}=+B: \operatorname{DecICl} & \text { Inton }_{i}: " . " \\
\text { Snt }_{\text {i.ii }}=+B: I_{g C 1} & \text { +Inton }_{i i}: " ? " \\
\text { Snt }_{\text {i.iii }}=+B: I_{\text {InpCl }} & \text { +Inton }_{i i}: "!
\end{array}
$$

The difforent Clause Classes have been described in chapter 7, above. An analysis of the different intonation types falls outside the scope of the present descrip-
tion (cf. Introduction), though these types are distinm guished by the intonation notation (punctuation conventions) indicated in the formulae above.

Absence of further distinguishing features between these three sub-types of the Simple Sentence renders separate treatment of each sub-type unnecessary. Three examples follow, and further exanples of the Clause Classes filling the Base are to be found in chapter 7, above.
e.g. i) (Snt $\operatorname{i.j}_{i}$ )
nownad6 yakfat-gik8 odo?phaavk-pa
$\left.\frac{\text { my-sister field-in worls }- \text { prog }}{\text { B:DeclCl }}\right|_{\text {Inton; }} ^{\text {man }}$
"My sister is working in the field"
ii) (Snt i.ii)
$\begin{aligned} \begin{array}{r}\text { haphe nif tsomi gi-tshenf do?mitat } \\ \text { ig not her rec hemsee } \\ \text { past }\end{array} & \text { shemeat } \\ \text { B:IgCl } & \text { Intonii }\end{aligned}$
"Didn't he see her eat?"
iii) (Snt i, iii )

"Sweep the housed"
8.2.2. Sentence Type ii, "Compound".

Compound Sentences consist of two or more Independent Clauses joined by a connector or connectors, $t$ an inton. ation contour. In theory, there is no Iimit to the num-
ber of clauses that may be joined in this way to form one sentence, though in practice sequences of more than two olauses joined by one connector are rare in normal speech, though more common in traditional stories.

There are five sub-types, each corresponding to a different connector and a consequential difference of relation (and meaning) between the Clauses filling the two Bases thus joined.

### 8.2.2.1. Sub-type i: "Co-ordinate".

The connector is hamee?fi "also" -- often equivalent to English "and" between clauses.


"I have worked in the field and I have fished (with hook and line) in the river:

As this example indicates, the temporal clitic referring
to the second clause may be suffixed to the connector.
ii) no-nagat meal-pa hamee?at no-nenikena 1ntipa

"My brother is playing and my sister is sleeping"
8.2.2.2. Sub.type i.i: "Temporal Sequence".

The connector is mineeqkho "and then", which is derived from mi: "and", nee1 "there" and - lhh $\delta$ "from" (DP relator). e.g. i)

"We worked in the field and then we went to our house" ii)

"I shall visit my maternal uncle and then I shall eat"
8.2.2.3. Sub-tyoe iii: "Alternative".

The connector is haphatakhe? "or". This is derived from three morphemes: hapha "Corroborative Interrogative", -ng "restrictive" and -khe? "incompletive clitic". ${ }^{2}$ It is the only interrogative connector and the resulting sentence is interrogative, though its constituent clauses are declarative.
e.g. i) fa?vu hapháakhe? há? ho?ku ?

"Is it raining or is the sun shining?"
ii) vodo?phaava-vt haphtakhe? - vt va?mit


[^75]"Shall we work or eat?"
8.2.2.4. Sub-type iv: "Adversative".

The connector is mike "but", which is derived from mi"and" plus -ke Dative relator. ${ }^{3}$

"It is raining but it is hot" (OR: "... but we
are hot" -- cf. footnote 17 to 7.2.1.2.1., above.)
ii) peed8 - koomi - nt -? pe no-ke? jo mike isango-village - in ren I-born but


"I was born in Isango ${ }^{4}$ village, but my sister was born in the village upriver"
$\overline{3}_{\text {When }}$ the DOP has a nominalized clause in the axis slot, the relation between the embedded clause and the matrix clause is one of Concession or Concurrence. The former meaning is very close to the adversative function when -kt is part of the type iv connector at Sentence level, the difference being that the concessive relation shows the speaker's reaction to two contrasting propositions, whereas the adversative relation is neutral, merely stating the way thing are. (I an indebted to Dr. Mary Ruth Wise for this insight. Her article with Green (1971b) touches on this and other related points.)
4 Isango is the local Spanish name for a very small insect that lives in the grass, and bites people and animals. The village of my main informant, Pablo Andrade, was notorious for these insects, and appropriately has the Spanish name Puerto Isango -- Isango Port. I have been unable to find this word in any Spanish or bi-lingual dictionary other than those produced in Peru and Colombia by S.I.I. for other Indian languages.

Whereas previous examples have frequently shown a temporal clitic on the connector, in this case, the second clause has no temporal clitic, though it refers to the past. Yet this is olear both from the previous clause and the particular verb in the Predicate of this clause.
8.2.2.5. Sub-type v: "Grounds-Inplication".

The connector is mipoks? "thus, so", which is derived from mi= "end" and -pokst Benefactive relator. ${ }^{5}$

When the Grounds-Inplication connector is used, the second clause frequently bears the dubitative clitic -ekg?tsi (cf. 7.2.1.2.6.5.1., above), or this nay be suffixed to the connector itself, as is the case with other clitics referring to the second clause.

[^76]e.g. i) anepuu? mi dodo?phava much rec she-work

"She has worked a lot, so $I$ think she must be tired" ii)


### 8.3. Distribution.

The Sentence is distributed in the Paragraph. Though an analysis of this level falls beyond the scope of the present description, the text in the next chapter gives some examples of the distribution of the Sentence.

Caepter 9
TEXT


#### Abstract

A deteiled analysis is now given of the first section of a text. This would in fact apear to correspond to what might be called the first paragraph, though no onelysis of Paragragh level as such is carried out.

Inevitebly, some fentures of the Parasraph appear is this, such as the iintermsentential relatorii, and the presence of clitics on this, rather than on the first tagneale in the clanse.





fiqus


\footnotetext{
"ejtm sțu पदtm (uostod "It is said that Nekanekaagi went fishing (with barbasco


bark of the gpacharema tree."








> TTF



# A GRAMMAR $0 F$ 

RESÍGARO
by

Trevor R. Allin

Bound in three volumes

VOLIME III

$$
A P P E N D I X I:
$$

LEXICON

As indicated in the Introduction, the Jericon is presented for reference, and as the besis for future anm alusis.

Lexicel itens mostly correspond to words, but in some ceses correspond to units higher up (ox, rereiy, lower dom) the gramatical hieremchy (as in Halliday, 1961:273).

The dialect of Spanish given in the glosses is that which is spolen in the regior of Peru in which the Resigaros live. For some plants and aninels it has been inpossible to find the thglish equivalents, and in these cases the Letin names have been given if positive icentificetion has proved possible, but in certain coses this has not been possible, and in these instances only the Spenish gloss is given, with an explanation in English.

The alphabeticel order adopted for the phonene symubols of Resigaro is as follows:-

| $a$ | $f$ | $m$ | $s$ | $v$ |
| :--- | :--- | :--- | :--- | :--- |
| $b$ | $g$ | $n$ | $x$ | $z$ |
| $c$ | $h$ | $n$ | $t$ | $?$ |
| ch | $i$ | $\tilde{n}$ | $t h$ | $(x)$ |
| $d$ | $\tilde{j}$ | $\tilde{n}$ | $t y$ | $(r)$ |
| $d y$ | $k$ | 0 | $t s$ |  |
| $d z$ | $k h$ | $p$ | $t s h$ |  |
| $e$ | $m$ | $p h$ | $u$ |  |

Note on hyphens
In the lexicon, an initiel hyphen indicates that in the case of a noun, this is obligatorily possessed (e.g., all body parts), and in the case of a verb, that this is an abstracted form, since the verb must normally have a subject. In the case of kinship terms, those preceded by a hyphen are torms of reference, normally assimilated to a preceding pronoun, while those without an initial hyphen are tems of address (vocative forms).

A hyphen between two parts of an entry occurs in the case of complex verb groups only (cr. 4.1.2.2., above). If it is necessary to divide an entry at the end of a line, should this division co-occur with the structural boundary within the complex verb group, a hyphen is repeated at the begiming of the next line,

A final hyphen indicates that the entry is a subclass 2 adjective, i.e., a predicative adjective, which occurs in a Predicate thet is followed by the Subject if this is manifested by a pronoun (cf. 3.4.3.2. and 7.2.1.2.1., above).

## -(?).... verbs.

Verbs with which a glottel is added initially when there is assiailation to a pronoun functioning as subject have
this glottal indicated in brackets before the entry, which is filed according to the lotters aftor the glottal (cf. 3.3.2.1.2.3., above).

```
Part I:
REACARO-GPAEIN--ETGLISH
```


## - A

| aa-ju | adnixerse, nerev llarse | to be surprised, anased |
| :---: | :---: | :---: |
| aed | Si | yes |
| csate | mant, hija (voc) | mother, demshter (rociprocel teras of address - voc) |


| a and | caldo | liguid, juice, broth |
| :---: | :---: | :---: |
| atpent | noñona | tomorrow |
| -abpi <br> dl: -aspikf <br> pl: .aapine | hueso | bone |
| -atpic? int | esqueleto | steleton |
| - ebepa | endrugos, los restos de cualcuier comida, resíduos | crusts, remains of a meal, rosiduc |
| 2.atysat | un srbol cuyas hojas se usan para teñir les honecos, etc. de rojo, y que da fruto que los animeles conon | a tree the leaves of which are used for dyoing hamocles, etc. rod, and which produces a fruit that animels eat |
| a atshin | aj1 | chili, red pepper |
| -as?n¢ | dar | to give |
| at? pe | papt, hijo (voc) | father, son (rociprocal terms of address -- voc) |
| -adota | bailer | to dance |


| adoviigi | ave | bird |
| :---: | :---: | :---: |
| adoviigims | avi6n | aeroplane |
| adoviial | aves | birde |
| .ada | voler | to fly |
| as | ese | that one |
| aijsaun? | estsr corce | to be near |
| aijutas | cerca | near |
| aftsébo? | se dice que | it is scid that |
| $\begin{aligned} & \text { aytps } \\ & \text { di: ayspookt } \\ & \text { pl: aytpoohs } \\ & \text { OR ajaponc } \end{aligned}$ | trocha, cerino | path |
| arcke? | cantoro, olia pore preparer comida | pot in which food is prepred |
| diet | $\begin{aligned} & \text { cociner (cual- } \\ & \text { quier cose) } \end{aligned}$ | to cook (ony. thime |
| ancanctshi | podrido | rotten |
| enedu | ```bajar el rio (una canon, 11em veda por la com rrionte)``` | to go down the river (a conoe, carried by the current) |
| ane?ka | hambre | hunger |
| -anarlazar | toner hambre | to be hungry |
| aneetshat | pina (distinta de y mos pequeño que ol nonsans? | ```pincapole (dixt- erent fron and smallor then the nanseng?0)``` |
| En00 31 <br> dl: Emooginusi <br> pl: $\operatorname{tag} \operatorname{Ginu}$ OR <br> Eing giinq OR tmb | pescado, paz | iss |
| -amo?tu | hecor podrir | to cusse to rot |


| enteds <br> dl: antodbmusi <br> pl: enodónu | guacrineso | mecow |
| :---: | :---: | :---: |
| an ilch 6 | sfuera | outside |
| -Sno?ta | derribar un srbol | to topple a tree (by cutting it down) |
| anepun? | muchos, tontos | much, a lot, so rauch, so meny |
| anepuu? ${ }^{\text {a }}$ | muchedumbre | crowd |
| anevisd6gi | hrangote | white-lipped peccary |
| cavili? | $\begin{aligned} & \text { muchas (per- } \\ & \text { sones) } \end{aligned}$ | many (people) |
| anevii?nd | $\begin{gathered} \text { muchas (per- } \\ \text { sones) } \end{gathered}$ | $\operatorname{many}(p o o p l e)$ |
| anjolah | senar* | to hool |
| aniigl | vivo (cdj), sano | alive, healthy |
| anii? | estor sono | to be healthy |
| ```2008g+ dl: enobeinusi pl: anogimu``` | scohovace, danta, topir | tapir |
| enotgl efmatilito | amote (lit: cuero de sachevaca) | whip (lit: tapir skin) |
| axobel etne | cinturbn, latigo | belt, whip |
| amobgi? ${ }^{\text {asi }}$ | lugar en le selva dondo se encuentra la sechevaca | place in the jungle where tapirs are to be found |
| Añeah | marainon (el fruto) | cashew fruit |
| Añahiot | maranion (el Arbol) | cashew tree |
| opapi | otro | another, other |
| aptepivea | otro tierapo | another (a diffo erent) time |


| aptat?aens <br> d1: apena?aam1Fe pl: aptnf?am: 1 in 0 R aptat | hoja | 1eaf |
| :---: | :---: | :---: |
| -aptat | sembrar | to sow |
| Spa?ni | (por la) mitad | (in) half |
| ape?menu | cl. rets de un vestido | tho reverie side of a garnent |
| 9parmisosi | $\begin{aligned} & \text { (nano) izquierda, } \\ & \text { izquierdo } \end{aligned}$ | leit (hand, side) |
| -aparpava | recordar | to remember |
| -aps | estar despierto | to be awake |
| -apblat | despertarse | to walke up (oneself) |
| aport | otra vez | once nore, again |
| -apoond | despertarse | to wake up (oneself) |
| -aph ${ }^{\text {a }}$ | neter algo en agua, remojar, preparar tinta | to put a thing in water, to soald to prepare dye |
| -aphota | desperter | to awaken (someone) |
| asing | Iuger | place |
| ```-atue?eemt dl: -athe?ee- malia pl: -athe feensh!``` | vientre | stomecs |
| ```atstegi dl: atseagi- musi pl: atssa giins OR etsa- gine``` | hombre, macho | man, nale |
| atstegleg | gallo | cock |
| -atshe | roncar | to snore |


| atshimuthebé | Epoca de lluvia, invierno | rainy season, winter |
| :---: | :---: | :---: |
| avtanagaa? $\% 6$ | balse. | balsa, raft |
| avbenes <br> dI: evanaink <br> pl: avánainf | pelo, gerrote | stick, club |
| avaenavuude | trozo de medera | $\begin{aligned} & \text { a piece of wool, } \\ & \text { a log } \end{aligned}$ |
| avtana? <br> dl: avtana?eekf <br> pl: avsana?eehi | Crbol | tree |
| avtana?eehtyta | arbustos | bushes |
| avenasevunde | trozo de nadera del tronco de un s.rbol | a log, a piece of wood from the trunk of a tree |
| arobtshi | cerco | enclosure, fence |
| -atkb | abrir | to open |
| -6? c ( | atorarse (con comida.) | to choke (intrans) (with food) |
| -a?mbliani | enloquecerse, habler mientras se está dormido | to go mad, to speak in onels sleep |
| -apmita | coner | to eat |
| araithootsa | alimento, conida | food, meal |
| -a?mithortsiba | buche | belly |
| a?mithootsigf | tijeras | scissors |
| a?mithoftsiha | cocina, comedor | kitchen, diningroom, eating place |
| a?mithootsiksts 6 | cocinera | cook (f) |
| -a?mitsa | borrar, Jimpiar | to erase, to clean |
| -a?mbta | quemar algo en un fuego | ```to burn sonething in a fire``` |
| -a?mb | quemarse una perSona | to burn oneself |



| beyiisi | tuckn | toucan |
| :---: | :---: | :---: |
| be?douulunt? | bañado de sangre | bathed in blood |
| be? 8 | nuevo | new |
| boe?-kht | remar | to paddle, row |
| boe?l:hottss. <br> dl: boe?lcho6tsigaakt pl: boe?thootsigenhs | remo | paddle, our |
| -boojeat | hueso del tobillo | ankle-bone |
| boto?-kht | barrer | to sweep |
| boto?kho8tsi1:00? * | escoba | brooin |
| bo?otsh1 <br> dy: bo?otahiiled <br> pl: bo?otahiinl | plato | plate |
| budoome | renacuajo | tadpole |
| bugtas | secreto (An) | secret (Im) |
| bu? -licha | ```desermar, desatar, desenvolver``` | to disama, untie, unwrap |
|  | - $\quad$ C |  |
| cechs | carbon | coal |
| čačhikat | carbonizar(se) | to char, to melwe/ |
| çıven - a? pitosta | bantizar | becone chercoal to baptize |
| čoo?-kht | besar | to kiss |
| coo? chosts 1 | beso | Kiss (Mn) |
| co?chluu-y̆ | mecerse (p.ej., en une hanaca) | to swing oneself (e.g., in a hannock) |
|  | - $\mathrm{C}_{\mathrm{C}}^{\mathrm{H}}$ - |  |
| chatr6?-khe | mesticar | to chew |


| čne?ke? 6 <br> dl: che?ke?ookth <br> pl: čhetze?oohi | meraca, sonajero | maraca, rattle |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |
| che?keú | maraca, sonajero | maxaca, rattie |
| dl: cht?keunk |  |  |
| pl: čhe? ${ }^{\text {chewuh }}$ |  |  |
| chípo | exterior | outside |
| čhitivent | ```en medio (de ello), en el centro (de 0110)``` | in the middle, centre (of it) |
| čhbor | hermana (de hermena, de hemano -.- voc) | sister (of sister, of brother - voc) |
| chboulchat | escupir | to spit |
|  | - D - |  |
| deatpa?1dzi | afrecho de yuca (lo que se bote), basura | ```yucca bran (the part which is thrown away), rubbish``` |
| daspemint | resigaro | Restigaro |
| dat? 8 | hueco (p.ej., on una casa, on la ropa) | hole (e.g., in a house, in clothing) |
| da?mi | $\begin{aligned} & (s u) \text { cortezu, (su) } \\ & \text { csscera } \end{aligned}$ | (its) berls, peel, shell |
| da? vane | ocuinas | Ocaines |
| deema | ```(su) corteza, (su) pial``` | $\begin{aligned} & \text { (its) bark, (its, } \\ & \text { his) skin } \end{aligned}$ |
| deners | $\begin{aligned} & \text { agams, trompetero } \\ & (\text { ave }) \end{aligned}$ | trupeter (bird) |
| depoo | axriba (en el rio) | upriver |
| deps? | Qltimo, fin | lest, end |
| depd?mińn | huitoto murui (Lit.: <br> "el grupo de arriba, de la cebecera del rio") | Huitoto Murui (Lit.: "the group from upriver, from the hoadwaters") |


| devo?-kht | ```hacor girer, hacer voltewr``` | to cause to turn round, over |
| :---: | :---: | :---: |
| -dt? ede? 6 | cabecerr, dar cabezades | to nod one's head. (when sleepy) |
| de? po | GItimo, fin | last, ond |
| dogliga? 6 ? | anarillo | yellow |
| doova | fruta (especie de alnendre) | "fruit" (a type of almond) |
| do? 6 | csta | this one (f) |
| dopothe | aquelle | that one (f) |
| duv-ju | quedorse on un sitio | to renain in a ploce |
|  | - DY - |  |
| dyoombu? 6 ? | orgulloso | proud |
| dyufisik6 | huasol (palmera) | a type of paln tree |
| dvousssugt | ripia (tabla delgada de inedera que so deja sin cepillar. Se use para hacer poredes en lo casa) | thin, flet piecos of unplanod wood used for making house walls |
|  | - DZ - |  |
| dsaa-lth | echar agua al fuego | to throw watex on the fixe |
| dzee-3t | ```salir, escaparse (p. ej., un animal, de los cazadores)``` | to get out, to escape (e.g., an aninal, from the hunters) |
| dzoo- ${ }^{3}$ | ```tomar un chapuzon (entror en el agua y selir rapjdamente)``` | to talse a guick dip |
| dzu?-jt | encoger (p.ej., la ropa cuando se lava) | ```to shrinl: (e.g., clothes when washed)``` |


| devor-khu | hacer gircx, hacor voltear | to cause to turn round, ovor |
| :---: | :---: | :---: |
| -desede? ${ }^{\text {c }}$ | cabecear, dar cabezadas | to nod one's head (when sleepy) |
| d6? po | Gltimo, fin | Iast, end |
| dogiiga? ${ }^{\text {d }}$ | anarillo | yellow |
| doovt | fruta (espocie de almendre) | "Iruit" (a type of almond) |
| do? 6 | Esta | this one (f) |
| do?othe | aquelle | that one (f) |
| du¢ ${ }^{\text {® }}$ | quedsrse en un sitio | to renain in a ploce |
|  | - DY - |  |
| dyoontlat? | orgulloso | proud |
| dyulišix\% | huasai (palinera) | a type of palin treo |
| dvoissugh | ripia (tabla delgada do modera que se deja sin copillar. So use para hacer poredes en 10 casa) | thin, flat piecos of unplenod wood usod for unding house walls |
|  | - DZ - |  |
| deaa-Eht | echar agua al fuego | to throw water on the fire |
| dree-3碞 | salir, escaparse (p. ej., un animal, de los cazedores) | to get out, to escape (e.g., an animal, frout the hunters) |
| dzoo- ${ }^{\text {¢ }}$ | tomar un chapuzon (entrer en el agua y selir rapidemente) | to take a cuick dip |
| dzu? -30 | ```encoger (p.ej., la ropa cuando se lava) 390``` | to shrink (e.g., clothes when washed) |


| -ext | morder | to bite |
| :---: | :---: | :---: |
| enal | boquichico | ```a species of fish (Sp. boquichico, Iit. "small-mouthed")``` |
| eniftsi | gusano | bot-fly larva |
| dl: eniftsimusi <br> pl: enitsinu |  |  |
| enitsi | engusenerse | to become infested with bot-fly larvae |
| en 60 gl | guabas (fruto) | fruit of the guem tree |
| en ${ }^{\text {cogit } 6}$ | guabo (Erbol) | guant tree |
| eplipi | tSmishi | liana |
| epfipfuu? 8 <br> dl: epiipiuu? 6 kt ple: epij.piun? 6 hi | soga de tamishi. | İana cord, liana |
| epiitsi? | cadena | chain |
| eplitshi <br> d. : epiitsh1hiikf pl: e. plitshihiins | hecha | are |
| eplitshi | alacren | scorpion |
| epitsh11? | anergo | bitter |
| -tpoo? pe.g1 | hemmano menor | rounger brother |
| epoo? ${ }^{\mathbf{6}} \mathrm{g}$ 6 | dedo meñique | little finger |
| -Epoo? pt | hermena menor | younger sister |
| epo?15h6 | despuss | after(wards) |
| epo?nd | despues | after(wards) |
| ep6?patsi. | el (1a) menor | the youngest, smallest |
| ep6?patsigl | hemmeno menor | youngest brother |
| ep6? patsigf | dedo meñigue | little finger |


| ep 0 ? patsipiyt | hermana aenor | youngest sister |
| :---: | :---: | :---: |
| ept | arco iris | rainbow |
| otsogiipl | viga principel en lo alto de un techo | ridgepole of a roof |
| -etsh 6 | acabar (intrans) | $\begin{aligned} & \text { to finish (in- } \\ & \text { trans) } \end{aligned}$ |
| -etshootul | terminar (trans) | to finish (trens) |
| evetsiita? 6 | tronco de ishange, ortiga | sten of stinging nettle |
| evetsfita | ishanga, ortiga | stingins nettlo |
| evits6ogi(pi) | $\begin{aligned} & \text { Ieche caspi (la } \\ & \text { Savia) } \end{aligned}$ | sap of the rubber tree |
| evits6ogi? | $\begin{aligned} & \text { leche caspi (el } \\ & \text { Erbol) } \end{aligned}$ | rubber tree |
| -e?hcone <br> dl: -e?hecpekt OR - e? hecpegaeke pl: -e?heepent | lengua | tongue |
| -e?heopt ept? | punta de la longua | tip of tho tongue |
| -6? yo | huir, oscapar, correr | to flce, escape, run |
| -0? pijtst | sobrino, sobrina (de hombre) | nophew, nsice (of a man) |
| $\begin{aligned} & -e ? p h \delta d 6 \\ & d I:-e ? \text { ph } 6 \text { deelt } \\ & \text { pl: -e?phodeen } \end{aligned}$ | ombligo | nevel. |


| $\operatorname{fan} 5 \mathrm{~g}$ | Creador (Dios - Int. MMestro Padrei) | Creator (God "Our Fethor") |
| :---: | :---: | :---: |
| fas. | nosotros (incl) | wo (incl) |
| fa?vayapa | Ilovirnar | to drizzle |


| ft? Vu | Ilueve | it is raining |
| :---: | :---: | :---: |
| fee?palch6 migaekd | doce | twelve |
| fee?pakh 8 mi.. gaekt? sagt? | trece | thirteen |
| fee?plah6 portstávagaehi | catorce | fourteen |
| fee? ploht segt | once | eleven |
| fee? pakh6 sa?os1 | quince | fifteen |
| fen 6 | tarmafe, aterraya (una red que se bota al agua) | ```casting net (a net that is thrown into the water)``` |
| fidodo | flauta | panpipes |
| fii-kht | empujar | to push |
| fio? -ht | stibar | to whistle |
| fitse. | salir de la tierra | to come/go out of the ground |
| fitsö? $-\mathrm{kh} \uparrow$ | jalar, sacar, de la tierra | to pull, take, out of the ground |
| 180-36 | hincharse | to sweli up |
| foo-kh 1 | hacer fuego, atizar | to make a fire |
| f6o-kh | sopler | to blow |
| foojakkats 1 | Baranpion | measles |
| foto? - lehe | hacer un hueco en cualquier cose, perforar | to perforate, to make a hole in anything |
| gabe-kht | hacer enfermar (con oraci8n) | ```to make s.o. get sick (by witch- craft)``` |




| hatayet | tronco de yaripa, huacrapona, sin derribar | $\begin{aligned} & \text { trunk of yaripa } \\ & \text { pala }- \text { standing } \end{aligned}$ |
| :---: | :---: | :---: |
| hablia.mche | $\underset{\text { rozar (chiter arbusm }}{\text { tos }}$ | to clear land (by removing bushos, etc.) |
| hetelicedal | montete (ave) | a species of bird |
| hatinaming | robar | to rob |
| hatamintagi | ladron | thief |
| hameetku | quizás | perhops |
| hestrimíno | avispero | wespst nest |
| hatainineges pl: hotnimi | ovispa | wesp |
| -heapu | pesar | to puss, $\mathrm{c}^{\circ} \mathrm{past}$ |
| -haa? | $\begin{aligned} & \operatorname{coger~(p.ej.,~fruto~} \\ & \text { de un Srbol) } \end{aligned}$ | to pick, take (e. E., fruit from a. tree) |
| haco - ${ }^{\text {Jut }}$ | otorarse (con bebidas) | $\begin{aligned} & \text { to choke (introns) } \\ & \text { (with drinis) } \end{aligned}$ |
| han?-1kht | atorar (de bebidas) | $\begin{aligned} & \text { to choke (trons) } \\ & \text { (of drinks) } \end{aligned}$ |
| -haonns | enteriar | to bury |
| -haenni | peinar | to comb (trans) |
| -hae? pheovti | peinerse | to comb oneself |
| -hacá? put | cantar | to sing |
| hade? pho6tsig1 <br> pl: haca?phootsi?a | cantante (m) | singer (il) |
| hade? phobtsint pl: hada? phobts OR hada? phootsi hutil | cancibn | song |
| hada? phobtsipije | cantante (f) | singer (f) |


| hadeevs.ji | bujurqui (pez) | a species of fish |
| :---: | :---: | :---: |
| halie | si | yes |
| hamaiok <br> dl: handakt. <br> baakt pl: hanatatabaeh 1 | hamaca | hammock |
| hanotnt | bufeo, delfin | dolphin |
| hanee? at? 00 | correcto, exacto | correct, exact |
| hanee?ntpii?oo | costumbre (ser una) | to be a custom |
| hamee?nu | tarabjen | also |
| heme? | asi | thus |
| -hamifntaincagl | tode la familia | all the farily |
| -hamilna | paisanos, fanilia | ```fellow conntry- men (& women), family``` |
| hamo?-kht | calentar, planchar | to heat up, to iron |
| hamo?khoठtsi?1- <br> pi | plancha | an iron |
| -hanspi | llevar (una cosa), condicir (una persone) | ```to carry (sthg), to take (s.0.)``` |
| -hendva | madre | mother |
| -hanavaa? je | madrina, madrastra, tía paterna (hermana del papa) | "godzother", stepmothox, paternal aunt (Iather's sister) |
| -han 1 | traer | to bring |
| -hanigi <br> d1:-hanigfmusi <br> p1: -hanfgine | padre | father |
| -hanigii? ${ }^{\text {g }}$ | padrino, padrestro | "godfather", stepfather |
| -han qgin $^{\text {c }}$ | padres | perents |
| -hanigintmolif | antepasados (muertos) | $\begin{aligned} & (\text { dead }) \text { ancest } \\ & \text { ors } \end{aligned}$ |
| ```hanlits6 dl: haniits6- musi pl: ham nitsomu``` | zancudo | mosquito |
| ```hapfitsa dl: haplitsa- musi pl: ha- pitssmu``` | sajino, jabell, cerdo, chancho $398$ | wild boar, pig |


| hapbtovigi | un sabio, una persona acostumbrada. | a wise person, an accustomed person |
| :---: | :---: | :---: |
| -haptt* | acostumbrarse | to accustom oneself, to become accustoned |
| -hapt | contestar | to answer |
| haphd | interrogativo | interrogative |
| heteaks | oruga, crisfilida | chryselis |
| heta? | como (comperacion) | like ( comparison) |
| hast. | ustedes | you (pl) |
| ha? aga? i-kht | bostezar | to yewn |
| ntal | sol, reloj | sun, a watch, clock |
| he? 1 | toma | "here, take this" |
| hé? inf | cielo | sky |
| ha?ins. tsaphb? 3t | estor nublado | to be cloudy |
| he?moo?- | tener calor | to be hot (of people \& aninals) |
| ha?moo?ft | hecer calor | to be hot (weather) |
| he?moo?ts | estar caliente | to be hot (things) |
| ha? mo? | cellionte | not |
| -he? pottu | salvar (de peligro) | to sero (from denger) |
| harpothootsigi | salvador | saviour |
| -ha? pl | ```crugar (un rio), pasar (adelantar), ganar, exceder, in- yectar``` | ```to cross (a river), to pass, go post, to win, to exceed, to injoct``` |
| -he?vant | caerse | to fell |
| -hedt | aserrar, descuartizer (cerne) | to saw, cut up (neet) |
| -heede | nalgas | buttocks |
| hetgi | thbano (nosca) | horsefly |
| -heentagi | tio paterno (hermano del padre) | paternel uncle (father's brother) |
| heepe | antorcha hecho de madera, tea | wooden torch |
| neeptias | fosforo | match (for lighting things) |


| heeptipl | kerosene | kerosene, paraffin |
| :---: | :---: | :---: |
| htepea | lamperina, farol | small oil lamp (usu. in round $t i n$ ) |
| hettc <br> dl: heetemusi <br> pl: hetemu | mosca | fly |
| hesva | pintura (como huito) | paint (such as hui- |
| heeve? 1 heevt?i-lch ${ }^{\text {a }}$ | balanza, bsscula anemazar, señalar, medir, leer, estudiar, apuntar, calcular | to dye) <br> bryance, scales to threaten, to indicate, to measure, to read, to study, to note down, to calculate |
| heeve?is | palo que se usa para nedir | a stick used for neasuring |
| heever? ikhtmami | lo que se estudia | that which is studied |
| heev ? ikhostsi | leccion | lesson |
| heeve? ikhothoó nage | regla (para nedir) | $\begin{aligned} & \text { ruler (for measur- } \\ & \text { ing) } \end{aligned}$ |
| heevê? ikhotsogi | estudiante (m) | student (m) |
| heevt? ikhttsopije | estudiante (f) | student (f) |
| hee?ko | dia | day |
| heeplrofa | amenecer, alborear | to dawn |
| hee?x6mb | madrugada | ```early morning, dawn``` |
| het?ma | asar | to roast |
| hee?ñ | una especie de cam zabe | a type of cas. seva |
| hefil? | blanco | white |
| hofii? ${ }_{\text {din }}$ | (cara) palida | pale (face) |
| heĭapent | sudar | to sweat |
| -hels? do | regresar, volver | to return, go back |
| -helz6? dota | devolver, entregar | to return, give back |
| -hekoná | cosechar yuca (p.ej., para una fiesta) | ```to harvest yucca (e.g. for a fiesta)``` |
| hemoo?vigi | persona inteligente | intelligent person |
| -htao?tot6 | burlarse de alguien | to ridicule s.o., to scoff at s.o. |


| -hemo?tú | entender, escuchar (de cerca) | to understand, to Iiston (from nearby) |
| :---: | :---: | :---: |
| whemb | pedir, suplicar | to askic for, to beg for |
| -hensko <br> di: -hentrookd <br> pl: -henakoone | oreja, ofdo | ear, hearing |
| ```-hentrois?o dl: -hen&kbii- ?\deltaku pl: -hená. k6ii?6hi``` | cuerno | horn |
| henfkopesi <br> dl: henak6pasfleh pl: henakopasini | orejera, arete, pendiente | earring |
| -hen 6 | igual | same |
| hense | ¿dbnde? | where? |
| hepitake ${ }^{\text {a }}$ | acostarse | to go to bed, to lie down |
| -hepitti | estar acostado, echado, estirarse | to be in bed, lying dow, to stretch |
| heš6 | prima (de hombre) | $\operatorname{cousin}(f)(o f$ a main) |
| hete? | hamaca | hamzock |
| -hetsamotú | preguntar | to ask a question |
| hevo?-lche | aventax, abanicarse | to fan oneself |
| he?chthux-kh | estornuder | to sneeze |
| hefee | ¿que (cosa)? | what (thing)? |
| he?e aneprit? | ¿cufito? | how much? |
| he?egi-heeva?ome | \&por dowde? | which way? |
| -he?k6 | correr | to run |
| -he?k6 | sacar yuca, rayar (yuca) | to get yucca, to grate (yucca) |
| -he?ma | ofr (de lejos), entender | to hear (from a distance), to understand |
| herni? | liso, resbeloso | smooth, slippery |
| he?opie? | antes | before |


| he?opi6? moki | antes (lejano -- en los tiempos de los que estan ahora muertos) | before (a long tine ago - in the tines of those now dead) |
| :---: | :---: | :---: |
| -hibii? ${ }^{\text {cte }}$ | lugar donde se hace <br> la coca (se prepa- <br> ra para el consumo) | place where coca is made (prepared for consumption) |
| hidee?tsi | ¿cuándo? | when? |
| hicle? anepti? | ¿cufnto(s)? | how much, how many? |
| hide?hee | ¿cbno? | how? |
| hidt?hee tsi | ```¿que pasa?(Lit.: ¿c8mo (est&) 81 /ello?)``` | ```what's happening? (Lit.: haw (is) he/it?)``` |
| higabd | trampa para pescar (un tubo cortado de un arbol algo parecido al barabl) | fishing trap (a tube cut from a tree something lile banboo) |
| hihi | tierra | earth, lend |
| bshuuu | paloma | dove, pigeon |
| -his | sobre, encima de | on, above |
| hiibi? 6 | coca | coca |
| niibl? E-kht | coquear (coner coca) | to eat (chew) coca |
| hiibl? e? asinoht | Lo que se cuenta (acerca de la coca), mientres se esta tomándola | that which is recounted (about coca), while taking it |
| hiibi? e?iyo | cantaro para hacer coca | pitcher or pot for making coca |
| -hifd6 | abuele (materna o paterna) | grendmother (maternal or paternal) |
| hiigi <br> dl: hiiginusi <br> pl: higinu | rata | rat |
| hifmiask | horcon, huacapt (naw dere dura que se usa para construir las casas) | a type of hard wood used in house construction |
| higimiaalcu? 6 | horcon, huacapf (el Grbol.) | a. tree whose wood is used in house construction |
| hisin | escarabajo | beetle |
| hilp6 | sobre, encine de | on, above |


| hiisuver? i- Ju | salir | to cone/go out |
| :---: | :---: | :---: |
| histabt | cajbn | drawer |
| histe | canoa | canoe |
| dl: hithkd pl: hitang OR hitSnu |  |  |
| hiive? | parecerse a | ```to look like (i.e., to have the same appear- ance as)``` |
| hiivant | en el centro de | in the middle of |
| -hiiva | medio, centro | raiddle, centre |
| hii?ko-3u | aparecer | to appear |
| hii?ko-kht | aclarar, declerar | ```to becone clear, to declare``` |
| hii? pababu. | media, calcetin | stocking, sock |
| ```-hii?pagu dl: -hii?p6- gaabt pl: hii?- pkgechi``` | dedo del pie | toe |
| -hii? palruba | pierna | leg |
| hii?patsi? ${ }^{\text {a }}$ a? d 6 | zapato | shoe |
| -hii? pau | talbn | heel |
| -hii?pa <br> di: -hii? paka <br> pl: -hii? paine | pie, pata | foot, aninal's leg |
| himágibú pl: hinadgi | caimito (fruto) | a species of fruit |
| himistsi | hierba | grass |
| himiltsi-kh | limpiar terreno, cultivar | to clear ground, to cut grass, to cultivate |
| himiftsikholsfanf | lugar donde se ha quitado la hierba | clearing (place where the grass has been out) |
| himistsi? 6 | lugar donde hay hierba | a place where there is grass |
| -hímia <br> dl: -himiuuks <br> pl: -hfiniuuhs | semilla | seed |
| -hino? | poner, esconder, causer, guaxder 403 | to put, to hide, to cause, to keep |


| -hino?kas | dejar | to leave |
| :---: | :---: | :---: |
| -hino?pheav | ponerse (ropa, etc.), perderse, escon. derse | $\begin{aligned} & \text { to put on (cloth- } \\ & \text { ing, etc.), to } \\ & \text { get lost, to hide } \\ & \text { (oneself) } \end{aligned}$ |
| hiñuhui? | topa (arbol) | a species of tree |
| -hipaphaava | lavarse | to wash oneself |
| ```hipetg1 d.l: hipeegi- hiiku pl: hi- pe0ginimin``` | estera | mat |
| hipers | anocke | last nisht |
| hipe? - | helarse | to freeze (intrans) |
| hipohi | $\begin{aligned} & \text { tierra, suelo, pa- } \\ & \text { tria, mundo } \end{aligned}$ | land, ground, floor, country, world |
| hipohi bedo?khakáan 1 | frontera | frontier |
| hépohi kio?khotob | IImite (geografico) | (geographical) limit |
| hipojiha | polvo | dust |
| hiporatgi | anudar, hacer soga | to knot, to make rope, cord |
| hiposaur? 8 dl: hiporatur? 6 ku pl: hiposenu? 8 hi | cuerda | cord, string |
| hipono8tsi? ooht | carcel | prison |
| -hipont | ```atar, amarrar, li- ger, encarcelar, llevar preso``` | to tie up, bind up, talre prisoner, imprison |
| -hip6o | abajo | below, under(neath) |
| -hip6om1 | de abajo | ```from below, under- (neath)``` |
| hip6onchu | falda | skirt |
| -hiph | lavar | to wask |
| hipho6tsigt | jabon | soap |
| hipho大tsipi.je | lavandera | washerwoman |
| -hitako dl: -hitakookt pl: -hitakoont | nariz | nose |
| nityesif | estos dos (hombres) | these two (men) |


| hiva | Epoca, estacibn del año | period, season |
| :---: | :---: | :---: |
| -hiveú | cabeza | head |
| d1: -hiveuurd <br> pl: -hivewubi |  |  |
| $\begin{aligned} & \text {-hsvei -a? pitob } \\ & \text { tai } \end{aligned}$ | bentizar | to boptise |
| hiveubabu | elmohede | pillow |
| $\begin{aligned} & \text { hivelpi?khob- } \\ & \text { tsigi. } \end{aligned}$ | peluquero | barber |
| -hive? | delante de (personas) | in front of (people) |
| hive?-khut | adelantarse, ir delante de, guiar | to pass, to go in front of, to guice |
| ```-hive?ás{ dl: -hive?a. sllf pl: -hi- ve?asini``` | $\begin{aligned} & \text { corona (de la ca- } \\ & \text { beza) } \end{aligned}$ | crown (of the head) |
| -hlve? Jii?6 <br> dl: -hfve? Yii? 61:t pl: -h1ve? Jii? 8 h | cabello pelo largo | (long) hair |
| nive?na- | estor enfrente de | to be opposite |
| -hfve? peohs | craneo | stull |
| hive? pesi | gancho (para el pe. lo), horquilla | hairpin |
| hivígí <br> dl: hivfigimusi pl: hivigimu | estrella, lucisrnaga | star, glowworm |
| nizometgi | pesado (inn) | heavy thing |
| hizzanil? | ser pesado | to be heevy |
| hizani? | pesado (Adj) | heavy |
| hižapo6gi | Iibelula | dregonfly |
| -hiza? phasva | pinterse | to paint oneselt |
| hizoos 1p1 | arado | plough |
| hižoo?vigi | cevedor | one who digs or ploughs |
| hi?koo?ni | claramente | clearly |
| hi?kova | transperente | transparert |



| noo-khe | quenar | to burn |
| :---: | :---: | :---: |
| hoddo? 6 | shirui ( pez ) | a species of fish |
| hoomevt | $\begin{aligned} & \text { yaguas (grupo idio- } \\ & \text { mati.co) } \end{aligned}$ | $\begin{aligned} & \text { Yaguas (lang- } \\ & \text { uage group) } \end{aligned}$ |
| hoons | agua | water |
| hooni? 6ht <br> d1: hooni? ehta <br> pl: hoonf?ehthi | pozo | well ( Nn ) |
| hoonl? i? vothoond | hielo | ice |
| hootsi | $\begin{aligned} & \text { resfriado, catarro, } \\ & \text { gripe } \end{aligned}$ | cold, catarrh, influenge. |
| hook | cuinela (un fruto algo parecido al aguaje) | a species of fruit similar to the aguaje |
| hoou? 8 | cumala (Arbol) | a species of tree |
| hosbd <br> dl: ho?btmusi <br> p1: ho?b6mu | carpincho, capibara, ronsoco | capybara |
| -ho?donat <br> dl: -ho?d6nem uukt pl: -ho?donawuhs | rodille | knee |
| $\begin{aligned} & \text {-ho? doneígi -i?- } \\ & \text { tonti. } \end{aligned}$ | arrodillarse | to kneel down |
| -hb?ku | picar (p,eje. un insocto, o del sol.), encajar (meter una cosa en su lugar) | to bite (of insects), to warm/ nake itch (of the sun), to put a thing in its place |
| hudutigi | crruhuinse (homiga) | curuhuinse ant |
| hane <br> dl: háneuuk <br> pl: hfneuuhe | lago, cocha | lake |
| husbods | nutria | otter |
| hutoobe? ž6? <br> dl: hutooba?zoold OR hutoo. be? z 6 ? eekt pl: hutoobe? 26 bí | $\begin{aligned} & \text { ajrahuasca (narcom } \\ & \text { tico) } \end{aligned}$ | Banisterium (narcotic) |
| huu | respuesta afirmativa de una persone que escuche a otra que habla <br> 407 | affimative reply fron a. Iistener to 5.0 . who is speaking |


| i- | ustedes (imptv) | you (pl - imptv) |
| :---: | :---: | :---: |
| idekee?tsi? ${ }^{\text {a }}$ | esa clese | that type |
| idelree?tsilkeva | esa clase | that type |
| idere?tshi | ahora | now |
| ide?va | asi | thus |
| ido-ĵ | sangrar | to bleed |
| -ifakaá | arrepentirse, asustasse | to repent, regret, be frightened |
| ifotakatsf | susto | fright |
| -ifota | asuster | to frighten |
| -ifá | temer | to fear, be afraid |
| ihihu | lugar que sirve de letrina | $\begin{aligned} & \text { a place used as } \\ & \text { a latrine } \end{aligned}$ |
| -i1dx | sangre | blood |
| iineami | porque | because |
| 1mau? 8 | colmene, penal | beehive, honeycomb |
| Stru?opers | miel de abeja | honey |
| iins dl: finfmusi pl: infimu | tigre, perro | tiger, jeguar, $\operatorname{dog}$ |
| Iiniyá? | tigrillo | small tiger, jaguar |
| $\begin{aligned} & \text {-ifn } 6 \\ & \text { dl: -ifntinupi } \\ & \text { pl: -in } 6 \text { n } \end{aligned}$ | esposa | wife |
| iin8. | cansar | to tire |
| -ilte-kha | ayudar | to help |
| -ist6 | hija | daughter |
| iitsi? ${ }^{\text {et }}$ | sustancia parecida al algodon, que viene de las hormigas. (iseda?) | ```substence similer to cotton, that comes from ants (Silk?)``` |
| -istsá | soltar | to release, lot go |
| iltshisfud | azâcar | sugar |


| iftshiks | coña brava | wild sugar cane |
| :---: | :---: | :---: |
| iftshima | caña de azficar | sugar cane |
| iftshe | neblina, humo, nube | mist, smoke, cloud |
| iivt- | perneño ( MnSt ) | small (NnSt) |
| ilvs | sel del monte (que se come con la coca) , anpiri (pasta de tabaco tomada con la coca) | rock salt (eaten with coca), a tobacco paste eaten with coca |
| -iiví <br> dl: -iiviiḱ <br> pl: -iivine | cuerno | horn |
| ifv1?6 | invitacion (a una fiesta) | invitation (to a ficeta) |
| $\begin{aligned} & \text {-iivd } \\ & \text { pl: -iivane } \end{aligned}$ | noribre | naine |
| ii?ñe <br> pl: ii?ñent | cosa, posesion | thing, possession |
| -ii? ${ }^{\text {andé }}$ <br>  <br>  | intestinos, tripas | intestines |
| $\begin{aligned} & \text {-ii?:艹菏 } \\ & \text { dI: -ii?šaukt } \\ & \text { pl: -ii?stuuh1 } \end{aligned}$ | barriga | belly |
| ii?sta | excremento | excrenent |
| -inu | dormir | to sleep |
| indad6 <br> dl: insadomupi <br> pl: insdone | mujer | woman, wife |
| insavi? ${ }_{\text {chab }}$ | gente | people |
| intevi?žánigs | persona | person |
|  | fortalecerse (des_ pues de una enfermedad) | to get stronger (after an illness) |
| - $\ln \mathrm{i}$ | esposes | wives |
| $\sin 6$ | pereza | laziness |
| inc- | cansar | to tire |
| - in 6 | arponear, picar (con lanza) | to harpoon, to spear |
| ino?k6? | vago, ocioso, holgazen | lazy |


| - inigah | ceja | eyebrow |
| :---: | :---: | :---: |
| -10imij? ${ }^{\text {¢ }}$ | párpedo | eyolid |
| 1aiptsi | anteojo | spectacles |
| -inipi | 16grine | $\begin{aligned} & \text { tear (irom } \\ & \text { crying) } \end{aligned}$ |
| - โもit <br> dl: -iainuke <br> pl: -Eaiuuhi | ojo, "hueso de la olegria" (extrenidad del htmero al codo) | eye, "funny bonel (extremity of the humerus at the elbow) |
| -5ai? eont | Iagrimas | $\begin{aligned} & \text { tears (fron cry- } \\ & \text { ing) } \end{aligned}$ |
| -Imi?aevi | pestañas | eyelrishes |
| imbminsag | $\begin{aligned} & \text { haragan, perezoso, } \\ & \text { vago (IVn) } \end{aligned}$ | Iazy person |
| -iñočh 1 <br> d1: -iñočhilca <br> pl: - iñochins | cuello | neck |
| iptco? f | cangrejo | crab |
| -ipe | delante de | in front of |
| -ip 6 | estar encinta | to be pregnant |
| ipogi? | verde | green |
| ip6otsovu- | estar encinta, embarazada | to be pregnant |
| inoti | hacer encinta | to cause to be pregnent |
| -iphs | muslo | thigh |
| -Iphikuba <br> di: - fohfunberd <br> pl: -1phflubach | pierne | Ieg |
| Sphtuvkt | pantal6n | trousers |
| -ipht | pisax | to step on |
| istė- Jtopheavd | penser | to think |
| itsvangi | sachashuyo, tucho (pez) | a species of fish |
| -it ${ }^{\text {a }}$ ? | olla de barro | earthenwere pot |
| itcevikschf | ```conaguchal (Iugar donde crecen los aguajos)``` | place where aguaje palms grow |
| iteevinaa? de | cohuana de aguaje | ```sweet, starchy drink mede from aguaje fruit``` |


| iteevi? 6 | aguaje (palmera) | a species of palin tree |
| :---: | :---: | :---: |
| iteevi? 6 <br> pl: iteevi | aguaje (fruto) | fruit of the aguaje pelm |
| -ita | cerrar, tapar un hueco | to close, to cover a hole |
| itsce?ni?138 dl: itsaa?ni?iJok* pl: itsaer ni?ijohi | cántaro, olla de barro | earthenware pot, pitcher, jug |
| itsaphoeve | foltar pera terminar | to semain to be finished |
| itsiigi | zarigtieya | opossum |
| itsfitsf | Iamprea (pez) | lamprey (eellike fish) |
| itsits6 | leña | firewood |
| -itsootil | poner | to put |
| -itshcpa | ostor sentado | to be seated |
| $i t \sin i . t \operatorname{cgh}$ | peine | comb |
| itshfito <br> di: itshiito nusi pl: im tshitomu | nigua, pique (un insecto que deja su larva debajo de la piel de los pies) | chigoe, sand <br> flea (an insect that depw osits its lervae under tho skin of the feet) |
| -1tshd | ```sentorse, serenar- se, calmerse (el agua)``` | to sit dow, to colm down (weter) |
| Ivt | hormono (de hermana) | ```brother (of sis- ter)``` |
| ižo | ```espiritu de un muerm to, fontasma, diabl foto``` | spirit of a dead person, ghost, devil, photograph |
| i? disentsi | coldo de yuca dulce | sweet yucce juice or broth |
| i.? dskae? d6 | ```colpa, abrevedero (de los animeles silvestres)``` | ```watering pleoe (of wild ani- mal.5)``` |
| i? dobtsi | bobida | drink |
| i? dobtsl? oovt | vasija | (drinluing) vessel |
| -i? du | beber ("tomar") | to drink |


| -i? gin 6 | nuera | deughter-in-law |
| :---: | :---: | :---: |
| -i? ${ }^{\text {Jingi }}$ | yerno | son-in-1aw |
| -ipckaoniflu | vbraito (forma posofin) | ```vomit (possessed form)``` |
| i?ctamistsi | vorito (forma no posefes.) | vonit (non-poss- essed form) |
| -i? rant | voniter | to vonit |
| -1?kapt | ver une trampe. (para averiguner si ha etrapado algo) | ```to check a trop (to see if it hos caught any- thing)``` |
| -i?kotad. $n u)$ | $\underset{\text { perte) }}{\substack{\text { lleger }}}(\text { de otra }$ | $\begin{aligned} & \text { to errive (from } \\ & \text { elsewhere) } \end{aligned}$ |
| -i?koth | dar de beber, hacer beber | to water (ani. mols), to couse to drink |
| i?navii?tegi | enemigo | enemy |
| $\begin{aligned} & \text {-i?nfmd } \\ & \text { di: -i?nimuukt } \\ & \text { pl: -i?nfinuuhs } \end{aligned}$ | pez6n | nipple |
| i?n1? conk | Jeche | mill |
| -i?ntíl | enfedorse, regañer | to become angry, to toll oif, to rebuke |
| 1? peht | ```vemos (varias per- sones)``` | let's go (several people) |
| -i?pi | ir | to go |
| -i? pheat | pisotear | to tremple, to tread underfoot |
| -i? ${ }^{\text {seppochi }}$ | ano | anus |
| i.?sootsif | escriera | ladder, stairs |
| -i? ${ }^{\text {cu }}$ | ```subir (p.ej., una escalera, no un rio)``` | to go up (e.g., a ladder, not a river) |
| -i?teviide? 6 | $\begin{aligned} & \text { aguaje (foma po- } \\ & \text { sefcla) } \end{aligned}$ | $\begin{aligned} & \text { apraje fruit (poss- } \\ & \frac{\text { essed }}{\text { form) }} \end{aligned}$ |
| -i?tsut | estar de pie | to be stending up |
|  | destetar | to ween |
| -i?tu. | aymar | to fast |
| -i?tso | cernir | to sift, sieve |


| -1? tsomu | evcrementar | to defecate |
| :---: | :---: | :---: |
| -1?tsu | despreciar, rechazar | to scorn, dislike, reject |
| -i? tshaka | sentarse | to sit down |
| i?tshootsige d1: i?tshootsigack pl: i?tshootsigeahr | banco, silla | bench, seat |
| -i? vosta | secar, cocinar jugo de yuca para secar. 10 | to dry (trans), to cook yucca juice in order to dry it |
| -i? vú | $\begin{aligned} & \text { evaporarse (agua), } \\ & \text { bajarse el tivel } \\ & \text { de un río } \end{aligned}$ | to evaporate (water), to go down (the level of a river) |
| -i? vú | torcer soga | to twist cord, rope |
| -i? ${ }^{\text {čad }}$ | hijo | son |
| -i? žafur | hijo, hija | son, daughter |
| -i¢ \%atnigi | hijastro | stepson |
|  | hijestra | stepdaughter |
| -i? žabtovt? | nieto, niata, bisnieto, bisnieta | grandson, grenddaughter, greatgrandson, greatgranddaughter |
|  | hijestra | stepdaughter |
| -i? ̌̌otu | terminer | to finish |
|  | - Ј - |  |
| jbak6gik6 | espfrito (de un muerto) | spirit (of a dead person) |
| - Jafkovegi | vida (duracion, periodo de tienpo) | life (duration, period of tine) |
| J̌abná-kht | der a luz | to give birth |
| Joéní | niño, bebk | child, baby |
| - Jae? | pasar, ocurrir (una cosa a alguien) | to happen |
| Jada? $\mathrm{g}_{\text {gh }}$ | cienpies | centipede |
| J̌akáde <br> d1: Jaliadeekt <br> pl: JokSdeent | chacra | field |


| Jtrani | espiritu de un muerto | spirit of a dead person |
| :---: | :---: | :---: |
| Jakemifts 1 | fotografia | photograph |
| jakta demí | purma (chacra vieja ya no usada) | old field no longer used |
| Jevtat? | lejos | far |
| ja?ksmi | algo tejido | something woven |
| - jb?nt | esperar, atalayar, vigilar, cuidar (p.eje, do un nim ño) | ```to wait, to keep watch, to look after (e.g., a child)``` |
| jeevi | lobo | wolf |
| - 31 ig 1 | merido | husband |
| jı10 | tucán chico, cecacocon | a species of small toucan |
|  | grueso, grande (de personas) | thick, big (of people) |
| 3¢ Jaagu | ancho | wide |
| 31 jamhá | anchura | width |
|  | grande (de hojas, libros, etc.) | big (of leaves, books, etc.) |
| Ji?-J6 | reunirse | to meet, to have a. neeting |
| Jji ${ }^{\text {a }}$-kh | junter (cualquier cosa, p.ej., fruto) | ```to join together, to gather to- gether, to coll- ect (e.g., fruit)``` |
| Jodoo?figt dl: Jodoo?fig6ka pl: Jodoo? figeh 1 | calda de agua, chorro, fuente | wateriall, jet of water, fountain |
| Jogi?khostsing | pala | spade, shovel |
| Joimokb? to | garza | heron |
| jobdá <br> dl: Jobdenusi <br> pl: Jodگnu | loro | perrot |
| $38 ? n 6$ | priodonte (armadi- <br> 110 grande) | giant arnadillo |
| yo?thoond | tejido | woven material |
| 等 | ser, estor | to be |


| kadde | espuma | foom, spray |
| :---: | :---: | :---: |
| -kadatuat | $\begin{aligned} & \text { espunajear (un rio } \\ & \text { cuando crece) } \end{aligned}$ | to froth, bubble (of a river when rising) |
| katids | carant, irapai | a species of paln |
| dl: kasd8- | (palmera), techo | tree, roof of |
| hiikt pl: | de hojas de cara- | leaves of the |
| katd8hioh | na | saine tree |
| katab? | tronco de irapai, carena | trunk of the irapaid or carenz |
| kanhesve? i-kht | causor una inundacibn | to cause a flood |
| kabkus6?imkht | hecer caso, creer, tener fe | to take notice of , to believe, to have faith |
| katinehu | pretina | belt with buckle |
| katni | yuca brave, mandioca | wild yucce, menioc |
| katust | fiel, legitino | faithful, legitimote |
|  | gustar, querer | to like, to went |
| kotšont- | estor bien | to be well |
| ke.s.so?osp | derecha, -o | right (not left) |
| ```mmeaval dl: -kacvo- iikf pl: -koam vaiih{``` | espinilla, canille, pierne inferior | shin, lower leg |
| ktbudu? - Ja | inclinorse | to bend over |
| ```ktdata dl: kedatc. musi pl: kt- datBmu``` | gollina | chicken |
| kef | neda | nothing |
| kainte- ${ }^{\text {j }}$ k | morir | to die |
| -ksince-kht | matar | to kill |
| kainte jotsopg ye | codtver (de mujer) | body, cadnver, of a. woman |
| kainceyovigi | codaver (de hombre) | body, cadaver, of a. man |


| kajotáx | exprimidor (una pren. sa de fibra pera opretar el veneno de la masa de yuca), tipit1 | squeezer (a press made from fibres for squeezing the poison from yucca pulp) |
| :---: | :---: | :---: |
| kajici | yuco | yucca |
| kajfigibut | masato | drink made from fermented yucca, banonos or maize |
| kajitgigat | palo de yuca no venenosa | a stick (root) of non-poisonous yucea |
| komendá <br> dl: komaßdénusi <br> pl: kanadinu | comejen | termite, white ant |
| kameni? | malcricdo, trovieso | bad-mannered, bad-Iy-behaved, mischievous |
| k6n 1 | año, verano | year, summer |
| -kamiikG | edad | age (of a person) |
| lsamo6tsi | bebide fermentada | femented drink |
| kamoviigi | borracho ( Nn ) | a drunk (m) |
| kemovilipije | borracha ( Nn ) | a drunk (f) |
| kands? | canesta de tamishi | basket made from liana cord |
| -kamb | emborracharse | to get drunk |
| kamíd 6 | uvilla (fruto) | berry of the currant bush |
| kamía ${ }^{\text {a }}$ ? | uvilla (planta) | current bush |
| kenasgi | espejo | mirror |
| kenabkokh 1 | hacer encinta | to cause to be pregnent |
| kaneamandei-kha | salar (la came, etc.) | to add salt to (meat, etc., as a preservative) |
| kanaans? 0 | sal (de comer, de mesa) | solt (for eating; table selt) |
| kanak6- | estar encinta | to be pregnant |
| kenak 6 ? | diftcil | difficult |
| -kansald | enredarse ( $\mathrm{p}, \mathrm{ej}$, , en unas soges, sin querer), equivocarse, perderse $416$ | ```to becone entangled (in rope, etc.), to make a mistake, to get lost``` |


| kanatstid? | bulla, ruldo | noise |
| :---: | :---: | :---: |
| -kan 1 | 12orar | to cry |
| kanifdet <br> dl: kanifdeuukf pl: kanitdeuuht | camote | sweet potato |
| kenilkam! | $11.0 n t o$ | weening |
| kan 1ko? get | palo de yuca venenosa | a stick (tuber) of poisonous yueca |
| kanimap ${ }^{\text {- }}$ | desear, envidiar | to desire, envy |
| kan imápogi | persone envidiose | envious person |
| kan imaposgi- | envidiar, desear, ser envidioso | to envy, desire, to be envious |
| kanimapoo?- | ser deseada una cose | to be desireble (a thing) |
| kanimap 6 ? | envidia | envy |
| kantvaktad6 | bruja | witch (f), shamon (f) |
| kanivakdag 1 | brujo, hechicero | witchdoctor (in), shaman (im) |
| kenfvakElckats 1 | coses de brujeria, de hechicería | things of witchcraft |
| kanivalti? | temible, que da miedo | fearful, cousing fear |
| hepatad | choro (un mono algo parecido al coto, pero de otro color -- el choro es marron oscuro, el coto es rojo) | a. species of monm key similar to the howling monkey, but darts brown, whereas the latter is red |
| -kapanú | arrojar | to throw, fling, cast |
| kepǎ̆u?-kht | abrazar | to hug, embrace |
| kap1 | repidamente, aprisa, apresurademento | rapidly, hurried. ly, quickly |
| kepiind | chacra nueve | new field |
| kapiltshi | achuni, coat1 | ```coati (aninal releted to the racoon)``` |
| kapikuu? | muy rbpidenente, inmediatomente | very fast, inm medietel.y |


| Kapinligi | picarsn, bagre (pez) | crtfish |
| :---: | :---: | :---: |
| kaponikl? | vergonzoso | shy |
| -ktpo? | volunted | will |
| -Ke.phiido dl: -kephiidokb pl: -kephitidone | brezo superior | upper ara |
| kasik6? i-kh | espiar, mirar | to spy on; to look at |
| -ktsiive? i- ja | conseguir pasar (sin ser visto) | to get past (without being seen) |
| L-dsik8? ig | espla | a spy, scout |
| kilsoogh | rallador mettico | metol grater |
| kešonte-kht | arregler | to arrange, rem peir |
| kašonte? - | ser pocifico (de personas) | to be peaceful (of people) |
| košonti? | anoble, pacifico (de persones) | kind, peaceful (of people) |
| kessbanka | demosiado | too much |
| kašoo?ntpilht | gracias | thank you |
| kašbvo?nuu? - | ser elegante, lindo | to be smort, protty |
| Lessovo?nd? | lindo, bonito, elegante, hermoso, be110 | protty, siert, nice, becutifuI |
| knš6? | bueno, bien, linpio | good, well, cleen |
| E.eve? | cortoze dol spacham rane (trbol) | berk of a species of tree |
| kavare | apacharama ( Srbol) | a species of tree |
| leava? Jinu | arcilla | clay |
| Havil-t6? | $\begin{aligned} & \text { perseguir (p.ej., } \\ & \text { cucndo se caza), } \\ & \text { fijerse en, pres- } \\ & \text { tar atenci6n a } \end{aligned}$ | to pursue (e.g. whon hunting), to teke notice of, pay attinm tion to |
| ```-ka? akak dl: -ka?aka- uul\mp@code{ pl: -ka.} ?akGuune``` | mondibula | jaw |


| ka?foonagh | tablilla de nadera que se emplea cuendo se hace el cazabe | small wooden <br> board used when cassava bread is made |
| :---: | :---: | :---: |
| ka?ma- | fermentar (de bebidas), pudrirse (de comida | to fement (of drinks), to go bad (of food) |
| ka?maǵihá | bebida ferraentada | femented drink |
| kt?menikif? | ser juguetón (de un niño a quien le gusta jugar) | to be playrul |
|  | jugretorn | playful |
| ka?mb | canasta de tbaishi | Liana cord basket |
| ka?mu | $\begin{aligned} & \text { Gcido (cono en el } \\ & \text { Iinon) } \end{aligned}$ | acid (as in a lenon) |
| ka?mate. | estar fermentado | to be fermented |
| -ke? pr | tirar, botar | to throw |
| ka? tadak 6 | chachaleca (pajaro) | cheachalaca (bird) |
| ```ka?vtts! dl: ka?vatsi- musi pl: ka?- vatstmu``` | pulga | flea |
| Mka?v6 | tostar | to tocst |
| -ke | relacionador de la <br> frase dativa | Dative Phrase relator |
| $\begin{aligned} & -\mathrm{kt} \\ & \mathrm{dI}:-\mathrm{kel} t \\ & \mathrm{p} 1:-\mathrm{k} \operatorname{tn} t \end{aligned}$ | mano | hend |
| kedevis? | rojo, colorado | red |
| ketgr | lune, mos | roon, month |
| keone | icon quitn? | with whon? |
| kteni | \&quisn? | who? |
| ketse-kht | ```encender, prender (una antorcha, un fuego -- con pied. ras o f6sforos)``` | to light (a firebrand, o fire -with stones or matches) |
| ketst? oova | linterna | lantern, flashlight (torch) |
| kettsed | borabilla eltctrica, foco electrico | $\begin{aligned} & \text { electric light } \\ & \text { bulb } \end{aligned}$ |
| ket?š | venado, vaca | deor, cow |


| kefeki1? Jovigi | coberde, miedoso ( Nn ) | coward, one who is efraid |
| :---: | :---: | :---: |
| kefeki? | ```miedoso, temeroso, astuto, mañoso``` | fearful, afraid, astute, clever |
| ```-megt dl: -kEgaak^ pl: -ktgachl``` | dedo de meno | finger |
| -k81 | antobrazo | Porourts |
| ke joo?ktts 1 | historia | hictors |
| kejoo?kstsinu | ouento, leyenda | story, legend |
| -ktjo? | ```convertirse, cam- biarse, transfor- marse, nacer``` | to be converted, changed, transformed, to be born |
| -kejo?ti | crear | to create |
| kemeki? | dormilin | sleepyhead, person much given to sleeping |
| -kem | decir | to say |
| kenee? ${ }^{\text {d }}$ | dospacio | slowly |
| -k 6 p ¢ 1 | anillo | ring (for finger) |
| k6pek6 | \&que dfa? | which day? |
| -ketsifk | al principio | at the beginning |
| ketshe-J¢ | quemerse (una casa, etc.), arder | to burn (intr) (of houses, etc.) |
| ```ketshii?(ni/ tsfi)``` | estar encendido (un flego) , ser sabroso, delicioso | ```to be alight (a fire), to be del- icious, tasty``` |
| ketshii?-v5fo | estar contento, feliz | to be contont. happy |
| ketshii?no6gi | amable | friendly |
| ketsh1? | ```delicioso, sobroso, rico (sabor), agra- dable (olor -- p.ej., de una flor)``` | delicious, tasty, pleasant (smell -- e.g., of a flower) |
| ketshi?-pa? | regocijarse | to rejoice |
| -ked | muñeca, puño | wrist, fist |
| kerinine | gordo | fat |
| -ke? 66 | ```cambiarse, converm tirse, nacer, comen- zer``` | to change (intr), to be converted, to be born, to commence |


| ke?nu? | un luger que tione arbustos | a place where thero are bushes |
| :---: | :---: | :---: |
| ke?piow | estar setistecho (se dice cuendo so ha comido demasiado), sotisfacer | to be sutisfied (said when one has eeten too much), to satisfy |
| ko?p11?- | estar 11 eno despues de comer mucho | to be full after eating a lot |
| ke?tsobtsigi | meestro, profesor | teacher ( m ) |
| ke?tsobtsint | enseñonza (buena) | (good) teaching |
| ke?tso6tsipfyt | meestre, profesora | teacher (f) |
| -kt?tsa | contar (narrar), enseñor (dar enaeñanza), corregir, anunciar, aviser, acuser | to recount (norrate), to teach, to correct, to onnounce, to infigrm, to accuse |
| ```ke?vigi pl: ke?vine``` | cacique, curoca, capitinn, jefe, autoridad | chief, coptoin, authority |
| ke?vigipdk6 | cguardiente | brondy |
| Fke?viikctsi | dolor | pain |
| ke?vi1?- | doler | to hurt |
| ke? vijn? i-khu | respetar | to rospect |
| ke? V1? | fuerte (dolor), dolorido, profundo (de dormir), piconte (de sobor) | ```strong(poin), painful, deep (sleop), hot (flovour)``` |
| $L_{\text {ke?vilkg }}$ dl: ke?vitka ginusi pl: ke?viiksgiiń | cocique, curaca, capitton, jefe, autorided | chiof, coptain, authority |
| kiokS? i-mht | cortor, hacer pedazos | to cut into pieces |
| kio? -kht | cortar (por le mitad) | to cut (in half) |
| kobe? -kha | recoger, leventar | to pick up |
| -kobú | grande (sufijo) | big (suffix) |
| kochívu | aire, viento | air, wind |
| 1565 | arriere (especie de homiga que vuele de noche. Son grandes y la gente las come) | a specios of ant thet flies at night. They are big and poople eat them. |
| Kogiigi | züngero, pintedillo (pez) | a species of fish |


| konakzir 6 | chambira, cumare (palnera) | Astrocarywn (a species of palm tree) |
| :---: | :---: | :---: |
| komakgi? 1 | herbazal (fruto de la palnera charabira) | ```fruit of the Astro- caryum (chambira)``` |
| -kombarauu? 6 | vena | vein |
| konee?tsi | fibra (de la palmera chambira) | fibre, string (from the chanbira palm) |
| kome? | brazalete | bracelet |
| kome?mit? ${ }^{\text {chi }}$ | vestido de mujer | woman's dress |
| konatap | barbasco | great mullein (or mullen) (a poisonous plant of the Verbascura fanily) |
| kone | vender | to sell |
| -konetk | mercancia (forma poselda) | merchandise (possessed form) |
| konettsi | ```mercancla (forma no poseida)``` | merchandise (nonpossessed form) |
| koneetsi?ooh6 | tienda | shop |
| kon6og1 | jebe, caucho | rubber |
| $\left\{\begin{array}{l} \text { konbogi? } \\ \text { dl: kon6ogf- } \\ \text { ?eela pl: ko- } \\ \text { noogi?eeli } \end{array}\right.$ | shiringa, guansoco (arbol) | a species of rubberproducing tree |
| $\left[\begin{array}{l} \text { kon } 8 \text { ogitovoo? }- \\ v 1 \text { E1 } \end{array}\right.$ | cauchero | man who collects rubber from trees |
| Eon6ogi?1pi | nequina de coser | sewing mechine |
| -kóo | hecie. | towards |
| -koomi | pueblo, grupo, tribu | village, group, tribe |
| kobn6 <br> dl: kbinookt <br> pl: komoohf <br> OR kobmbmu | ```manguare (tanbor grande para men- dar mensojes)``` | big drum for signelling |
| kotmobs <br> dl: kobmbbaa- <br> kú pl: lnoomó bach 1 | tambor | drum |
| k ¢ontgt | fiesta | fiesta |


| ktonteg-jt | hacer una fiesta | to organize a fiesta |
| :---: | :---: | :---: |
| kooneja | algo, alguna cosa | something |
| k6on 1 | ¿que? (cosa) | whet? (thing) |
| kobin 1 | ainendra | almond |
| kSomae? | ¿que serts | what cen it be? |
| -(?)koo? pa?th | aborrecer | to abhor |
| koptag | garrapata (insecto parasitico que se encuentra en algunos animales), plata, dinero | a species of parasite to be found on some animals, money |
| kopáaginf | moneda, plata, dinero | coin, roney |
| kopee? | ¿por que? | why? |
| -ropd | acarrear, transw portar, descargar | to carry, transport, unload |
| kotsi | chosna (mono) | a species of monliey |
| -lrovand | seguir | to follow |
| -kovatnt | colgar | to hang up |
| hove6?l-6ved dl: kove8?ko veuukt pl: kov68?koveuuh1 on kove8?L6veuu? OR kovet?kove? | piedrecita | small stone |
| kove6?k6ve? Jinu | arena, playa | sand, beach |
| lovegij?k6 | hace tiempo | some time ago |
| kovegi? | hace (tiempo) | . . - ago |
| kovej6ov 5 | Ocaine dyohxtayah (grupo idionttico) | Dyohxatyeh Ocaina <br> (languege group) |
| Koviits 1 | paujil (avesilvestrd | cashew bird |
| -kovid | hacer carabe | to make cassava |
| ko?igi | ¿quien? | who? |
| 16600g1 | lagarto | ユizerd |
| ko? píidú <br> dl: ko?piidá musi pl: ko?pidanu | pajaro | bird |
| 1r6?ve | chequira | beads |


| -ko? va | tenderse (en hanaca) | to lie down (in a haviocl:) |
| :---: | :---: | :---: |
| kuhti? mind | señalar, indicer | to signal, indicate |
| kuuhus | bestorn | walking stick |

- KH

| -Hhada? - J6 | ```seperarse (dos per. sones), retirarse, trasladarse``` | to separate (intrans $-\infty$ e.g., of two people), to withdraw, move away |
| :---: | :---: | :---: |
| -khads?-kht | separar (algo) | to separate (trans -- e.g., things) |
| khakakdvats 1 | guerra, combate, lucha, pelea | war, combet, bettle, figint |
| -khtkaiket | pelear | to fight |
| $\begin{aligned} & -k h a k \operatorname{ch} 1 \\ & \mathrm{pl}:-\operatorname{kn} \operatorname{lnin} \mathrm{E} \end{aligned}$ | mejilla | cheek |
| khavokfit? - | ser hondo | to be deep |
| Khavaliti? | hondo, profundo | deep |
| kha? -lind | jalar | to pull |
| kha?gii?- | ser delgado | to be thin |
| kha? gi? | flaco, delgado | thin (of people) |
| khelshe? | espera | wait |
|  | ser obediente | to be obedient |
| khtue?ci? | obediente, apto, capaz | obedient, capable |
| -iche? | $\begin{gathered} \text { no mas(p.ej., } \\ \text { jasnakine? "un } \\ \text { nino, no mes") } \end{gathered}$ | ```no more, only, just (e.g., jatnakhos "just one cluild")``` |
| -kh6? | todavia | still, yet |
| khe? alshe? | inds terde | letor |
| -khe? jothoonigi | ```Primer Padre (Crea- dor)``` | $\begin{aligned} & \text { First Fathor } \\ & \text { (Creator) } \end{aligned}$ |
| -khe? jothbopifo | Primera Madro (Creadora) | First Mother <br> (Creator) |
| lhe?mi | no me importa $\begin{gathered}\text { n } \\ 424\end{gathered}$ | ```it doesn't matter to ne, I don't nind``` |


| khfigi | tio materno | maternal uncle |
| :---: | :---: | :---: |
| -mh6 | de (procedencia) | from |
| khonae? 6 | rana | frog |
| - lwhoni | reirse | to laugh |
| -khonfinakevt | bronear | to jolso |
| khtniiktts 1 | brome | joke |
| kh6ni?aponee | triste (lugar) | sad (place) |
| khoni? $\mathrm{p}^{\text {pobgim }}$ | estar triste, entristecerse | to be sad, to becone sad |
| kh6ni?ap6? | triste, afligido, pobre (persona) | sad, afflicted, poor (to be pitied) (of people) |
| Whostsiga.ja? | cucherita | small spoon |
| khootsictu | cuchera | spoon |
| Ehovalob? i- Јú | pertirse, descascertrse (un fruto, etc.) | $\begin{aligned} & \text { to bredz up (in- } \\ & \text { trans), to lose } \\ & \text { its shell, peel } \\ & \text { (fruit, etc.) } \end{aligned}$ |
| khovak6? i-kht | romper en pedezos, descascerer | to broak up into small pieces (trans), to peol, to shell |
| khovat - ${ }_{\text {cti }}$ | romperse | to break, tear (intrans) |
| lhovar-kha | $\begin{aligned} & \text { hender, romper, } \\ & \text { rosgar, rajar, } \\ & \text { partir (p.ej, } \\ & \text { un tronco o lena) } \end{aligned}$ | ```to toar, brook (trens), split, soratch, break up (a.g. a log or firowood)``` |
| Whove?leí? | quebradizo | fragile, oasily brealable |
| -6ht | comer ( Pruto y coses $\operatorname{dnces})$ | $\begin{aligned} & \text { to oet (fruit and } \\ & \text { sweet things) } \end{aligned}$ |
| -kht | hecer | to make, do |
|  | - If - |  |
| na.ado | ofrenda (de corne que los invitados lleven a le fies. ta) | offoring (of meat that the guests toko to the fiesta) |
| max 31 | una especie de fruto | a spocios of fruit |
| mán 1 | brea | pitch, tar |


| matni-1/nt | ```embrear (tepar con bree una canoa)``` | to ter (to seal a conoe with pitch) |
| :---: | :---: | :---: |
| makn 1? 6ni <br> d1: mednf?u- <br> nile氏 pl: nad.. <br> n1?unini | ntscera | mask |
| maente? <br> dl: macils?omusi pl: mac. nัa? 6 mu | iguena | igusma |
| mothant- | collerse | to becone silent |
| madägnt | silencio | silence |
| maspi <br> dl: makpânusi <br> pl: mapánu | abeja (que no da miel), enjambre | bee (that does not produce honey), swarin of bees |
| maz? gi | ```cahuena (bobida de alnijobn hecha de harina de yuce.``` | a starch drintr mede from yucca flour |
| nea?gi-khut | hacer cohuana | ```to make a starch drink from yucea flour``` |
| mentma-kht | hacer cazabe | to malce cassava. |
| maa?mul | cazabe | cessava |
| mad?tsa.- | estar cansado | to be tired |
| majakead6 | señorita, mucheche, virgen | young lady, girl, virgin |
| nekatpa | ```peje torre (pez pa- recido al zúngaro y al begre)``` | a specios of fish similer to the catfish |
| maksde. | secarse (ropa, etc.) | to dry (intrans) (clothes, etc.) |
| nakad | seco | dry |
| nekepi | tode clase | all sorts |
| -nakt? d ¢ | secar (ropa, etc.) | to dry (trans) (clothes, etc.) |
| mamenii?- | ser insípido | to be insipid |
| mamenf? | insipido, agrio, sin gusto | insipid, bitter |
| mantai-kht | abandonar (a alguien), dejar (de hocer algo) | ```to abandon (s.o.), to stop (doing sthg)``` |


| -manaduto? | conocer, saber | to know |
| :---: | :---: | :---: |
| menegi pl: mant | $\begin{aligned} & \text { conga, isula (hor- } \\ & \text { miga) } \end{aligned}$ | lerge poisonous ant |
| memed | 11 max | to call |
| mepfitsi | nel agutero | bad omen |
| maplitsimkh | presagiar | to presage, to Sorbode |
| matsis | ennohecerse, cubrirm so de moho | to go mouldy |
| -metsike | por rencor | out of bittorness, spite |
| matsixGatsig1 <br> pl: matsikáatsint | acleente | bad person |
| metshatke | man 1 | peanut |
| matshsapolst? | por rencor | because of bittorness, spite |
| matshis?- | heder | to give off an unpleasent saell |
| motshiveo?ntho | pecodo | sin |
| matshlva?nt? | melo | bed |
| matshi? | hedor | unpleasant smel. |
| matsh6? | corto, bajo | short |
| mavs? | mico, huapo (mono) | longrtailod monkey |
| me? do | pucacunga (ave nocturne) | a species of nocturnel bird |
| me? pho? 6? | mes tarde | later |
| mo?tsanktsi | fatige, cansoncio | tiredness |
| ma?tsanet- | canscrse, estar consado | to becone tired, be tired |
| me?tsuu? - | estor censedo, debil | to be tired, weak |
| ma?tsu? | cansencio | ciredness |
| -natu | negativo inperativo | negative inperative |
| ma?vb | ```horqueta (gancho pa- ra coger frutos de los Srboles)``` | hooked or forlsed stick used to get fruit from trees |
| me? vo <br> medt- | huapo, mico (nono) estar asado | Iong-tailed nonkey to be roasted |


| meeg | cazabe | cessava |
| :---: | :---: | :---: |
| me8me? 6 | chicha (de pijueyo) | chicha (fermented drink) made from Guilelma fruit |
| menilgs | ardilla | squirrel |
| men 1? | olor ( $p *$ ej., de comida; no es desagradable) | smell (e.e.e, of food; not dis. agreeable) |
| -nenfevu | desconfiar, no creer | to distrust, disbelieve |
|  | jugar | to play |
| metshoovigi | maduro | ripe |
| -ne?k6 | peler (fruto) | to peel (fruit) |
| me?ailtsi | juego | a gone |
| -me?nltotaphaavd | sufrir | to suffer |
| -ni | pasado reciente | recent past |
| migealild | dos | two |
| migeakut sam gư? | tres | three |
| migi | 61, ese (hombre) | he, that (man) |
| -mitigi. | cuñado (marido de la hermana de la mujer) | ```brother-in-law (wife's sister's husband)``` |
| nilpels6 | cenasta de hojas de palmera (cepillejo) | basket made irm palm leaves |
| miiš9 | gato | cat |
| miltsimi | ahumado | smoked |
| mii?6h1 | vestido de mujer | womanis dress |
| milis.so | creo que | I think that... |
| mike | pero | but |
| micovegi | durente | during |
| minsad 6 | dueña | owner (f) |
| $\min 5 \mathrm{cg} 1$ | dueño | owner (n) |
| mineed | por eso | for that reason |
| -uitatpavi | cazer | to hunt |
| minopiivigi | cezedor | hunter |
| mixd | buscar | to look for |


| -mitu | ahunar | to saoke (i.e., to preserve food by smoking it) |
| :---: | :---: | :---: |
| mitsh $\mathrm{m}^{\text {a }}$ | levonterse (de estar sentado, de la cana, etc.) | to get up (from a seeted position, from bed, etc.) |
| mi? | ellos | they |
| mi? ${ }^{\text {a }}$ | a.si | thus |
| mi? 1 \% 6 | esa (olla de barro) | that (earthenware pot) |
| -mi?tsotu | hervir | to boil (trans) |
| -mi?tsu | hervirse | to boil (intrans) |
| mízzo | tuerto, chejo | blind in one eye |
| moi?-kht | remover | to stir |
| -no ${ }^{\text {jas }}$ | tocar | to touch |
| mokt? gi | churuco, nusmuqui (mono) | a species of mon. key |
| -Tok 1 | fallecido | deceased |
| - n 6kh6 | cortar madera con hacha | to cut wood with en axe |
| -(?) m6kh6 | $\begin{aligned} & \text { oler (exhelar un } \\ & \text { olor) } \end{aligned}$ | to mit a smoll |
| moniftsimkh | tener ganas de comer corne | to feel like eating meat |
| -(?) mónont | ehogarse | to drowil (introns) |
| mon6otsf | tamendus, shihui (aninal parecido al oso hormiguero, pero abs pequeño) | ```tamandua (an ani- mel similar to the anteater, but smaller)``` |
| nomeeds | huerfena, viuda | orphon (f), widow |
| monergi | huerfano (m), viudo | orphen (i), widower |
| moohe | recien | recent |
| Hoohema | hoy | today |
| mostsinf <br> di: mootsi- <br> huukt pl: <br> mootsinuuhi | cana, mosquitero | bed, mosquito net |
| -(?) noths | rompor 1. ctucara de mani | to breat the shall of poanute |


| -motsháni | amar (a una persona - cosa), mezquinar (no querer compartir con los dembs), perdonar | to love (a person or thing), to be stingy with (un. willing to shere with others), to forgive |
| :---: | :---: | :---: |
| -(?) m6tsh6 | matar, golpear, azom tar, maltratar a una persona | to kill, beat, whip, mistreat a person |
| motsho?k\%? | miserable | miserable |
| -in6? do | ehuyentar | to frighten off |
|  | tocar | to touch |
| matube | hermeno (de hermano), esposo (de esposa) | brother (of brom ther), husband (of wife) |
| máuje | esposa (de marido) | wife (of husband) |
| muu. 6 | nosotros (exclusive) | we (exclusive) |
|  | - M - |  |
| mepolso | piraña, peña (pez) | piranha |
| me? monf ? | deslustrado | dull (not bright) |
| -mott | $\underset{\text { mida) }}{\operatorname{probar}(\mathrm{p} . \mathrm{ej} ., \text { com }}$ | to try (food, etc.) |
|  | - N - |  |
| -ntad6 | hormana (de hermena), aniga, compañera | sister (of sistor) <br> friend ( f ), companion ( $f$ ) |
| -nbadopija | prime (de f) | cousin (f, of f) |
| no.agi | c6lera, mal humor | anger, bad temper |
| -ntagi | $\begin{aligned} & \text { hermeno (de hermano), } \\ & \text { amico } \end{aligned}$ | brother (of brother, friend (a) |
| -naagig | primo (de m) | cousin (m, of m) |
| nasna | huito (la tinta) | red dye from a plant |
| neane? 6 | huito (la planta) | a plant from which a red dye is made |
| naopi | noche | night |


| -napi | debajo de, parte inferior | under, lower part, bottom |
| :---: | :---: | :---: |
| ntapigy | abajo (mes que hipoo) | low (lower then hip60) |
| naepi? 6 ? | 1a mañana, tomprano | the morning, early |
| nespe <br> d.1: natapannsi <br> pl: napḱnu | paca, najas | peca, spotted cevy |
| neo?ka | idiona | Language |
| ```-nae?k6pi dI: -nae?kapi- kt pl: -noc?- kapine``` | gargenta (por dentro) | throat (inside) |
| -nea?ni | disputer, reñir | to dispute, to argue |
| naginagi-jb | enfodarse, rabiorse | to, get angry |
| naikoogi | curacion | healing (inn) |
| naikoogigi <br> dl: naikoogin <br> gfinusi pl: <br> naikoogi?a | curandero | witchdoctor, shamon |
| noilroogihu | oración | prayer |
| -nai?lct | curar (usondo los metodos del curendero: plantes; on reciones, etc.) | ```to heel (using the methods of the shanan: herbs, prayers, etc.)``` |
| -nak6egi. | sobrino | nephew |
| -n6kbotsk | cuñado (de hombre) | ```brother-in-1aw (of a man)``` |
| -(?) namalced | dejar boce abajo, agacherse, poner huevos (gallina) | to leave upsidedown, to bow down, to lay eggs (hen) |
| - (?) ntat | estar boca abajo | to be upsidemdown |
| -nans | cuerpo | body (living) |
| nantanamaa? de | cahuana de piña | sweet starchy drink made from pineapples |
| nenăana? amb | jugo de piño. | pinegpple juice |
| nanaminfille | hijuelo, retoño (de piña) | shoot, new growth (of pineapple) |
| nantana? 6 | piña | pineapple |


| nanapfita? 6 | macanbo (tronco) | pumpkin vine |
| :---: | :---: | :---: |
| nanaplita? 6 | nacambo (fruto), cam | pumpkin |
| d1: nanapiits? 00 k 亿 pl : nanapfite?ooh1 | labazo |  |
| -nfnikána | $\begin{aligned} & \text { hermana (de her- } \\ & \text { meno) } \end{aligned}$ | sister (oí brother) |
| navis | lo que se atrapa cazando | that which is caught hunting |
| nasathe | ellos (lejos) | they (far) |
| ne?1 | gusano (que se en- | worm (that is found |
| dl: na? 1ausi. <br> pl: na? fru OR na?ithy | cuentra en los 6.rboles. La gente lo cone.) | in trees. People eat it.) |
| -na?hakava | discutir (con alm guien) | to argue (with someone) |
| na?ntamináad | criada, empleada, moza | maid, enployee (f) |
| na?ndminág | criado, empleado | ```servant (m), em- ployee (ii)``` |
| -nes | con (acompañando) | with (accompanying) |
| net | all 1 | over there (farther than nee 1) |
| neegi | sabalo (pez) | shad (fish) |
| neebs | alia | there |
| neel | ahi | there |
| neelmil | habitante | inhabitant |
| nehitshin ${ }^{\text {d }}$ | el lugar de | the pleco of |
| netetsh1:6 di: netetshimusi OR netetshi?ook $\mathfrak{p l}$ : netetshimu | piojo | louse |
| niginomént | cementerio | cenetary |
| niginoont | tumba, sepulcro | tomb |
| nihi?-kht | paladear, saborear, laner | to taste, lick |
| nilhorno?vigi | bobo | foolish |
| nifkanek6? | facil | eossy |
| nilk6 | no | no |


| ```nilkl, nilkaf dl: ni{kbuuk{ pl: niflkauhi``` | fruta | fruit |
| :---: | :---: | :---: |
| nitkhtri | no | no |
| nifkhe? | todavia no | not yet |
| $\begin{aligned} & \text { nilnoviglpi- } \\ & \text { vigi } \end{aligned}$ | mudo ( Nn ) | dumb person |
| nilpa? | sunque no | although not |
| niltsi | tabaco | tabacco |
| ni£tsIviižd | ampiri | paste made from tabacco |
| niltsi?6 | tabaco | ta.bacco |
| mivve elce?tsi | nunca | never |
| ni1?8 | ```señora (se dice a unc. mujer que ya no es virgen)``` | "Mrs" (said to a. woman who is no longer a virgin) |
| -nineovtr | cuñeda (de hombre) | ```sister-in-law (of a man)``` |
| $\begin{aligned} & -\mathrm{n} 6 \\ & \mathrm{dI}:-n \delta k! \\ & \mathrm{pl}:-\mathrm{n} 6 \mathrm{n} 6 \end{aligned}$ | boca | mouth |
| noht | idioma, pelcbra | language, word |
| $\begin{aligned} & \text {-noǰini } \\ & \text { dl: -nojiniikt } \\ & \text { pl: -noĵhiih1 } \end{aligned}$ | barba | beard |
| nokokab | aterdecer | to get dork, to fall (night) |
| nok8tsahe?k8ku | anteayer | the day before yesterday |
| nok6tisapelr8 | anteonoche | the night before lost |
| nokరtsk | ayer | yesterday |
| nombogi? | umeri | a species of tree |
| nomona | salide de un rio de un hueco | coming-forth of a river from a hole |
| non6?n6egi | relacion entre suem gros de un matrimonio | ```relationship be- tween parents-in- law of a married couple``` |


| notok 6 | torde | late |
| :---: | :---: | :---: |
| noठtsigu <br> di: nobtsigrekt pl : nobtsigechi | lenza, erpsn, flecha | $\begin{aligned} & \text { lance, harpoon, } \\ & \text { arrow } \end{aligned}$ |
| noftsint | pelabra | word |
| -novigipf | hebler | to speok |
| noviigi | espina (p.ej., de paluera), aguja | needie (e.g. of a palm tree), (sewing-) needle |
| $\begin{aligned} & \text {-n6? eovi } \\ & \text { dl: -n6?ac- } \\ & \text { vind pl: } \\ & \text {-n6? antins } \end{aligned}$ | 2obio | lip |
| -n¢ | en (la puerta, etc.) | in (the doorway, etc.), at |
| ntihiga-36 | protegerse, refugiarse | to protect oneself, to talre refuge |
| nelhiga-kh | dar sombra. | to shode |
| ntohich <br> dI: nethi- <br> geckh pl: <br> nethigeahi | tembo | a shelter, home |

- H -
naa?des calabaza heche en pumpkin gourdmade
forme de uno taza nade into the shepe
of a bowl or cup
stherpoovigi
genador
winner
atmpi
Abnusi
-migif
dl: -migikl
pl: -migine
nat
yo, mi
I, my
ellos
they
elles dos
they two (f)
ellos dos
they two (m)
frente, cara
forchead, face
- 

| yo, mi | I, my |
| :--- | :--- |
| ellos | they |

nia? i?-…

| ña?i?-kht | doblar | to fold (trons) |
| :---: | :---: | :---: |
| ñi?š6gt | ruiseñor | nichtingale |
| noi-khe | frotar, lustrer | to polish, shine (trans) |
| ño?ha- | hacerse suave, suavizar | to make smooth, become snooth |
| ño? $\frac{1}{}$ | ser blando, suave | to be soft, smooth |
|  | - ${ }^{\text {H }}$ - |  |
| nee? xe -kht | sanar (con medicina) | to heal (with medicine) |
| nelee\% - | sanarse, hacerse mas fuerte | to get better, stronger |
| Nelke?khootsi | medicina (cualguier cosa que da fuerza) | nedicine (anything that gives strength) |
| me?-jt | aplastarse, mordia cer, pungar | ```to squash (oneself), to sting, smart, hurt (intrens)``` |
|  | apreter | to press |
| ne?kii? | ser fuerte (de personas) | to be strong (of people) |
| \#erles? | fuerte (de fuerza fisica) | strong (of people) |
|  | - $0-$ |  |
| ocht | daledale (planta) | a species of small tuber |
| -odo? phamed | trabajar | to work |
| -finda | ñame, sachapapa | yam |
| - Ja- | achicarse | to become small |
| 6k6gilgi | j6ven, muchacho | youth (m), boy |
| 6lı6niigi | fuego, candela | fire (of logs, etc.) |
| 6koniigihu | escopeta | rifle |
| 6konjigi ${ }^{\text {\% Sht }}$ | ceniza | ash |
| 6 k 6 nfighms | Iancha | launch, boat |
| 6konijgit | bala (para escom peta), cartucho | bullet, cartridge |


| 8k6nicigivunda | tizon | burning log |
| :---: | :---: | :---: |
| okh6odod | fruto del okhoodo? | fruit of the okh8odo? tree |
| okhbodo? | arbol que da fruto que sblo los animales comen | a tree which gives fruit that only the animals eat |
| oneapi | lombriz | worn, earthworm |
| omeke | \&por que (no)? | why (not)? |
| 6iab | salsa picante | highly seasoned sauce |
| ont?k 6 <br> d1: ona?k6- <br> nusi pl: <br> ona?nornu | ```serpiente, culebra, cascabel, jergon, vibora``` | snake |
| -one <br> dl: -onchiika <br> pl: -onene | diente | tooth |
| -6ab | derranar, vaciar | to spill, to empty |
| -ñu | el agua que inunda les casas cuando el rio esta crecido | the water that floods the houses when the river is high |
| 00 | intensificador - ya | $\begin{aligned} & \text { intensifier - al- } \\ & \text { ready } \end{aligned}$ |
| -oJa- | ser delgado, poco | to be thin, little |
| -oja-kht | achicar, hacer más pequeño, hacer dism minuir | to shrink (trans), nake sinallor, malre diainish |
| -0う̌ajus? | poco, estrecho, pequeño, chico | little, narrow, small |
| 8sna? | mafala (tuberculo comestible) | a species of edible tuber |
| oopimiq | bastante, suficiente | enough |
| 00 pimian ${ }^{\text {a }} 00$ | entonces | then |
| ootshi | collar | nocklace |
| oovt <br> dl: oovenusi <br> pl: ovamu | coto | howiing monkey |
| opsent | hfgedo | liver |
| opijtsi(k-6) | trampa para pescar | trap for fishing |
| opíitshomii. | antiguos (personas de antes) | $\begin{aligned} & \text { ancients (people from } \\ & \text { olden tines) } \end{aligned}$ |


| -8pokot6 | canter un duo antes de une fiesta | to sing a duet bem fore a fiesta |
| :---: | :---: | :---: |
| -ophú | crecer (plantas) | to grow (intrans) (of plants) |
| ots6oma | larva comestible, nojojbis, suri | edible larva or worm |
| -otsh 6 | dar de comer (cosas que no sean cerne) | ```to feed (trens) (with food other than meat)``` |
| ovetsimkhu | hacer trampa | to malre a trap (for cetching animals) |
| oveets iks | trampa para coger ratones | mousetrap |
| ovi? | ```limpio, libre (tie. rra)``` | clear (of a clearing in the jungle) |
| -ovortu | mojer (alguion) | to wet, moisten ( 5.0. ) |
| 6? d8nekif? 30vigh | $\begin{aligned} & \text { pescedor (que usa } \\ & \text { barbesco) } \end{aligned}$ | fisherman (who uses great mullein poison) |
| -0? dond | pescar (con barbasco) , machacer berbosco pare que salga el veneno cuando so posca | to fish (with groat mullein poison), to crush great mullein in order to squeoze out the poison when fishing |
| O? doftsiphaevt | trobajo | work |
| -0? hoogi | abuelo | grendfather |
| -6?上6 gigijks | juventud | youth, early life |
| -0? 0 -6t6 | fluir, gotecr, escurrir, chorrear | to flow, drip, drain, run (of water) |
| $-67166 t \operatorname{cop} 1$ dl: -6?kots.e. pike pl: -6?kbttapint | gargente (por fuera) | throat (outside) |
| -6?kotsapfot <br> dl: -6?kठtana pignule pl: -6?k6tsapigxiuh | pecho | chest |
| $-6 ? 156 t \operatorname{pl?oots}$ | 1 agalla, broncuio (de peces) | gill, branchia (of fish) |
| -0? EOES | fuego (forme pose1an) | fire (possessed form) |
| -0\%1.6 | tumbar un Srbol | to Eell a tree |
| -0? metsind | sajudar | to greet |



| peniftsimuk penistsi?ep6? | construis une casa cumbre del techo da una casa | to build a house the highest point of the roof of a house |
| :---: | :---: | :---: |
| penitsfut. | caserio | village, hamlet |
| panonoठtsikoo? ${ }^{\text {a }}$ | escoba | broon |
| papás 1 | ```encorvodo, redondo, circulo (de ruedas, aros, anillos, etc.)``` | ```curved, round, oir- cle (of wheels; rings, etc.)``` |
| papekova | todos los dias, sienpre | every day, always |
| psphokotem kii?. | ```ser un tirador ex- perto``` | to be a good shot |
| psphokoteki? | la cualidad de ser un tirador erperto | the quality of beirig a good shot |
| petophe | prinero | first |
| patsagikooví | lugar donde se sienton los dueños de una fiesta | ```place where the leaders of a fies- ta are seated``` |
| patsovilte | boa, exprimidor bora (七ipiti) | boa constrictor, tube-shaped wickerwork strainer for squeezing poison frou yucca, etc. (Bora style) |
| patshanuu?-- | ser htimedo, estar mojado | to be wet, damp |
| petshanu? | hrmedo, mojado | wet, daunp |
| patshijes. | quedarse (en casa) | to stay behind (at home) |
| psa | cosa redonda | round thing |
| pavuuda | ```redondo (como un tronco de madera), mocho``` | ```round (like a log), a cut piece of tree trunk``` |
| petaxt | juntanente, todos (de persozas) | $\begin{aligned} & \text { together, all (of } \\ & \text { people) } \end{aligned}$ |
| pa?oogeh 5 | claro (del dia) | clear, light (of daytime) |
| p6?osikume | diez | ten |
| pa?tobnagi | vigilante | wetchanan |
| pa?toov1g1 | uno gue vigila | one who keeps watch |


| -pa?ta | riirar, atisbar | to look, watch, spy on, observe |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { peed6g1 } \\ & \text { pl: peed6 } \end{aligned}$ | cucusa, isango | a species of insect that bites people \& animals |
| petg 1 | harina de yuca, almidon | yucca flour, sterch |
| peegi | gevilan | sparrowhawle |
| -pee? | como (relacionador de la frase compam rativa) | same as, like (Comparative Phrase relator) |
| $\begin{aligned} & \text { peglina } \\ & \text { dl: peginamusi } \\ & \text { pl: peginanu } \end{aligned}$ | caindn, lagarto | alligator, caiman, lizard |
| -(?) pent | tragar | to swallow |
| -pe?do | lamer | to lick |
| -pidaad6 | codo | elbow |
| p1do-kha | criar (animales) | to raise, rear (animals) |
| plida | animal domestico | domestic pet |
| pilgf. <br> dl: pilgimusi <br> pl: pigimu | oso hormiguero | anteater |
| plikapa | yare (jugo de yuca brava) | juice of bitter yucce |
| pilme <br> dl: piinemusi <br> pl: pimému | hormiga | ant |
| pi.ina | bolsillo, bolsa | pocket, bag |
| pitnaubaba | bolsa | beg |
| piltelchovi | ayudante | assistant, helper |
| pii?ñe | tuyo | yours |
| -piko? pavi | servir | to serve |
| -piko? pheava | reverencier al Creador | to revere the Creator |
| pin6 | campo (que no tiene dueño) | field (that does not have an owner) |
| $\begin{aligned} & \text { pipfigit } \\ & \text { dl: pipfigiuukt } \\ & \text { pl: pipfigiuuhi } \end{aligned}$ | pijuayo (el fruto) | the fruit of the Guilelma |
| pipígi? | palmera de pijuayo <br> 440 | $\begin{aligned} & \text { Guilelma (peln } \\ & \text { tree) } \end{aligned}$ |


| pipligiti <br> dl: pipitgim ? fléa pl: pipígi? inf | un recimo de pijuayo | bunch of Guilelma |
| :---: | :---: | :---: |
| pisama | carne de animal | animal flesh, meat |
| pişı-khe | desmigajar | to crumble (trens) |
| pitsinuu?- | ser lindo, bonito (no se refiere a belleza fisica, sino a acontecimientos o sonidos, peej., una cancion) | to be nice, pretty (not referring to physical beauty, but to on event or sound, e.g., a song) |
| pitsing? | lindo, bonito | nice |
| pitsheed6 | pi.chico (nono) | a species of monkey |
| pitshiigi <br> dl: pitshiigimesi ol: pitshig1ma | murcielago, chim. bila | bat |
| pi?156 | invtilido (enferno) | invalid (sick person) |
| pi?136- | ```ser deformado (el nacer)``` | to be deformed (froti birth) |
| -p1?ko | echar, botar | to throw (away) |
| ```p1?m1 dl: pi?mimusi pl: pi?mimu``` | piceflor, colibri | humaingbird |
| p1? zase | shimbillo, churina (arbol) | a spocies of tree |
| p1? 20 | fruto del shimbillo | fruit of the shimbillo tree |
| porment? | trabajador (Adj) | hard-working |
| ponatmajili?o | chonta, cogollo | ```tocuma (heart of the hungurahui tree)``` |
| ponadmaze <br> dl: ponasna?eekí pl: ponadma?eeh1 | ```tronco de hungura.. hui (un tipo de pel- mera)``` | a species of palm tree |
| -pon 1 | avergonzarse | to be ashamed, tirid |
| ponuu? - | dax vergitenza | to cause share or tinidness |


| pont? | Vergitenza | shame, timidness |
| :---: | :---: | :---: |
| pootsigh | rana | frog |
| po6tsh6 | punchana (roedor) | a species of rod. ent |
| poo?g1 | tortere (utensilio de cocina en que se cocine el caza be) | type of frying-pan used for cooking cassava |
| poporog 1 <br> d1: popoog1musi pl: popogimu | lechuza, buho | owl |
| potstinu? - | ser pegajoso | to be sticky |
| potstinti? | pegajoso | sticky |
| potsiftsamha | endulzar | to sweaten |
| potsitsuu?- | ser dulce | to be sweat |
| potsitst? | dulce, salado | sweat, salted |
| potshSado | perezoso (animol) | three-toed sloth |
| potsh1?n6 | 11 eno | full |
| poristsi | azulejo (ptjoro) | bee-eater (bird) |
| p8?kónoom dl: p6?kరnomeek pl : p6?16nomaah1 OR p6?:8noomb | puerta ne | door |
| p6?menuu? - | ser alto (tono musical), fuerte (ruido) | to be high (musical tone), loud |
| p6?mant? | alto (tono musical), fuerte (ruico) | ```high (musical tone), loud``` |
| po? postak 6 | pona, cashapona (fruto) | a species of Iruit |
| po?posta? 6 | cashepone (palmera) | a species of paln tree |
| po?tstave | medio, centro | half, centre |
| po?tssavsgaah 1 | cuatro | four |


| pha | th, tu | you, your (sg) |
| :--- | :--- | :--- |
| phaa?m1?00 | entonces | thon |


| phaigi | un viejo, adulto | old men, adult (m) |
| :---: | :---: | :---: |
| dl: phaigita |  |  |
| OR phaimusi |  |  |
| pl: phaigiohi |  |  |
| OR pheine |  |  |
| phaike?nevt | tia materna (hermana de la mamb) | maternal aunt <br> (mother's sister) |
| phaipije | una viejita, anciana | old woman |
| di: pheipi- |  |  |
| Jeekt OR |  |  |
| pheimupi pl: |  |  |
|  |  |  |
| phedee?katsi | grasa, manteca | grease, fat |
| phesnatkatsipi | aceite | oil |
| phese?- | engordarse | to get fat |
| phece?-khe. | saludar | to greet |
| phedo?phed6? | brillante, Justroso | brilliant, shiny |
| pheco? vakht. | relampaguear | to strike (of lightning) |
| phe?dotsi | hermena meyor | elder sister |
| phe?gitsi | herneno mayor | elder brother |
| pht? 6 ? | todos | all |
| phigitsafna | (una tribu -- el informente no conoce el nombre castellano) | (a tribe -- informant does not lnow Spanish name) |
| phiig ${ }^{\text {c }}$ | achiote | annatto, annato (red dye from the pulp of the Bixa orellana tree) |
| phistsp | aguti, añuje, guara | agouti |
| -phokotí | alcenzer (con escopeta, lanza, etc.) | to hit, strike (with bullet, spear, etc.) |
| phoomkha | agitar | to shake, agitate |
| phoodeati | verdad, cierto | true |
| pho?khootsi | abanico | $\begin{aligned} & \text { fon (for cooling } \\ & \text { oneself) } \end{aligned}$ |
| phe | th. | you |
| phtitiost | chocar | to collide with |


| saa?du-khe | freir | to fry |
| :---: | :---: | :---: |
| sabo?-je | hundirse, sunergirse (voluntariamente) | to sink, subinerge (voluntarily)(intrans) |
| sabo?-kht | hundir, sumergir | ```to sink, submerge (trans)``` |
| sadumí | gajo, racimo | bunch, cluster |
| sagi | veinte | twenty |
| sagh | uno | one |
| sapfys | una (mujer) | one (woman) |
| sa? ${ }^{\text {a }}$ | otras personas, los demás | other people, others |
| st?osi | cinco | five |
| seu? - kht | cortar cosas pequeñas (p.ej., tela, con tijeras) | to cut small things (e.g., cloth, with scissors) |
| siga?-lche | alumbrar, ilumincr | to illuminate |
| siigi | ajeno | alien, foreign to |
| sii?-kha | $\begin{aligned} & \text { oler, percibir un } \\ & \text { olor } \end{aligned}$ | ```to smell, perceive a smell``` |
| sii?6. | $\underset{\text { ajeno }}{\text { grupo }}(p \cdot e j ., \text { tribu), }$ | $\underset{\text { alien }}{\text { group }}(e . g ., \text { tribe }),$ |
| siku? - ju | respirar | to breathe |
| silku?khoond | respiracion | breath, breathing |
| sipek6 | pasedo meñana | the day after tomorrow |
| situ?akh6 migaek | diecisiete | seventeen |
| situ? skh6 migaakt? sage? | dieciocho | eighteen |
| situ? tikh6 po?tsadaragaeh 1 | diecinueve | nineteen |
| sftu? kikh saga | dieciseis | sixteen |
| s1?0s1kh6 migaakt | siete | seven |
| sl?osikh 6 migaaktt? sagf? | ocho | eight |
| si?osikh6 po?tsadvagaeh1 | nueve | nine |


| st?ostikh sagt | seis | six |
| :---: | :---: | :---: |
| soe? -khá | arañar, rascar | to scratch |
| soo? - kh 4 | chreper | to suck |
| sovidelk | lagartija (del monte) | small lizard |
| sulgiba | tupido | thick, closemit (of undergrowth, basket.. work, etc.) |
| sub? | estrecho, fino | nerrow, fine |
|  | - ${ }_{\text {S }}$ |  |
| sta..ju | disperserse | to disperse (in- |
| ธ̌aašae-kht | regar | to water (a field, etc.), irrigate |
| sakoorgipi | chapo (bebida de plátano) | banane drink |
| šakoo?g1? 1 <br> dl: sakoo? gi? 1 k औ pl: sian koo?gi? ini | racimo de platanos | bunch of banenas |
| šakoo?gis6 <br> dl: sakoo? gi? \&kú pl: šakoo? gi? 6 h | platano | benene. |
| sted 6 | suegre. | mother-in-law |
| stince | el amenecor, claro (del die) | $\begin{aligned} & \text { dewn, light (of } \\ & \text { day) } \end{aligned}$ |
| ši¢na- | aquietarse, ester tronquilo | to be/become caln, quiet |
| Stint | tquieto!, idejanel | be still!, leave me alone |
| sil?tyu | gorila | gorilla |
| scds | serna | scabies |
| šbh6 <br> dl: Sohomusi <br> pl: Šohotau | pavo, peva de monte | turkey, peacoctr |
| šoko? -.ja | moverse | to move (intrans) |
| šoko?-khú | espantar, hacer huir | to frighten, cause to flee |


| Soo-kht | derramar, echar agua (pare lavar) | to pour out water <br> (in orcier to wash) |
| :---: | :---: | :---: |
| sobht | mentira | lie, falsehood |
|  | engañar, mentix, ser falso | to deceive, tell lies, be false |
| Sobne Jakbemi | decepoion, mentira | deception, lie |
| soo?g1 | suegro | father-in-law |
| -šota | dar de comer carne | to feed with neat |
| -st | coner carne | to eat meat |
| suu-khe | ```aconsejar (no hacer algo), impedir, pro- hibir``` | to advise against, hinder, prohibit |
| surchatamihiu | mandamiento | cominand |
| sruukhottsint | mandamiento, consejo | comand, piece of advice |
| tas | frio, fresco | cold, cool |
| tas- ${ }^{\text {y }}$ | enfriarse (una cosa, p.ej., una comida), calraarse (el agua, una herida, una persona, etc.) | to get cold (e.g., a. meal), to calm down (intrans) (of water, a wound, a person, etc.) |
| tasje | abuela (materna y paterna) | grandmother (naternal and paternal) |
| taance-je | desmayarse | to faint |
| taasa? 9 J6 <br> dl: teesa? i- <br> 〕 6 ku pl: t <br> sa?ijohi | taza | cup |
| tampl? | 1laruma, cetico (tarbol cuyas hojas se mezclan con le coca) | a species of tree the leaves of which are mixed with coca |
| taa?giu | liza (pez) | mullet (fish) |
| tabo? -khe | arremangar | ```to turn up, roll back (one's sleeves, etc.)``` |
| -(?) tam6 | ```taper, cubrir (un hueco), cerrar (una puerta)``` | ```to cover (a hole), to close (a door)``` |


| tranaks? ${ }^{\text {c }}$ | variedad de Srbol que | species of tree |
| :---: | :---: | :---: |
| dl: tanack | da caucho (nts gran- | producing rubber |
| ? eek 4 pl: tfnaakz? eh 1 | de que leche caspi) | (bigger than the leche caspi) |
| -taponl | soñar | to drean |
| taponiivigi | soñador | dreaner |
| taponfentsi | sueño | drean |
| teveerkha | combiar | to change (trans) |
| -taverni | sobrina (de mujer) | neice (of a woman) |
| ta? akabid | anona | soursop (Annone muricata) |
| tasars? ${ }^{\text {c }}$ | tronco de anona | trunk of the soursop tree |
| ta?duu?- | ser duro | to be hard |
| te? duf | duro | hard |
| te?mo6tsihi | sombrero | hat |
| tebaht | monte, bosque, selva | uninhabited part of the jungle, wood |
| trbak | refz | root |
| tesge | mesa | table |
| $\begin{aligned} & \text { tef? } \\ & \text { dl: te?iikt } \\ & \text { pl: tefinins } \end{aligned}$ | r10 grande | big river |
| $\begin{aligned} & \text { te厄? iyf? } \\ & \text { d1: ţ?i.ku- } \\ & \text { yt? pl: te- } \\ & \text { ?iihiJa? } \end{aligned}$ | quebrada chica, arroyo, riachuelo | small strean, brook |
| tes? f?amp | orilla del rio | river bank |
| tes? i? ${ }^{\text {apo }}$ | atajo | ```short-cut (on the river, a- voiding a big bend)``` |
| tegaht <br> dl: tegahuukt́ <br> pl: tegahuuhf | cerro, lona, altura | peak, hill, height |
| tegakt | rama | branch |
| t Chum? 6 | fronda, hoja larga de palmera | palm leaf frond |
| tel? iku | barbacoa $\begin{aligned} \\ \\ 447\end{aligned}$ | ```support on which meat, etc., is cooked (barbecue- fashion)``` |


| temook <br> dl: temookk <br> pl: temoothi | mar | sea |
| :---: | :---: | :---: |
| -(?) tsaphaava | plancar, proyectar, inaginar | to plan, inagine |
| tosaads? 6 | astila | splinter |
| tetuhi | cicetriz, herida | scar, wound |
| tetyol <br> dl: tetyoilkt <br> pl: tttyoiin1 | isla, restinga | island, sandbar, mudbanl: |
| t6uu? 6 <br> d]: toun? 6 k <br> F? : teun? 8 hi | esa soga | that rope |
| téamp 1 <br> dㄱ: te?aamiki <br> pl : te? aminh 1 | ```cuaderno, libro, papel``` | notebook, (printed) book, paper |
| tt? amih ${ }^{\text {c }}$ | escuela | school |
| te? ehfi <br> d2: te? ehuulta <br> pl: te? ehuuht | bache, hueco | (pot-) hole |
| té? etebut | cellampa, hongo, seta | mushroom |
| te?ipl | raiz | root |
| -te?khi | ir a traer | to fetch, go and bring |
| tiñeenebl | una especie de trampa | a type of aninal trap |
| ti? phostshi | medicina, remedio | nedicine, cure |
| ti? phobtshigi | medico, doctor | doctor |
| todetbode | un tipo de baile | a type of dance |
| todoktak <br> dl: todok6akénusi pl: todokakanu | sapo | toad |
| toki | añasháa ( pez ) | a species of fish |
| tokh\% | shapaja (fruto) | a species of fruit |
| t6liho? | shapaja (palmera) | a species of palm tree |
| -(?) tonuf | abofetear | to slap, hit |
| t6\%--36 | ```dislocarse (un hue- so), herirse, lisi- arse 448``` | to become dislocated (a bone), to hurt, wound oneself |


| t60-1\%ht | dislocar, quebrar (p.ej., un palo, en dos) | ```to dislocate (trans), break (e.g., a stick, in two)``` |
| :---: | :---: | :---: |
| toodsh 1 | cucaracha | cockroach |
| t66 Jovigi | un cojo | lame man |
| 七66 jovipije | una coja | lane woman |
| toopeu | pangutne (ave) | a species of bird |
| -tovaa?gi | conseguix | to obtain, get |
| tovilgi. | paucar, mochilero (ave) | a species of bird |
| -tsomoked | acostarse | to lie down, go to bed |
| $-t 68 \mathrm{mu}$ | estirarse, estar echado, acostado | to stretch onesolf, be lying down |
| -to?vakam?nt | casarse | to get merriod |
| -to? ví | conseguir, sacar | to obtain, get |
| tua- yd | brincor, soltar | to jump |
| tuu-kh 0 | amputar, cortar (cosas grandes como árboles) | $\begin{aligned} & \text { to cut (off) (big } \\ & \text { things like trees) } \end{aligned}$ |



| tho?lcheima | huitoto muinani (gru- | to |
| :---: | :---: | :---: |
|  | idiomatico) | (language group) |

- TY -

-tsa se dice que it is said that
tseamba gritar de alegria to shout for joy
tseagi dibujo (en lo cere) a drawing (on a person's face)
tsragi-khi pintor, escribir, a- to paint, draw, dorner
adorn, decorete
tsanglbant- ser listado (p.ej., to be striped (e.g., como un tigre)
like a tiger)
tseagikha- escritura writing katai
tsaegikhob- leccion lesson tsinh
-tstate hermeno (de hemana) brother (of sistor)
tseatsh 5 tucon gronde, picofeo large toucen
dl: tsaftshi-
musi pl:
tsatshimu

| tsaapk? | camaron | shrinp, prawn |
| :--- | :--- | :--- |
| tsagima | fruto del agnaje o | fruit of the aguaje |
|  | humari que se ha en- | or huari paln |
|  | terrado para madur- | which has been |
|  | arlo |  |


| tsagíma | masa de aguaje | dough made from aguaje irvit |
| :---: | :---: | :---: |
| tsag11?0 | ISpiz | pencil |
| -tsak6ota | apagar | $\begin{aligned} & \text { to put out (a } \\ & \text { fire, etc.) } \end{aligned}$ |
| -tseku | apagarse | to go out (a firc, etc.) |
| -tseniak | coser | to sew |
| tsapsogi | conmiofn | chaucleon |
| tsaphoogi? ooht | cstrel | prison |
| tsenmovet | oscurided | dexkness |
| tsephos? | oscuro, nogro | dork, bleck |
| tsevablanat | todo de una vez | oll at once |
| tsovetan | en seguida | at once |
| ```tsa?i dl: tse?imu- si pl: tsam \mathrm{ nu:}``` | armedillo | armadillo |
| -tsa?kü | escoger | to choose |
| -tse?nf | venir | to cone |
| -tsc?tu | adherir(se), pegar(se) | to adhere, stich to (introns) |
| -tsa?tf | $\begin{aligned} & \text { carger, llevor un } \\ & \text { bulto } \end{aligned}$ | to carry a load |
| tso?thootsi | cergo | load, weight |
| -tse? vorti | asegurar, hacer seguro (p.ej., poner el seguro en una arme pora que no dispexe) | to moke sofe (e.g., position the sofety catch on a fiream so thet it will not fire) |
| tseentnsgi | $\begin{aligned} & \text { compadre (anigo entre } \\ & \text { hombres) } \end{aligned}$ | friend (between men) |
| tseemandipije | $\begin{aligned} & \text { comadre (amiga entre } \\ & \text { mujeres) } \end{aligned}$ | friend (between wo men) |
| -tsee?gi | cuñodo (de mujer) | $\begin{aligned} & \text { brother-in-law (of } \\ & \text { a wowan) } \end{aligned}$ |
| tseinoogi | altura | height |
| tsein6? | alto, lergo (tamaño) | high, long (of size) |
| tsenf | axriba (en el cielo) | above (in the sky) |


| tseníral | Ios de lo alto, de arriba (p.ej., los monos) | those from above, high (e.g., the nonkeys) |
| :---: | :---: | :---: |
| tsenfiatht | blusa, camisa | blouse, shirt |
| tsenfimemf | avion | aeroplane |
| -(?)ts¢¢6 | topar (chocar una cosa con otra) | to collide |
| -tsainah 9 | pluma | feather |
| -tsinin 1 | hijos (pl) | sons (pl) |
| -tsiinu | vello, pelo del cuerpo, de animal | body hair, fur |
| -tsiita | hacer salir con humo (a. un animal de un hueco, cuando se ca. za) | ```to noks out (an oninal from a hole, when hunting)``` |
| tsii?tsi?6 <br> pl: tsii?tsi | grillo | cricket (insect) |
| tsikit | celvo | bald |
| tsiki? | solamente | only |
| tsik1?gi- | estar desnudo | to be naked |
| tsiki?hóhi | tonteria | silly thing |
| tsiki?na | vacio | empty |
| tsiki?nte--khe. | enderezar | to straighten (out) (trans) |
| tsilis? | cualquier (de cooas y personas) | any, whichever (of things and people) |
| tsikfond | por gusto | because one wants to |
| -tsins | detras | behind. |
| tsimina | despues | after |
| -tsi?da | arrastrar | to drag |
| toi?kil? | recto, derecho, directanente | straight, direct(Iy) |
| -ts 1? 68 | quitar (una cosa a una persona), arrebatar | to take (something from someone), to snatch |
| ts 6 | ella, su (de ella) | she, her |
| ts68? vi-kht | afilar, hacer filoso | to wharpen |
| tsopek\% | noticia, mensaje | notice, news, message |



|  | - 0 - |  |
| :---: | :---: | :---: |
| uni | saliva | saliva |
|  | - V - |  |
| vaa-kht | acuchillar (matar con cuchillo u otra arma parecida) | ```to knife (to kill with a knife or other similar in- strument)``` |
| -vale6 | hombro | shoulder |
| -vakotbad <br> dl: -váak <br> baunk pl: <br> vkak6 bauuh 1 | hombro | shoulder |
| vatnama | bambd | bamboo |
| vasn | nombre de una fiesta en la que se baila con el bambu | nane of a fiesta in which the people dance with bamboo sticks |
| vaststhy | shacapa, sonaja (adorno hecho de la semilla de un fruto y Ilevado en los tobillos en una "fies. ta idioma") | rattle (a decoration made irom fruit seeds and worn on the ankles in 2 "language fiesta") |
| $\begin{gathered} \text { دaststhi- } \\ \text { pot? } 36 \end{gathered}$ | hacer sonar shacapa (cuando se baila) | to cause the rattle to make a noise (when dancing) |
| -vaeva | aima | soul |
| vadóva-kht | negociar | to carry on a business |
| vadbva?ooht | tienda | shop |
| -vaft <br> dl: -vafokd <br> pl: -vafoone | ```interior, dentro de, estórnago``` | interior, inside, stomach |
| -vafb -henotb | meditar, penser | to meditate, think |
| -vafogu | escama | sccle (of fish, etc.) |
| -vafot | corazon | heart |
| $\begin{aligned} & \text {-vtf6?o } \\ & \text { pl: -vaft- } \\ & \text { ?ooha } \end{aligned}$ | costilla | rib |


| $\begin{aligned} & \text {-vaft?ootsi } \\ & \text { dl: -vaf6?oo- } \\ & \text { tsiku pl: } \\ & \text {-vaf6?ootsini } \end{aligned}$ | pulnon | lung |
| :---: | :---: | :---: |
| vagii?t6 | $\begin{aligned} & \text { suguisugui, tocon } \\ & \text { (mono) } \end{aligned}$ | a species of monkey |
| vagito <br> pl: vagitone | un invitado a una fiesta, un bailarin | person invited to a <br> fiesta, dancer |
| -vagita | ir a una fiesta |  |
| vakejo?thoonag1 | Dios | God |
| -vakeratshi | estar tranquilo | to be calm |
| vekene | nuestras manos | our hands |
| -vaketsa-pho-ju | olvidar | to forget |
| vakht- ${ }^{\text {a }}$ | enfermarse, estar enfermo | to become ill, to be $i 11$ |
| vanefnaht | fruto del vanagna? | fruit of the vanag nase tree |
| vanama? 6 | arbol que da fruto que no se come | species of tree that produces a fruit which is not eaten |
| -vanaa? je | concuñada (hermana de cuñado o cuñada) | ```sistormin-law (sis- ter of sister-in- law or brother-in- law)``` |
| -vanae? Jegi | concuñado (hermano de cuñado o cuñada) | ```brother-in-law (bro- ther of brother-in- law or sister-in- law)``` |
| -(?) venori | visiter | to visit |
| -vtai | espalda | back |
| $\begin{aligned} & \text { dl: -vtail- } \\ & \text { kfor -va- } \\ & \text { nigiika pl: } \\ & \text {-variine } \end{aligned}$ |  |  |
| -varina | detrbs de | behind |
| -vtal?aapi | columna vertebral, espinazo | spinal column, backbone |
| $-(?) v \operatorname{san}$ | ```entrar (en una casa), visitar``` | to go into (a house), to visit |
| -(?) vanota | hacer entrar | to cause to enter |

\begin{tabular}{|c|c|c|}
\hline ```
vats8ogi
dl: vatsठogi-
musi pl: va-
tsogimu
``` \& gallinazo \& turkey buzzard \\
\hline -vatsi \& cocinar carne \& to cook meat \\
\hline vatshootsi? oohk dl: vatshob tsf?oohsk pl: vatshobts1? oohbh1 \& olla de estaño \& tin pot or pan \\
\hline \begin{tabular}{l}
va? agaje? \\
dl: va?aga. yaakt OR va? agazkuja? pl: va?agajaah
\end{tabular} \& cuchillo

ni \& knife <br>

\hline | va? agt |
| :--- |
| di: va?agaaka |
| pl: va?agaehi | \& machete \& nachete <br>

\hline -va?i?pipa \& tener diarrea \& to have diarrhoea <br>
\hline va?i?pimoftsi \& diarrea \& diarrhoea <br>
\hline ve?kad \& Ilanchame \& bark-cloth <br>
\hline -va? na \& mendar, enviar \& to cominand, to send <br>
\hline va?mostsind \& ley \& law <br>
\hline vt? patinah \& pucuna \& blowpipe <br>
\hline va? pasne \& cerbatana, pucuna \& blowpipe <br>
\hline vedcemaba \& cinta para el cabello de una mujer, pañuelo \& ribbon for a woman's hair, (woman's) scarf <br>
\hline vedemsk6 \& oje, 1lanchama (trbol) \& tree from which bark-cloth is made <br>
\hline vedtema? \& tronco del llanchema \& trunk of the tree from which berkcloth is made <br>

\hline | vedtema |
| :--- |
| pl: vedentam | \& ropa, tela (forma no-posefda) \& clothing, cloth (non-possessed form) <br>

\hline -vedema \& rope (forma poselda) \& clothing (possessed form) <br>
\hline vee \& act, por aqui \& herc, this way <br>
\hline vee- \& dar comez6n, picar, escocer, irritar \& to cause itchiness, itch, irritate <br>
\hline vecks? 6 \& malz, mazorca, tusa

$$
456
$$ \& maize, corn <br>

\hline
\end{tabular}

| vecths | a. 111 | ther |
| :---: | :---: | :---: |
| venf | $\begin{aligned} & \text { pago (por cualquier } \\ & \text { cosa) } \end{aligned}$ | payment (for anything) |
| -(?) vetsht | desplunar | to pluck |
| ve?e | aqui | here |
| ve?i | aqui | here |
| -ve?nij | mess que | more than |
| vefains? | más ella | further away |
| vi gi-khe | arrollar, enrollar, envolver, revolcer | $\begin{aligned} & \text { to roll (up) } \\ & \text { wrep (up) } \end{aligned}$ |
| v19ši?6gu | catarata | rapids |
| di: vísi?o gekt pl: vs si?ogeh 1 |  |  |
|  | roca, piedra grande | rock, large stone |
| -vik6? phaeve | separtirse, separarse | ```to break up (in- trans)(of a group of people), to separete (intrans)``` |
| vio-3気 | rizar (p.ej. su pelo una mujer) | to curl (e.g. a woman her hair) |
| vio-kha | mezclar (p.ej., cuando se prepara una comida o una bebida) | to mix (e.g., when preparing a meal or a drink) |
| viti- | obstruirse, taparse | to become obstructed, blocked, covered over |
| viti?-kht | rodear | to surround |
| vitsరnakats 1 | clamor | shout, cry, clamour |
| -vitsbat | gritar, quejarse, clamar | to shout, complain, clamour |
| -v1? do | fumar | to smoke (of people) |
| -v1?ko | repartir, dividir | to share out, divide up |
| voši?-ju | reventar | to burst |
|  | - ? - |  |
| -?pe | pasado remoto | remote past |
|  | 4.57 |  |

- X -

| xuu- ${ }^{0} h$ | descansar | to rest |
| :--- | :--- | :--- |
| xuukhoठtsi | domingo | Sunday |

## Part II:

SPANISH - RES fGARO

agacharse：－（？）namaka太
agalla（de peces）：6？k6 thap1？ootsi
agam 1 （ave）：deene？
agarrar：eke？－khd
agitar：phoo－kh
agrio：mameni？
agua：hooni bastante agua：pak6 el agua que inunda las casas cuando el río cre－ ce：oñu
aguaje（fruto）：iteevi？ 8 （Arbol）：iteevi？
aguardiente：ke？vigipákठ
aguja：noviig1
agutf：phii？tsi
ah1：neef
ahogarse：－（？）mónoad
ahora：ideke？tshi ahora sl：hode？を
ahumado：miftsimi
ahumar：－mitu
ahuyentar：－mb？do
aire（viento）：kočhívt
ajeno：siig1，sii？a
aji：aatshiu
ale：－a？náapi
alacr解：epiitshi
alborear：hee？kofa
alcanzar：a una persona： guu－ju
con escopeta，etc．：
－phokota
alegre：ser alegre：ke－ tshin？－varb
algo：kboneja
algodon：tshomaatshis
algunos：sii？
alinento：a？mithoठtsi
alna：－vaavt
almendra：kobnt
almidon：petgi
almohada：hiveubsbd
alto（grande）：tseinb？
los de lo alto：tsenlimi
alto（tono musical）：p8？－ mant？
ser alto（tono musjcal）： p6？manuu？－
altura：tseinoog 1 ，tegah
alumbrar：siga？－khe
all．6：neehi
alli：nee，véeth
amable：ketshii？noogi， kašonl？
amanecer（Vb）：hee？kofd
amanecer（ Nn ）：šinee
amar：－motshens
anargo：epiitshil？
anarillo：dogiiga？t？
amarrar：h1？po，－hipont
amenazar：heeve？i－link
amiga：naadó，tseemaná－ pije
amigo：ntagt，tseemsnagi
ampiri：ilvi，niftsiviiža
amputar：tuu－khd
anciana：phaipiys
anciano：phaigl
ancho：jif Jaagt
anchura：号 jaahe
andar：－hi？vu
anegar：tha？－yu
anillo：kepasi
animal：tshoveeni
aninal domestico：piida
ano: -i?šapaah1
anoche: hfpeko
anona (tronco) : ta?akt?
(fruto): taraksba
anteanoche: nok6tsaptks
anteayer: nokסtsehe?k8ku
antebrazo: -keq
anteojo: 1aipasi
antepasados (muertos) de uno: haņénémoly
antes (nts bien reciente): he?op혀의
(antes de he?opie?):
he?opie?moki
antiguos (personas de antes): opiitshomii
antorcha: neepe
anuder (hacer soga): -hiponaégi
anunciar: -ke?tsú
anzuelo: ea?phigi
añashla (pez): toki
año: kámi
añuje (animal): phfi?tsi
apacharama (arbol): kava? 8
apagar: むsak6otú
apagarse: -tsoku
aparecer: hii?ko-jk

apresuradanente: kapi
apretar: $\tilde{A} \mathrm{e}$ ?-kht
aprisa: kapi.
apto: kherne?ki?
apuntar (señalar) : heeve? i-khu
aquel: gi?ithe
aquelia: do?othe
aqui: ve?e, ve?i
aquietarse: šíiaa-
arado: hižoo? fpi
araña: paagá
arañar: soe?-kht
Srbol: avtana?
arbol que da fruto que los animales comen, y cuyas hojas se usan para teñir las hanacas, etc., de rojo: aatyada
arbol que da fruto que som lanente los animales comen: oth 60 do?
srbol que da fruto que no se come: vanagna?s
arbustos: avana? eehtya?
lugar que tiene arbustos: ke?nu?
arcilla: keva? jinc
arco iris: epa
arder (p.ej., una casa): ketshe-J́a
ardilla: menfigi
arena: kovectkove? jinh
arete: henakopasi
amadillo chico: tsa?i
armadillo grande: J̌o?n6
arpon: nobtsigh
arponear: -in 6
asegurar (poner el seguro en una arian para que no dispare): -tsa?7osti
arrancar: bedo?-kha
arrastrar: -tss?du
arrebatar: -tsi?ko
arreglar: kašonte-khe
arremangar: tabo?-khá
arrepentirse: -ifakak
arriba (en el cielo): teni

```
los de arriba (p.ej.,
los monos): tseniimi
arriba (en el rio):
depoo
arriera: kбfe
arrodillarse: ho?donaflgi -i?tठna
```

arrojar: -kapank
arrollar: vigi-khd
arroyo: tee?ije?
asado: estar asado: meda-
asar: -h6e?ma
asegurar (poner el seguro de una arma para que no dispare): -tsa?vobta
aserrar: -hedu
asi: hame?, ide?va, mi? t?
asir: eke? -khd
asombrar (dar sombra) : nuthige-khu
astilla: tesaada?6
astuto: kefekf?
esustar: -ifot
asustarse: -ifakab
atajar: gadagi?-khu
atajarse: gadag1?-jth
atajo: tet?i?apo
atalayar: - ja?nd
atar: -hiponk
atardecer: -nokokad
atarraya; fenb
atisbar: -pa?tđ
atizar (remover el fuego para que arda mas): foo-khh
atorarse (con comida):
-A?komi, haa?-khk (con bebida): hea?-ja
atrapa: 10 que se atrapa, cazando o pescendo: navii
atrapar (algo que se cae): -a?nat
aunque (no): nilpa?
autoridad: ke?vigi
ave: adoviigi
aventar: hevo?-kh6
avergonzarse: - poni
avion: adoviigimi, tseniinemi
avisar: -ke?tod
avispa: haśnimintagl
avispero: hafnimilnd
ayahuasca: hutooba?ž6?
ayer: nok6tsf
ayudante: piltekhovi
ayudar: -ifte-kht
ayunar: -i?ta
azotar: -(?)motsh 6
azote: anofgi efmanil?o
azhcar: iltshiyint
azulejo (pajaro): po?iltsi

$$
-\mathrm{B}-
$$

bache: te? ehu
bagre: kapiniigi
bailar: madott
bailarin: vagito
baile (fiesta): koontgl un tipo de baile: todet6od6
be jar: -hod62k0 bajar el rio (una canoe, llevada por la corriente): -amadu
bajarse (el rio): -i?vi
bajo (corto): matsho?
(debajo de): -náapi
bela: 6k6niigik
balanza: heeve? 1
balsa: avaanagaa?žठ
bembt: vaanama
banana: šakoo?g1?6
banco: i?tshobtsigk
bañarse: -a?pitt.
barba: -nojens
barbacoa: tel?iku
barbasco: konsapi
barrer: boto?-khu
barriga: -ii?šáa
barro: gakatmi
bastante (mucho): aneptia?
(suficiente): obpimil
bast8n: kuuhui
basura (de yuca): daapa?9dzi
batin (para moler yuca): tho?kho6nage
bautizar: -hivel -a?pitosta
bebe: JaAnk
beber: -i?d 6 dar de beber, hacer beber: -i?kot6
bebida: i?do6tsi bebida fermentada: kamobtsi
bejuco: epiipiuu? 6
bello: tyo?tyá?, kaš6va?nuf?
besar: čoo?-kha
beso: čoo?khootsi
bien: kašb?
estar bien: kacšoná-
biznieto:-i? žatova?
blanco: hefil?
blando: ño?huu?
blusa: tsenfiacha
boa: patsoviqte
bobo: nifhemoo?vigi
boca; -n6
boca abajo: estar boca e.bajo: -(?) nama
dejar boca abajo: -(?) ná. makad
bola: eetsia
bolsa: pilnat, pisnaubaba
bolsillo: pifnat
bombilla electrica: kee. tseh
bonito: kašbva?nk?, pitsf. ná?, tyo?tyla?
boquichico (pez): enai
boras (grupo idiomático): godobh 1
borde: -?aavi
borracha: kanoviipiye
borracho: kamoviigi
borrar: -a?nitsú
bosque: tebaht
bostezar: ha?aga? i- Ja
botar (tirar): -ka?pa (echar): -ps?ko
brancuia: - 6 ?k6tEapi?ootsi
brazalete: kome?
brazo: -a?náap
brazo inferior: -kes
brazo superior: -kaphiid6
brea: meanf
brillante: phedo?phede?
brincar: tuan ${ }^{\text {jo }}$
broma: lchoniiktsi
bromear: -khonifkalkud
browqus (de peces): ©

bruja: kanivevadad
brujerfa: coses de brum jerfa: kantwantikda
brujo: kanfvaldagi
buche: -a?mithostsiba
bueno: kašb?
bufeo: hamacnf
buho: popoogi
bujurqui (pez): hadeevani
bulla: kanatskif?
burlarse de alguien: -hé mo?tsto
buscar: -mizu

$$
-\mathrm{C}-
$$

cabecesr: - de? edt?
cabr"10: -hIve? Jii? 6
cabeza: -hivef
dar cabezadas: -de? ede? 6
cacacochn (ave): Y110
cacique: ke?vigi
cadsver (de hombre): kaine
(de majer) : kainse jo-
tsopiye
cadona: eplitsi?1
caerso (personas, etc.):
-hé vand
(Erboles): - 6 ?nt
cahuana: maa?gi calmana de aghaje: itee-vin- $\mathrm{at} \mathrm{d}_{8}$
cchrans de pijuayo: pipitstreatde cahuena de piña: nandan namaa? de
caimen: pegifnû
caimito (fruto): himadgibd
caj6n: histaba
calsbaze heshe en forma de ura tame: nan? de? 6
calabazo: nanaplita? 8
calcetIn: hii?pababd
celcular: heev6? i-kh
celdo de yuca: i?dakatsi
calenter: hamo?-hhe
calentarse (personas):
-a?n色解
caliente: ha?mo?
estar caliente: ha?moo?-
calmarse (agua hervida, persona, etc.): taa-jt (agua del rio): -itshi
calor: tener calor: ha?-moo?-
calvo: tsikit
callampa: te? et 6 b
cellarse: negãana-
cana: mostsint
canalebn: tsaptiag
camaron: tsaa?k6?
cembiar: tevet-kh
cambiarse: -lit? ${ }^{5}$
ceminer: -hi?vu
canino: ajtpo, ehuthy.
camisa: tsenifichu
comote: kanildef
campo (que no tiene dueño) : pinб
canaguchals iteevilcaaha
canagucho: iteevi?e
canasta: milpali6
(de thmishi): ka?no, kamb?
calda de agua: Jodoo?figu
bajo (corto): matsho?
(debajo de): -naapi
bala: 6koniigía
balanza: heever?
balsa: eváanagaa?ž6
bembá: vaínamu
banana: šakoo?g1?8
banco: i?tshobtsigk
bañerse: -a?pitú
barba: -nojihí
berbacoa: te1?iku
bexbasco: konaapi
barrer: boto?-kha
barriga: -ii?šáa
barro: gekatmi
bastante (mucho): anepetr?
(suficiente): obpimif
bast $8 \mathrm{n}:$ kuuhus
basura (de yuca): daá pa?1dzi
batan (para moler yuca): tho?khoonagh
bautizar: -hiveh -a?pitoota
bebt: Jainat
beber: -i?d dar de beber, hacer beber: -i?kot\&
bebida: i?dootss bebida fermentada: kamobtsi
bejuco: epiipiuu?6
bello: tyo?tyâ?, kaš6. va?nư?
besar: čoo?-kht
beso: čoo?khobtsi
bien: kašb? estar bien: kášoná
biznieto:-isžastova?
blanco: hefif?
blando: ño?huu?
bluse: tsenifineha
boa: petsovigte
bobo: nifhemoo?vigi
boca: -n6
boca abajo: estar boca abajo: -(?) ntati dejar boca abajo: -(?)nt.. makab
bola: ettsia
bolsa: pilnaú, piinaubábé
bolsillo: pinná
bombilla electrica: kettsed
bonito: kaš6va?nu?, pitsind?, tyo?tyb?
boquichico (pez): enat
boras (grupo idiomstico): godo6hi
borde: -?aavs
borracha: kanoviipiye
borracho: kamovigi
borrar: -a?mitsú
bosque: tebahá
bostezar: ha? aga?i-ya
botar (tirar): -ka?pa
(echar): -pisto
branquia: -6?kotazp1?00ts1
brazalete: kome?
brazo: -a?naapi
brazo inferior: -kei
brazo superior: -kaphiid6
brea: madni
brillante: phedo?phedo?
brincar: tua- ${ }^{\text {J }}$
broma: khoniilstsi

```
bromear: -khonifkakava
bronguso (de peces): -6?-
    kotwopf?coser
bruja: kan1rambad6
brujerla: cocas de bru-
    jerda: kawtraketrata
brujo: kanIvakAegi
buche: -a?mithoftsibs
bueno: kasó?
bufeo: hamaknt
buho: popoogi
bujurqui (pez): hadeevthi
bulla: kanatsfu?
burlarse de alguien: -he_
    mo?tot|
buscar: mminu
    - C -
caberer=: -de?ede?6
cabeilo: -hive? Jii?8
cabeza: -hfvef
    dar cabezaũas: -de?ede?6
cacacocobn (ave): jilo
cacigue: ke?vigi
cacever (de hombre): kai-
    n6eyoverg
    (de mujer): kaineejo-
    tsopzye
cadena: epiitsi?1
caerre (personas, etc.):
    -be?%mak
    (Arboles): -a?nd
cahcana: naa?gi
    cabuana de aguaje: itee-
    vimac?de
    cehirata de pijuayo: pi-
    pijutman?de
    cahucrs de piña: nanda-
    namea?de
    calda, de agua: jodoo?figu
cancion: hada? phostsihd
cendela: 8kठniigi
cangrejo: ipado?hi
canilla: -kaavaí
canoa: hiftú
cansado: estar cansado: ma?tsuu?-, ma?tsanab-
cansancio: me?tsu?, ma?tsákatsí
conser: in6-
cansarse: me?tsenabu, mab?tsa-
centonte (m): hada? phobtsigí
(f): hade? phobtsipiye
cantar: -hadt? pu
cantor un dio: -tshopd cantar un dío antes de una fiesta: - pokot
cantaro: itsaa?ni?\{yb
(pare preparar comida): akoka?
(para hacer coca): hiim bi? E?ijo
ceña breva: iftshiks
caña (de azacar): iftshimá
capaz: themely?
capibara: ho?bú
capillejo (canasta): mípals 6
capitan: ke?vigi
cara: migi
carant (palmora): kadab
carbon: čačh1
carbonizarse:-čačhikaß
csrcel: hipono6tsi?oohu, tsaphoogi?ooht
carge: tsa?tho6tsi
carger: -tse?tú

carne de animel: pišant
carpincho: ho?bư
carpintero chico: tyodde
carpintero grende: tshobff
cartucho: Bkoniigitu
casa: paniltsi
casarse: -to?valaa?nt
cascabel: ona?k6
cascara: da?mi
caser10: panitsimd
cashapona (palmera): po?pobta?
cashapona: po? pobtak 6
catarata: visixi? 6 gú
catarro: hobts1
catorce: feesparh6 po?tsadvagaah1
cauchero: kon6ogitovoo? vigi
caucho: lion6ogi
causar: -hi?no
cavador: hizoo?vigi.
cevar: -hi?žo
cazabe: maa?mi, meegi una especie de cazabe: hee? ñá \(^{2}\)
hacer cazabe: -koví
cazador: minopiivigi
cazar: -minápavi
cedazo: tshid6ogif
ceja: - inigaht
cementerio: niginománú
ceniza: 6k6nitigiyiht
centro: hiivé, po?tsatat en el centro de: hiivana
cerbatana: va?pasnd, va?m paanahu
cerca: aijanat?
estar cerca: aijanuu?-
cerco: avoठtshi
cerdo: hapiitsf
cernir: -i?tso
cerrar (la puerta, un
hueco): -(?) támb
(una quebrada): -ith
cerro: tégeha
cetico (3rbol): teavi? t
cicatrin: tetuhq
cielo: há? ih1
ciempibs: jada?1gk
cierto: phobdend
cinco: st?osi
cinta: vedeembla
cinturón: anobgi elinta
circulo: papasi
clamer: -vitsona
clamor: vitsorakats 1
claramente: hifkoo?ni
claro: hi?l:8?, pa?oogehi claro del dia: šíņe
clese: esa clase: ide.
kee?tsi?A, idelsee?tsikeva
clevo: thootshif?o
coat1: kapiltsh1
cobarde: kefekil? yovigi
cobije: paginobtsih
coca: hiibl?
centaro pare hacer coca: hiibi?e?iyo
lugar donde se hace la
coca: hibii? \({ }^{\text {cte }}\)
cocina: a?mithobtsiht
cocinar (cualquier cosa) : -akћ
(carne): -vatsh
(jugo de yuca, para se-
carlo): -i?voota
cocinera: a?mithobtsirots 8
cocha: hened
codo: -pidảadeti
coger (p.ej., fruto de un frbol): -haa?
cogollo (de palmera): ponatinayii? 6
coje: t86jovipiyb
cojo: t 6 万jovigi
cola: -tshíp1
c6lera: nágí
colgar: -kova?nd
colibri: plemf
colina: tegaha
colmena: 11mu? 6 (en el tronco de un atrbol): hokoome? 6
colorado (rojo): kedavil?
colpa (abrevadero de los animales silvestres): i? dákae? do
columna vertebral: -v*ini? aapi
collar: ootshi
comadre: tseemanáplye
comadreja: tsofv6
combate: khtkakavatsi.
comedor: a?mithoठtsiht
comejen: kamadd
comenzar: -ke? jo
comer: -a?mitu
comer carne: -క̌
comer fruto y cosas dul-
ces: -khfi
comezón: vee
comida: a?mithobtsi
como: heta?-, hiive?-,
-pee?, -? E?
¿c5mo?: hide?hee ¿ctmo estan ustedes?: hide?heeht
compadre: tseensnagi compeñera: néad6 comprar: givenf -aa?ni con (por medio de): -gt (acompanamiento): -nec ¿con quien?: keene
concuñeda: -vanaa? 36
concuñado: -vanae? 3 jeg
conducir: -hanapi
conejo: ginomomihiigl
conga: manegf
conocer: -manad -to?
consejo: šutlehobtsíha
conseguir: -to?vtit
construir (une casa): paniftsi-kh
contador: ser contador de cuentos: tsopoko-?1p1-
contar (narrax): -ke?tsa
contento: estar conten-
to: ketshin?-vfef
contestar: -hap
convertirse: -kt? 3 b
coquear (comer coca): hiibi?
corazon: -vafob
corona (de la cabeza): -hive? \({ }^{\text {sisi }}\)
correcto: hamee?ag?oo
corregir: -ke?tsh
correr: -he?ho,-E? うo
cortar (por la mitad) : kio?-kh
(cosas pequeñas): seu?l:hú
(cosas grandes): tuu-khई
(nedera, con hacha): -mb17h6
corteza: da?mi, debna (do opecharoma): kava?
corto: matah6?
cosa: ii?ñ
cosechar (yuca): -hekont
coser: -tsanisa
cosquillas: giigofi
cosquillear: giig6?1-kh*
costilla: -vefb?o
costumbre: henae?ápii?oo
coto: oove.
craneo: -hive?pahi
creador (dios): fanígi
crear: -ke jo?th
crecer (plantas): .ophe
creer: kakkus6:i-kht
creo: mikašo, -eke?tsi
criada: na?ntininaado
criado: na?naminaag1
criar (animales): pldo-khú
criatura: jaána
crudo (de fruto no meduro): eni?
cruzar (un rio): -haspd
cuaderno: te?ami
cualquiera: tsiki?na?o
¿cuando?: hidee?tsi
¿cuánto?: hide? anepút?, he?e aneptit?
cuatro: postskávagaehi
cubrir: -(?) ttゃ§
cucarache: tood8h1
cucusa: peedógi
cuchara: khoठtsigu
cucharita: khobtsigayá?
```

cuchillo: va{agaja?
cuello: -iñoch1
cuento: kejoo?ketsihu
lo que se cuenta acerca
de la coca mientras se
esta tomandola: hiibi-
?E?asinoh|
cuerda: hiponaku?6
cuerno: -iivil, -hen\&ko-
11?0
cuero: eêmh, ef̂nam11?o
cuerpo: -nan\&
cuidar: -ja?nG
culebra: onk?k\&
cultivar, limpier terre-
no: himiltsi-khu
cumala (el fruto): hoof
(el frbol): hoou?t
cumare (palmera): komaa-
gi?6
cumbre (del techo de la
casa): pani{tsi?ep6?
cuñada: -nineavu
cuñado (de hombre): -ná-
kbotsk
(de mujer): -tsee?gi
(merido de la hermana
de la mujer): -milgi
cureca: ke?vigi
curacion: naikoog1
curandero: naikoogigi
curar:-nai?k6
curuhuinse (hormiga): hu-
dutgg
- CH -
chacra (nueva): kepinf
(cultivada): Jokede
(vieja, ya no usada):
Jakádem1
chachalaca (pajaro): ka?-
tad\&k8
chembira (palmera): komaá.
gi?*
chemuscar: -a?venomu
chancho: hepfitsf
chano (bebida de platano):
šakoo?gipi
chopuzbn: dzoo-jb
chaquira: k5?ve
charapa: haddah{
cherco: gtkakmi
chejo: mi?žo
chico: oo jayta?
chicha: mếme?6
chimbils: pitshiigi
chocar: phtti-ju
chonta: ponabnayii?6
choro: kapaed6
chorrear: -0?k6m6
chorro: jodoo? Ifgh
chosno: kotsi
chupar: soo?-kha
churima (Erbol): pifža?*
(fruto): pl?ău
churuco: mokafgi
- D -
daledole: očh{
danta: anobgi
dar: -aa?ni
dar de comer (cosas que no
sean carne): -otsh6
dar de comer carne: -šoth
dar comezon: vte-
dar de beber: -i?lrota
dar a luz: Jaf́ná-khu
dar vergüenza: ponuu?-

```
\begin{tabular}{|c|c|}
\hline de: -kh6 & desconfiar: meni?vu \\
\hline debajo de: -napl & ```
descuartizar (carne): -he-
    df
``` \\
\hline dCbil: ser debil: ma?-tsuu?- & desear: kanimapo- \\
\hline decepcion: sobns jakceni & desenvolver: bu?-kht \\
\hline decir: -kemd declarar: hiisko-lhut & ```
deshinchar (de una herida):
    haa-ju
``` \\
\hline dedo (de meno): -keg & deslizarse: tshigi-ju \\
\hline (meñique) : epo?patsigt & deslustrado: me?koni? \\
\hline (de pie): -hii?ptgu & desmayarse: taante-jौ \\
\hline deformado: ser deformado (al nacer) : pi? 196 m & desmigajar: piš1?-kht \\
\hline ```
dejar: -hino?kaa, -hi?no
    (botax): -pl?lo
    dejar boca abajo: -(?)nam
    makak
``` & ```
desnudo: estar desmudo:
    tsik1?gi-
despacio: kenee? Ja
despejarse (el cielo):
``` \\
\hline \begin{tabular}{l}
delante: -ipe, hive? \\
ir delante de: hiver-khú
\end{tabular} & ha?ihf oo kaş?
despertar: -aphotu \\
\hline ```
delgado: kha?gi?
    ser delgado: lrha?gii?-,
    ooje-
``` & despertarse: -ap反kad, -apoont \\
\hline delicioso: ketshi? ser delicioso: ket & despierto: estar despierto: -apo \\
\hline demasiado: kaš6maka & desplumar \\
\hline dentro de: -gikó, -vafb & despreciar: -i?tsu \\
\hline derecha (contrario de izquierda): kaášo?osi & ```
despu6s: epo?khb, epo?na,
    tsim{nd
``` \\
\hline ```
derecho (no torcido):
    tsl?kif?
``` & \begin{tabular}{l}
destetar: -i?tot \\
destrozar: bedo?-kht
\end{tabular} \\
\hline derramar: -6no & detres de: tsimi, -vatine \\
\hline (pare lavar) : soo-khú & devolver: -hels? dote \\
\hline derribar (p.ej., un trbol): -Ano?ta & dia: hee?k6 \\
\hline desarmer: bu?-kh & ñana): sfper6 \\
\hline desatar: bu? & diablo: ižo \\
\hline descansar: xuu-jta & diarrea: va?i?piaobtsi \\
\hline descargar: -kop & tener diarrea: -va?i?pipa \\
\hline descascarar: lhovak6?ikht & dibujo (en la cara): tsaagi. \\
\hline descascararse: khovakb?i-罍 & dice: se dice que: -tsa, aitsabo? \\
\hline
\end{tabular}
diecinueve: situ? \(k\) hh po?tsás.vagani
dieciocho: situ?akh6 migeakú? sagd?
dieciseis: sftu? 6 hh sagú
diecisiete: situ? Sirh6 migaekú
diente: -one
diez: pa?osfkuat
difficil: kenak 6 ?
dinero: kopteginf, kopaag1
Dios: vekejo?thoonagi
direcci8n: hoke? pe
directamente: tsi?1s11?
dislocax: t86-kh
dislocerse: t86-y̌u
disminuir: hacer dismi. nuir: ooyankh
dispersarse: šaa-je
disputar: -naa?ni
dividir: -va?ko
dobler: ñe?i?-liha
doblarse: ñe? i?- Ј̆́
doce: fee?pkhb migaaki
doctor: ti?phootsigi
doler: ke?vil?-
dolor: ke?viliktsi
dolorido: ke?vi?
domingo: xuukhootsi
donde (estan ..- en el lugar de, a): \(-k 60\)
idonde? hense ¿por dónde?: hesegi--heeva?one
dondequiera: kaašo ja?ipithéanee
dormilon: kenelf?
dormir: - 1 ma
dos: migaekt
dueña: minkad8
dueño: minteg
dulce: potsitsti? ser dulce: potsitsuu?-
durante: mikovegi
duro: ta? dt?
\[
-E-
\]
echado: estar echado (acostado): -t6?mu, -hepita
echar (botar): -pi?ko echar agua al fuego: dzaam kha echer agua pera levar: šoo-khl
edad: komilk
61: tsá, etgi (ese hombre): migi
elegante: kašbva?nta? ser elegante: kaš6va?-nuu?-
ella: ts6, - jots6
ellas (dos): atmupi
 (dos): mbmusi.
(lejos): napathe
emberazada: estar embarazada: ver: encinta
embotado: nil tsb?vii? tst
emborracharse: -kent
embrear: medni-mkh
embriagarse: -kam6
empezar: -k6? ys
empleada: na?nánináad6
empleado: na?namineagi
empujar: f1i-khe
```

en: -nth, -gi
encajar (meter una co-
sa en su lugar) : -h8?-
ku
encarcelar: -hipond
encender: keetse-kha
encendido: ketshii?ni,
ketshii?tsu
encima: -hifp6
encinta: estar encinta:
-iph, ip6otsova., ka-
nak6-
hacer encinta: -ipoti,
kanaakokhi
encoger: dzu?-30
encontrar: gru- ${ }^{3}$ b
encorvado: papksi
enderezar: tsiki?n6e-
-khit
endulzar: potsiftsa-kha
enemigo: i?navii?tegi
enfadarse: -i?nt, nagi-
nagi-ju
enfermarse: valrha-yd
enfemo: estar enfermo:
vatháyú
hacer enfermo (con o-
racion): gtbe-kht
enflaquecer enormemen-
te: -padi
enfrente de: estor en-
frente de: -hfve?ng
enfriarse (una cosa, p.
ej., una conida): taa-
- ラれ
enganchar: eke? -lind
engañar: soone-jú
engordarse: phede?-
engusanarse: enitsi-
en jambre: nafápa
enloquecerse: -a?mbant

```
```

enmohecerse: matsi-

```
enmohecerse: matsi-
enojarse: gadya?-ju
enojarse: gadya?-ju
enrederse: -kantáa
enrederse: -kantáa
enroller: vigi-kha
enroller: vigi-kha
enseñanza (buena): ke?-
enseñanza (buena): ke?-
    tsootsinh
    tsootsinh
enseñar (dar enseñanza):
enseñar (dar enseñanza):
    -
    -
entonder: -he?mi, -hemo?-
entonder: -he?mi, -hemo?-
    tu
    tu
enterrar: -haa?ni
enterrar: -haa?ni
entonces: phae?mi?oo,
entonces: phae?mi?oo,
    ob pimímí? 00
    ob pimímí? 00
entrar (en una casa): -(?)-
entrar (en una casa): -(?)-
    vá8
    vá8
    (en una casa, una canoa,
    (en una casa, una canoa,
    un hidroavion, el agua):
    un hidroavion, el agua):
    -hokt? phaavt
    -hokt? phaavt
    (al agua, y salir rápi-
    (al agua, y salir rápi-
    demente): dzoo-ǰa
    demente): dzoo-ǰa
entristecerse: kh6ni?a-
entristecerse: kh6ni?a-
    potgí-
    potgí-
enviar: -va?nu
enviar: -va?nu
envidia: kanimapo?
envidia: kanimapo?
envidiar: kanimapodgi-,
envidiar: kanimapodgi-,
    kanimapo
    kanimapo
envidiosa (persona): Lani-
envidiosa (persona): Lani-
    ribagof
    ribagof
envolver: vigi-kht
envolver: vigi-kht
*poca: hiva
*poca: hiva
    Epoca de lluvia: atshi-
    Epoca de lluvia: atshi-
    mutheba
    mutheba
equivocarse: -kanant
equivocarse: -kanant
esa (olla): mi?jyo
esa (olla): mi?jyo
escalera: i?šoठtsí
escalera: i?šoठtsí
escama: -vafogu
escama: -vafogu
escapar: -er yo
escapar: -er yo
escarabajo: hilm6
escarabajo: hilm6
escerbar: -hiržo
escerbar: -hiržo
escoba: panomotsikoo? th,
escoba: panomotsikoo? th,
    boto?khooteskoost
```

    boto?khooteskoost
    ```

fantasma: ižo
fariñe: tso?vomú
farol: heped
fastidiar: -tsot
fatiga: ma?tsaakatsi
fe: tener fe: kaskusర?ikht

Eeliz: estar feliz: ke-tshii?-vtif
feo: tso?ko?
fermentado: ka?makgiht, ka?na-
ester fermentado: ka?mefe?
fermentar: ka?ma-
fiambre: tshovino6tsi
fibra (de palmera -chambira) : komee?tsi
fiel: kakst
fiesta: k6ontgi hacer una fiesta: kbo-negi-ju
fiesta del bamba: vaAnu
fijarse en: kavii..t8?
filoso: tsk?vii?tsú
fin: de?po, depo?
fino: sut?
flaco: kha? gi?
flauta: fidod6
flecha: noftsigh
flor: giivi
fluir: -o?kסw
foco elfctrico: kettsef
fondo: hi?pok6
fortalecerse: inGavi?-
žat́pee? -
fosforo: heepemi
foto: JZkamiftsi, izo
frazada: pagimo8tsind
freir: saa? du-kht
frente: -aigi
fresco: tea
frio: hispifi?, taa
hace frio: hi?pli?fu
esta/tiene frio: hi?pi1?tsu
fronda (de palmera): t*huu? 6
frontera: hipohibedo?khákani
```

frotar: ñoi-khd

```
fruta: niski
fruto: fruto del aguaje o humexi que se ha enterrado pera medurarlo: tsagiind fruto del okh6odo?E: okh6odoú fruto del venasna?e: vanafnaht
(especie de almendra): doova
fuego: \(8 k 6 n i j g 1\)
hacer fuego: foo-kht
fuente (de ague): Yodoo?flgt
fuente de aladera en la que se pone la yuca pera moler1a: tho?khootsigú
fuerte: fa?ki?
(ruido fuerte): po?mand? (dolor fuerte, dormir fuerte): ke?vi?
funar: -vi? do
futuro (sufijo) : -vt

gajo: sadun
galline: kadat
gallinazo: vatsoog1
gallo: atstagigi
ganador: athe? povigi
ganar: -ha?pش
ganas: tener genas de comer carne: moniftsi--khe
gancho (para el pelo): hive? pasi (en la ropa): eke?khobtsi
garganta (por dentro): -naa?kEp1
(por fuera): -b?kठt*ap1
garra: -hi?tavi
garrapata (insecto parasitico) : kopaagi
garrote: avanai
garfa: hay garia (esta lloviendo un poco): ft?vajepa
garza: Joimokb?to
geto: miiši
gavilkn: peegi
gente: indavi?žes gente blanca ( sg ) : gim nomominaagi
golpear: -(?)mbtsh 6
gome: tshe?thoond
gordo: ke?inlne
ser gordo: phe?dii?-
gorila: šl?tyu
gotear: -0?k6n6
gracias: kasco?n6pikh
grande (sufijo) : kob*
grande (hoja, etc.):
Ji. Je? ami
grasa: phedee?katsi
grillo: tsii?tsi?6
gripe: hootsi
gritar: -vits6nd
gritar de alegria: tsaa-- 36
grueso: J1才aag1
grupo: -koomi
(tribu, etc.) : sii?
guabas (fruto): en \(8 \circ \mathrm{~g} 1\)
guabo (trbol): enbogi?
guacanayo: anfad6
guansoco (Srbol): kon6ogite
guara (aguti): phii?tsi
guardar: -hi?no
guerra: khakakavetsi
guiar: hive?-kha
gusano(que se encuentre en los arboles ): na? 1
(que se encuentra bajo la piel de \(10 s\) animales): eniftsi
(lombriz): omaepi
gustar: kaešoja? i-kht
por gusto: tsik1? f
\(-\mathrm{H}-\)
habitante: neeimil
hablar: -novigipl hablar mientras se esta dormido: -a?malsan
hace (tiempo): kovegi?, kovegii?k6
hacer: -kht
(causar): -hinno, hino?
hacer amistad: panfagi-\(-36\)
hacer cahuana: maa?gi-kht hacer calor: ha?moo?ft hacer caso: kablus8?i-lkh hacer cazabe: -kovi, naa?-ma-kht
hacer entrar: -(?) vánotu hacer (tostar) fariña: tso?vont -ka?v6
hacer una fiesta: kooncgi-je

hombro：－vaakt，－vaakb－ bat
hondo：khavakt？ ser hondo：khavaktit？－
hongo：te？etcbe
horcón（árbol）：kilmi－ aaku？\({ }^{8}\)
（madera）：hifiniaakt
hormiga：pilme
horqueta（para coger fruto de los arboles）： ma？v6
horquilla（para el pe－ 10）：hive？pasi
hoy：moohsas
huacaph（arbol）：hilni－ aaku？ 8 （madera）：hilmiaaka
huacrapona（palmera）： （el árbol，sin cortar）： hasja？
（el tronco，derribado）： hasjabu
huahuasepa（lange）：nob－ tsigh
huangana：ameviid g＇s \(^{1}\)
huapo（mono）：ma？vo
huasai（palmera）：dyu－ 11šik6
hueco（en una casa，en le ropa）：das？ 6
（en la tierra）：t＊？eht
huerfana：moxeed 6
hutrfano：moketg 1
hueso：－atpi
hueso de la alegria： －inia
hueso del tobillo：boo－気告
huevo：esteh，efve，efvi poner huevos：－（？）na－ makad
huito（el tronco）：nat－
na？ 6
（la tinta）：nána
huitotos（grupo idiomá tico）：muinani：tho？－ khưm
murui：deps？mink
hemedo：patshanu？
humo：iftsho
hundir：sabo？－khe
hundirse（voluntariamen－ te）：sabo？－ブa
（sin querer）：haa－
hungurahui（tronco）：po－ nabna？
```

                                    - I -
    idiona：noth naa？kt

```
igual：hent
iguana：manna？o
iluminar：siga？－kht
imaginar：－（？）t kophaava
impedir：suu－kht
importar：no me inporta： khe？mi
inclinarse：kabudu？－ja
incomodar：－tsot \(\mathfrak{l}\)
indicar：kuht？-kh 6
inferior：parte inferior： －naap1
inmediatamente：kapikuu？
insecto（grillo）：tsii？－ tsi？ 6
inslpido：marneni？
inteligente：persona in－ teligente：hemoo？vigi
interior：－vats lo interior del fruto： ginilkaß̂vafo
interrogativo：haphe．
```

intestinos: -ii`?skco
inundacion: causar una
Inundacion: kacháve?i-
-lsht
inundarse (en une canoa):
tha?-j^{
invblido (deformedo):
pi?1每6
invitación (a una fies-
ta): isvi?8 (une pelo-
ta de tebaco que se re-
parte entre los invitam
dos)
invitedo (a una fieste):
vagito
invectar: go?-kht, -ha?-
pt
ir: i?p1
ir a una fiesta: -va-
gita
ir delante de: hive%-
-kha
ir a treer: -te?khi
iropai (palnera): kakdon
?8
irritar: veem
isango: peedogi
ishanga (planta): eve-
tsiitt
isla: tetyoi
isula (hormiga feroz):
men6
izquierdo, -a: apa?mi-
?051
-J -
jabal1: haplitsu
jabon: hipho6tsigt
jalar: khe?-khú
jalar de la tierra:
fits6?-kha
jebe: kon6ogi
jefe: ke?vigi
jugo (de piñia): nanáaná
jergon (vibora): onG?k\delta
j6ven: 6k%gilgi
juego: me?miftsi
jugar: -(?)mba1
?aank
(de yuca dulce): i?dGluaa-
ts1
jugueton: kG?nem{ki?
ser jugueton: ka?meni-
k11?-
juntamente: pa?and
juntar: Jip-lchú
juventud: 6?lc6gigiikt
labio: -n6?aavi
lado: al lado de: -a?nd
ladr6n: hatmAmin*ag1
lagartija (del monte): so-
videk%
lagarto: k6?oogi, pegiinú
lago: hened
16grimas: 1misaand, faip%
Iamer: -pt?do, mihi?-lchd
lamparina: heeped
lamprea: itsiitsi
lancha: blobnfigimy
lamza: nobtsigt
16piz: tsags1?0
largo: tseino?
larva comestible: ots6ond

```

1atigo: anobgi efma
lavandere: hiphobtsipije
Lavar: -hiph
lavarse: -hipphaava
Ieche: i?nf?aent
leche caspi (el arbol):
evitsరogi?6
(le sevia): evitsbogip1
variedad de leche caspi (mas grarde): tá-
naaka? 6
lechuza: popóogi
Leccion: heeve? ilchootsi, tsaagikhootsint
1eer: heeve? i-kh
Legitimo: káš6
lejos: javakta?
lengua: -e?heepe
leña: itsits \(\delta\)
letrina: lugar que sirm ve de letrina: ihihu
leventor: xobe?-lch
levantarse: mitsha-j \({ }^{6}\)
ley: va?mostsind
Ievenda: kejoo?lsatsihu
libelula (insecto): hizapoogi
libre: ovi?
libro: te? amil
Iigar: -hiponk
limite (geografico): hipohikio?khothob
limpiar: -a?mitsf linpiar terreno: hi-miftsi-kht
limpiarse (aclararse, p.ej., agua): -tsh

Iimpio: kašó?
(libre, p.ej., una chacra, una trocha): ovi?
lindo: kaš8va?na?, pitsind?, tyo?tyd?
linterna: kectse?oova
Ifquido: -?aena
lisiarse: t88-j̧
liso: he?ni?
listado: ser listado: tsaagibana-
liza (pez): taa?giu
lobo: Jeevit
lodazal: gácabmi
lodoso: tso?k6?
loma: tegaht
lombriz: omápi
1oro: Jobda
luciernaga: hiviigi
lucha: khakekavatsi
luger: asina
lugar que tiene arbustos: ke?nu?
lugar donde habia una casa: panamint
Iugar donde hay hierba: himiftsi?6
lugar donde se he quitado la hierba: hiniltsiliháktaini
Juger donde so encuentra la sachavaca: anobgi?asi lugar donde se sientan los dueños de una fiesta: patsagiloovt el Lugar de: nehftshint
luna: keegi
Iustrar: ñoi-kh
Iustroso: phedo?phed.6?


Ilamar: -mana
llanchane: va?kat
(tronco del trbol): vedems?

1lanto: saniiktur
llaruma (srbol): taavi?6
Ilegar: tho?-Je
leegar de otra parte: -i? kotán'(nu)
1leno: potshi?n6 estar lleno despues de comer mucho: ke?pil?-
llevar: -hantpi
llevar preso: -hiponú
llorar: -kani
lloviznar: fa?va号pa
llueve: fá?vu
lluvit: ff?vobtss
- M -
macambo (arbol): nana.. piitat?
(fruto): nenapfitfi?8
machacar (berbasco para que salga el veneno al agua cuando se pesca): -0? dontí
machete: va?aga
macho: atsfagi
nachucar: tho?-kht
madera, trozo de: avtana? © vuudh, avanavuud
madrestra:-hansvae? je
madre: afme, -hanka
nadrina:-hansvaa? ye
madrugada: hee?kont
naduro: motshoovigi
maestra: ke?tsobtsipife
maestro: ke?tsobtsigi mafala: 88na:e
nafz: vedka? 6
majus: nadpa
mal agtero: mapitsi
mal humor: naagi
mal olor: natshi?
malcriado: kameal?
maleante: natsfkatsigi
malo: matshiva?nt?
maltratar a una persona: -(?) m6tsh6
mamá af́me, aanib
manantial: jodoo?figh
mandamiento: šuukhakaamint, fuukhootsihu
mandar (dar 6rdenes): -va?nd
mandibula: Lka?aket.
mandioca: kab̆ni
manguare: ko6m6
manf: matshaaḱ́ romper la csscara de manई: -(?)moth6
mano: -k8
manta: paginobtsih
mantoca: phedee?katsi
mañana: atpant
pasado mañena: sipek6
la mañana: naapi? 6 ?
mañoso: kefelf?
máquina de coser: konoogi?1pi
mar: t6moot
mareca: čhe?ke? 0 , čht?... keh
marañon (fruto): añaah

naravillarse: aa- \({ }^{\text {an }}\)
marido: natube, -ǰígi

mazorca: vellat? 6
mecerse: čo? chivu-Ĵ
media (ropa): hii?pabE. bú
medicina (cualquiera): ti? phootshi (que da fuerza): \#̃eke?khootsi
medico: ti?phobtshigi
medio: po?tsasva, hiivu por medio de: -gi
medir: heeve?i-kh6 palo que se usa para nedir: heeve?if
meditar: -vafb -nenota
mejilla: -khekhi
mendrugos: -e.fpa
menor (m) : epo?patsigi (f): epb? patsipiys
mensaje: tsop6k6
mentir: sobne-jo
mentira (una palabra mentirosa) : sosh \(\alpha\)
(una accibn mentirosa):
soone jakSami
meñfaue: dedo meñique: em p6? patsigu, epoo? págu
nercancia: koneetsi
mermar (bajar al nivel del agua en el rio): -i?vt
nes: ketgi
mesa: teegk
neter (algo en agua): -aph 6
(una cosa en su lugar):
-h6?ku
(en la tierra un palo): go?-khu
mezclar: vio-kht
mezquinar: -motshans
mi: 46
mico (mono): ma?vo
miedaso: (Aj): kefelki?
(Nn): kefekil? Jovigi
miel de abeja: ifmu:optr6
mientras: -a?nd
mirar: -pa?ta
niserable: motsho?kס?
mitad: apa?mi
mochilero (pajaro): tovifigi
mocho: pevuude
mojado: petshtnu?
estar mojado: patshinuu?-
mojar: -ovo?tu
nojarse: -o?vu
mojoj6is (gusano comestible): ots6oma
moler: tho?-khí
molestar: -tsot 6
molleja: -googif
momento (en ese monento): hold?pe
moneda：kopagihs
mono：choro：kapGad
chosna：kotsi
pichico：pitsheeds
monte：tebaht
montete（ave）：hsadrudaí
morder：－emt
mordicar：स̈e？－弱
morir：kainee－ya
mosca：heett
mosquitero：mootsine
motelo：hasadahi
moverse：šoko？－ja
noza（criada）：na？nt－ minéado
muchacha：mā⿹弓冫欠ad6
muchacho：8kogiqgi
ruchedunbre：anepuu？\＆ú
muchos（de cosas）：ane－ puu？
（de personas）：aneví？， anevil？
mudo：nilnovigipivigi
mujer：ináad
una（mujer）：sapije
mundo：hipohi
muñeca（del brazo）：－kat
murcielego：pitshfigi
muslo：－ 1 phi
musmuqui（mono）：noka？－ gi
－N－
nacer：－keryo
nada：kaf
nadar：－o？vapt
nadie：no hay nadie： nil keent in（zá）
nalgas：－heeds
narcotico：hutooba？ 2 है？
narrador：tsopoko？1pi－
narrar：－ke？tsu
nariz：－hitak6
naufragar：tha？－ja
neblina：iltshá
negociar：vadठva－kha
negro：tsaph8？
nido：pagizb
nieta：－i？žaátová？
nieto：－i？žaatove？
nigua：itshiit6
niño：jáná
no：nif，nifk6，niflthe mi
noche：naepi
nombre：iivt
nosotros：（exclusive）：
fa？
（inclusive）：mun？
norte：deposo
noticia（buena）：tso－ potik6
nube：iftsht
nublado：estar nublado：
háfini tsaph8？Jf
nuera：－i？ging
nueve：sfoosfly po？tsáa vagaeh1
nuevo：be？
nunca：nilva eke？tsi
nutria：husbod6
－N
ñame：offiná

\section*{\(\pm 0=\)}
obediente: kheme?ki? ser obediente: khene? -kii?-
obscuro: tsaph6?
observar: -
obstruir: viti-
ocainas (grupo idiometico): uvohsa: da?ve. nt dyohxaya: kovejaavi
ocioso: ino?k6?
ocurrirle una cosa a alguien: - Jaa? 6 ?
ocho: si?osikhठ migaakt? sagt?
ofrenda (de carne): matd6
oldo: henako
ofr: -he?nt
-je (6rbol): vedemak 6
ojo: -ini
oler (exhalar un olor): -(?) m 6 kh 6 (percibir un olor): sij?-kh6
olor (desagradable): matshi?
(agradable): ketshi? (p.ej., de comida): men1?
olvidar: vakttsapho-jf
olla (de barro): itsaa?ni? 5 \% 6 , its? (de estaño): vatsho6tsf?oohú (para preparar comida) : akalca?
ombligo: -e? phode
once: fee? pakh6 sage oraci6n: nailsooginu oreja: -henalr6
orejera: hendropesf
orgulloso: dyoomeft?
orina: a?eobtsi
(forma poselda: -a?\&aan7)
orinar: -a?ed
ortiga: evetsiita
oruge (larva): hat*elf
oscuridad: tsaphovad
oscuro: tsapho?
oso hormiguero: pilgi
otra vez: apost
otro: apkep 1 otro tiempo: apapivad

\section*{- P-}
paca: nakpt
pecifico: lešonđ? ser pacifico: kešont̛? -
padrastro: -hanigii? Je
padre: ad?pe, -hanigi
padres: -hanigine
padrino: -hanfgii? \({ }^{\text {fe }}\)
pagar: giveni -aa?ni
pego (por cualquier cosa): ven1
paisano: hamiin*
pdjaro: ko?piidu
pala: Jogi?khobtsih́
pelabra: nobtsind, nohd
paladear: nihi?-kh
palidecer: -padf
ptlido: hefii?Gmf
palmera de pijuayo: pipiig1?6
palo: avsanai palo que se usa para medir: heeve?if
palo pera machacar: tho?khobtsif
paloma: hihuuu
pan: paa? 6
pan de yuca (cazabe): maa? mu
panal: 19nu? 6
panguana: toopat
pental6n: iphsuukd
pantano: gekacni
paña (pez): mepolk 6
pañuelo (pare la cabeza): vedsembibu
pepa: a\&?pe
papel: téacmi
parar (estar de pie, paredo): -i?tठat
parecerse: -hiivk?
parpedo: -inimii? 6
partir (madera): khova? --rhe
partirse (descascerarse un fruto, etc.): khova-

pasado mañana: slpeko
pasar (adelantar): -ha?pt, -haapt
(sin ser visto): ktsiive? i-J゙
(ocurrir una cosa a alguien) : - Jaa? E?
peso: dar un peso: -hlevu
peta: -hii?pk
patear: tyugaš1?-khe
patria: hipohi
pancar: toviligi
peujil: koviitsi
pava de monte: šbh6
pavo: seho
pecado: matshivee?naht
```

pecho: -631:6tgapigu
pedir: mhemf
pegajoso: potsand?
ser pegejoso: potsánuu?-
pegar(se): -tsa?tu
peinar: -hea?ns
peinarse: -haa?phaavu
peine: itshijtagt
peje torre (pez): makab-
pa
pelar (fruto): me?k6
pelea: khalsal䬳tsi
pelear: -kh{lcakadvá
pelo (del cuerpo, de ani-
mal): -tsilinf
(lareo -- cabello): min
ve? jii?6
pelota: eetsik
peluquero: hivelpl?khob-
tsigi
pellizcar: -tshi?to
pendiente: hendropasi
penser: -varb -henotu,,
isaf`\mp@code{i-japhaavb}
pequeño: oojajá?, iiv\&-,
-j\&?
perderse (alguien): -Ira.m
n{4\&
(algo): -ntno?phaevt
perdiz: haagu
perdonar: -motshbn{
pereza: in*
perezoso (persona): {n6-
mináag{
perezoso (el animal): po-
tsháad6
perforar: foto?-khf
perico: tyugi{?6
pero: mikt

```
perro: \(\operatorname{linf}\)
perseguir: kavii-t8?
persona: inßavi? žániǵ otras personas: sa?a
pesado: hižanelgi, hižani?
ser pesado: hižanii?-
pesceado: 5moogi
una especie de pescam
do: konaato
pescador (con anzuelo):
ee?phikheki1? jovigi
(con berbasco): 6?d8-
mek11? Jovigi
pescer (con anzuelo):
ee? phi-kh
(con barbasco) : -o?do-
nil
pestoña: -ini?avi
pez: 3moogi
boquichico: enal
pezon: -i?nimu
picaflor: pi?mi
picante (p.ej., aj1):
ke?vi?
picar (dar comeron): vée-
(con lanza): - in 6
(hormiga): -hbeku
picarón (pez): kepiniigi
picofeo (ave): tseatsh
pichico (mono): pitshêed6
pie: -hii?pd
al pie del tronco de un Grbol: hi?pbkond estar de pie: -i?tona
piedra: v11ši? 86
piedrecita: kovesk6vê
piedrecitas: kovet? kove?, kovte?kbveuu?
```

piel: efmk, efmamif?o
pierna: -iphfkuba, -hii?-
palcuba
pierna inferior: maa-
val
pifayo: ver pijuayo
pihuicho: tyugii?6
pijuayo (Srbol): pipii=
g1?
(racino de): pipiigi?1
(fruto): pipligit
pintadillo (pez): kogifgi
pintar: tsaagi-kh 6
pintarse: -hižt?phaevd
pintura (cono huito):
hesva
piña: amectshal, nanta-
na? 6
piojo: netetoh1? 6
pique: itshlit6
piraña: mepok6
pisar: -ipha
pisotear: -i?phank
plancha: hamo?khoठtsi-
? 1pi
planchar: hamo?-kh6
planear: -(?)ttaphaavt
plata (moneda) : ropaegihi
pletano: šakoo?g1?6
racimo de platanos: ša-
koo? g1? 1
plato: bo?otah 1
playe: kovecok6ve? Jind
pluna: -tsiinahf
pobre (triste): Eh6ni-
? ap 6 ?
poco(s): oo jajat?
podrir(se): ver pudrir-
(se)

```
podrido: amaa?ktshi
polvo: hipojuhti
pona: po? poftals
poner: -hi?no
(sobre el fuego): -itsoota
(huevos): -(?)ntab
ponerse (ropa): -hoka?phaava
(ropa u otras cosas, como collares): -hino? phaavi
por eso: mineei
por medio de: -gí
¿por que?: kopee?, kope? hee
pozo: hooni? tho
preguntar: -hetsand, -hetsanot
preparar tinta: -aph6
presagiar: mapiitsi-kh6
prestar atencion; kaviiuto?
pretina: katmaht
prima (de hombre): héš6
(de mujer): -ntadopiys
priner padre: khe? jothóonig
primera medre: khe? jothoopije
primero: patophe
primo: -n6agigi
principe: ke?vigi
principio: al principio: ketsiika
priodonte: yb?n6
probar: -motí
producir (fruto):
ginilke-3t
profesor: ke?tso8tsigi
profesora: ke?tsobtsipije
profundo: khevakn?
prohibir: suu-khfi
pronto: lrapi
protegerse: nfíhiga-j̋
provocar (irritar): -tsota
proyectar: -(?)tenophavt
pucacunga: má?do
pucuna: \(\forall\) a?patnah \(\mathfrak{i}\), va? paánt
pudrirse: -a?nt
se pudre (conida): ka?matsú
hacer pudrir: -amo?t
pueblo: panitsinfi, panitsintiko oni
todos los pueblos: peloomfive
puerta: p6?kరnoom6
puerto: hojo?nobma
pulga: ka?vatsi
pulmones: -varb?oots1
punchana: pobtsh6
punta de la lengua: -e?heepe ep6?
punzar: go? kh ,
puño: -kéa
puma: Jeka?dem1
pus: gikb
```

                                    -Q -
    \&que (cosa)?: he?e, he?ee,
k6on!
¿que dla?: kepekb(hee)
¿qu6 sera?: kbonae?
\&que pasa?: hide?hee tsu
cque pas6?: hode?e
quebrada chica: tet?ijt?

```
```

quebrar: too-kh6
quebradizo: khove?ki?
quedarse (atras): pa-
tsh1iga.
(en un sitio): duu-J^
quejarse: -vitsora
quemar: hoo-khf
(algo en el fuego):
-a?m6tú
(una chacra): -a?vtab
(superficialmente):
-a?venond
quemarse (una persona,
sin querer): -a?ma
(una chacra, una case,
etc.): ketshe-张
querer tener, hacer:
keašojya? j.-khe
\&quien?: kEenf, kthee,
ko?igi
!quietol: S{iná
quince: fee?pkkh6 sat.-
?os1
quitar (una cosa a una
persona): -tsl?k6
quizas: haamee?k6
- R -
rabo: -tshispi
racino: sadumi
raiz: tebake, te?ipi
rajar: khova!-lchu
rallador metalico: kt-
soogh
rallar (yuca): -he?k8
rama: tegakf
rana: khonaa?\&
(otra especie): p6om.
tsigl
rancho (comida): tsh6.
vimo\deltatsi
remojar: -aph6
remover: moi?-khd renacuejo: budSom rencor: por rencor: matshEapoka?
reñir: -nea?nf
reparticion: ginठob
repartir: -vi?ko
repartirse: -vils6?pheavú
resbelarse: tshigi-ŷu
resbaloso: he?ni?
resfriado: hootisí
resjduos: -akpt
resigaro: daApemind
resina: gik 6
respetar: ke?vi je? i-kht respiracion: sikupkhobnt
respirar: siku?-ju
restinga: tetyoi
retirarse: khada? - Ju
retoño: nanaonk?ifk6
reunirse: Yie-jk
reventar: vos̃i?-јu
reverenciar al Creador: -piko? phaevá
reves (de un vestido): apa?mint
revolcar: vigi-khí
rey: ke?vigi
riachuelo: tee?iJs?
rico (sabroso): Ketshi?
rinion: -init
rio (grande): tet? 1
ripia: dyuifisugu
rizar: vio-ft
robar: haka-lud
roca: viiši?6u
rodear: viti?mhu
rodilla: -ho?donad
rojo: kedkvis?
romper: lchove?-kha romper en pedazos: khom vak6? i-kh! romper la cascera de manf: - (?) mbth 6
romperse: khova?-yu
roncar: -atsh6
ronsoco: horbd
ropa: vedtemt
rozar: haska-ltht
ruede: papasi
ruido: kenatsưb?
ruiseñor: ñii?š ${ }^{\text {g }}$ d

```
- S -
```

sabalo (pez): neegi
saber: -manaá-to?
sabio: hap6tovigi
saborear: nihi?-kht
sabroso: ketsh1? ser sabroso: ketshii?-
sacar: -to?vfi, tsh6eekht
sacar yuca: -h6?r6
secar de la tierra: fim ts6?-khe
secudir: thoo-kht
sachapapa: offinat
sachashuyo: itavaagi
sachavaca: anobgi
lugar donde se encuentra
1a sachavaca: amobgi?asi
sejino: hapiitsd
sal（de mesa）：kanamat seguida：en seguida：tsa－
？ 0 （del monte－－que se come con la coca）：i1－ v1
salado：potsftsú？
salar：kanaamant？i－khu
oalida de un rio：no－ mona
selir：dzee－Ĵ，fits6？－ －⿹丁口㇒́，hiišuve？i－Jú
saliva：－fini
salsa picante：bint

soludar：－o？netsina， phede？－kht
salvador：ha？pothoठtsi． gi
salvar：－ha？potfi
sanar：afi－kht （dando pastillas，etc．）： شُee？ke－lkht
sanarse：äele？－
sengrar：ido－jú
sangre：－ildf，－id 6 bañado de sengre：be？－ douvkunt？
sano：aniigi
estar sano：anii？．
sapo：todokalia
sarampion：f6o Эak．ats 1
sarna：š6d1
satisfacer（estar sa－ tisfecho）：ke？pi－
savia：evitsbogipi
secar：－i？vootú，－i？－ v6tu
（ropa）：－maka？dí
secarse：makada－
seco：makada
secreto：bugeds
vaset
seguir：－xovark
seis：sf？osfleh6 sagk
selva：tobeh́
sembrar：－apánd
semilla：himiu．
sentarse：－itshi，－i？tsha－ k
estar sentado：－itshepa
señalar：kuha？－kht，heem vé？i－kh6
señor：ke？vigi
señora：nis？ 8
señorita：maỹakada
separer：khada？－kht
separerse：khada？－．うそ́， －viko？phaevb
sepulcro：niginooma
serenarse（el agua）：－1－ tshé
serpiente：onáno6
servir：－piko？pavi
seta：te？etebl
shacapa（adorno）：vak－ tsáhi
shapaja（el srbol）：t6－ tho？${ }^{6}$
（el fruto）：tokho
shihui：mon6otsi
shimbillo（árbol）：pi？－ ža？ 6
（fruto）：pi？žu
shiringa（6rbol）：konठow ci？ 6
shirui（pez）：hoodo？6
si：aai，hake

＋哌
siempre：papekfvt

```
siervo: a?naminaga
sjete: sq?osikh6 migea-
    k
silbar: fio?-khu
silencio: nacãááa
sille: i?tshootsigú
siquiera: ekb?
sobre: -hilpb
sobrina (de hombre):
    -e?piitsu
    (de mujer): -taveeni
sobrino (de hombre):
    -e?piitsú
    (de mujer): -nakegi
soga (de tanishi): epii-
    piumb
    (pena anzuelob): ee?-
    phinu? 6
    (esa soga) : touu? 6
sol: he? 1
solamente: tsiki?
soltar: -ittsu
sorbra: dar sombra:
    nutiti igambhu
sombrero: ta?mootsinf
sonaja: vastsshi
Sonar: hacor sonar sona-
    ja o shacape (cuando se
    baila): -vadtsAhipo6?-
    y6
sonejero: čhe?ke?6,
    čhe?keh
soñador: tapбniivig1
soñar: - tapon1
sopler: f6omhtí
suave: ño?huu?
Suavizer: ño?ha-
subir: -i? \({ }^{\text {sut }}\)
sucio: tso?k6?
sudar: -hejápend
```

suegra: šbed6
suegro: soo? $\mathrm{En}^{\text {i }}$
suelo: hipohi
sueño (de soñar) : tapbnicats 1
(de tener sueño): imaakatsi
sufrir: -me?aitotaphaavu
suguisugui (mono): vagii? to
sumergir: sabo?-kht
sumergirse: sabo?-já
sumileoncito: thiithi?s
supl.icar: -hent
sur: ginomb
suri: ots $\delta$ oma
susto: ifotakatsi

```
                                    - T -
```

tabaco: nistsi, niftsi?0
tébano: heegi
tablilla (para hacer cazabe) : ka? foonaga
tal6n: -hii?páa
tanandus: monbotsi
tambien: hamee? $a d$
tambo: ntuhigu
tambor: kobmobl
tanishi: epiipi soga de tSuishi: epiipiun? 6
tanto: axepuus
tapaje (valla de ceña pata pescar): pagino?oogui
taper: -(3)t太m6
tapar un hueco:-itú

```
taparse: viti-
tapir: amobgi
tarde: noole 6
    mas tarde: ma?pho? 6?,
    khe? akhe?
terrafa: fen6
tama: taasa? 1 job
tea: heept
techo: kafd \(\delta\)
tejido: jo?thoont, jar-
    kems.
tela: vedemd
temor: -qfú
temeroso: kefeki?
temibie: kanivakft?
tempreno: naapi? t? \(^{\text {? }}\)
tender (frazada): -pa-
    gint
tendorse (en hanaca):
    -ke?vt
tenor:
    tengr asco: tshoo?ko-
    yeri-kitu
    terer calor: ha?moo?
    tene frio: hi?pii?.
    tener ganas de comer
    carne: moniftsi-kht.
    teier hembre: -ana?kaa-
    n.
teñir (los cabellos o
    el cuerpo con huito):
    -erpite
terminar: -etshootf,
    -i? žota
tia (materna -- herma-
    na de la mama): -phai-
    ke?neavt
    (paterne): -hankvaa?-
    36
tiempo: kovegi?
        hace tiempo: kovegii?lse
tienda: koneetsf?oohd,
        vadove? ooha
```

tierra: hipoh1, hing
tigre: fini
tigrillo: íniya?
tijeras: a?mithootsigh
tio (materno): -khiggi (paterno): -heenaegi
tipit1: kayakka tipiti bora: patsoviite
tirador experto: páphokoteki?
ser un tirador experto: paphoxotekii?-
tirar: -ka?p tirar una lanza: -fn6
tizon: bkoniigivuuda
tocar: -
tocon (men): vagii?t6
todavia: - kne?, kheme? no todavia: nill:he?
todo: todas (cosas): phe?t6? todas (las personas): pa? and
toda clase: makapq
todos los pueblos: pá-
koomive
todos los dias: papekovs
tomar (beber): -i?da
toma: ha? 1
tonterfa: tsikfohuhi
topa (arbol): hiñuhui? 6
topar: -(?)tstab
torcer soga: -i?vk
tortera: poo?gi
tortuga (terrestre): has... dah1
tos: ehe?khobtsi
toser: ehe?-khá
tostar: -lka?v8
trabajador: pomend?

| trabajar: -odo?phaevu <br> trabajo: o? dobtsfphaavi | trono de madera: avtana- <br> ? Evundth, avtanavuudh |
| :---: | :---: |
|  | trueno: ectno |
| -ropt | tu, tu: phal, pha |
| ir a traer: -te?khi | tuc |
| trager: -(?) ptat | tucan chico: jifio |
| ma: para pescar: | tuctn grande: tsasts |
| higabt, opiitsf(k6) | tucho (pez) : itavaegi |
| para coger ratones: | tuerto: mi? žo |
| oveetsils <br> otro tipo de | tunba: niginoomá |
| tiñeenebú | tumbar (un arbol) |
| trencuilo: šíist | -6no?ta |
| ester tranquilo: -va- | tupido: sufgiba |
| trensformarse: -ke? 3 б, -ke je? | turbio (rfo): thonaa?ksmis |
| trans ixcente: hi?kova ser transparente: hi?kovea. | ```tusa (meiz): vodka?b tuyo: pi土?r=``` |
| transportar: -kopa |  |
| trasjederse: kheda? - Jौ |  |
| trevieso: rameal? | ultino: de?po, depb? |
|  16t? sagu? | umarl (arbol): nomagi?6 |
| trenendo: Jijaarg |  |
| tres: migaakf? sagu? |  |
| ibu: lroonf |  |
| nonbre de matri- | ustedes: hasa, i- |
| bu) : phigitacenta | uville (fruto) : kamiid6 |
| tripa: -ii?šalc | (planta): kamildo?e |
| $\begin{aligned} & \text { triste (persona): khoni- } \\ & \text { ?ap6?, khoni?apobgi } \\ & \text { (luger): lchठni?apon6e } \end{aligned}$ | V |
| trocha: ajapb, ehuthi | vaca: lret? se |
| ```trompetero (ave): dee- ne?s``` | vaciar: -bab |
| tronco del árbol que | vago: inosk 6 ? , infuintag |
| da leche caspi: evitsolog1? | vamos (tá y yo): háada |
| tronco de hungurahui: | (varios): 1?peho |
| nabjas? 6 a | vasija: i?do6tsi?oovti |
| tronco de ishanga: evetsfita? | veinte: sagi |

```
vello: -tsiink
vena: kombarkuu?S
venado: ket?s̆e
vender: -kone
venir: -tsa?n#
ver: -tshenl
    ver una trempa: -i?ka-
    pu
verano: kam1
¿verded?: hodetsa
    es verdad: phoodent.
verde: ipogl?
vergonzoso: kaponiki?
vergitenza; ponaf
    dar vergüenza: ponuu?-
vestido: vedemf
    vestido de mujer: ko-
    mé?mil?6hf, mii?6hi
vestirse: -holr6?phaav&
vez; otra vez: aponh
    todn de una vez: tsa-
    vaEEsata
v1a: ajapo
vibora; ont?k6
vida: jaflovegi
viejita: phainfye
viejo: phaigi
viento: kočhfivt
vientre: -athe?eem|
viga princinal en el te-
    cho de una casa: etso-
    giipi
vigilante: pa?toonagl,
    pa?toovigi
vigilar: -je?nf
virgen: majak3ado
visitar: -(?)vá%, -(?)-
    vánorá
viuda: moneed\delta
viudo: monetgi
viveres: tshovimootsi
vivo: amiigi
volax: -ada
voluntad: k太po?, k\&?po
volver: -heko?do
vomitar: -i?kanú
v6mito: i?kEamiltsi
```

- Y -

```
```

```
- Y -
```

```
ya: 00
yeguas (grupo idiometico): hoomeva
yare: plisieqa
yaripe (erbol): hakja? e
yexno: -i? Jingí
yo: mb
yuca: kajifigi
palo de yuca (no venenosa): kajfigiga
yuca brava: kaan 1 palo de yuca venenosa: kanjlio? gl
\[
-Z-
\]
zancudo: hanfits6
zapato: hii?p6tsi?aa?d6
zarigüeya: itsiig1
zingaro (pez): kogilgi
```

APPENDIXII :
COMPARATMVE
WORD LIST

```

RES IGARO-BORA-OCATNA-HUITOTO MUITANE

The following comperative vocabulary is based on the Rowe Stendard Comparative Vocabulary (tropical forest area) of 232 items, with on additional 140-odd of the items that are in the Swadesh list but not in that compiled by Rowe. ( \(A\) raised "S" after the Rowe list number indicates that the item is also in the Swadesh list.)

Spanish glosses are given beside the English, the dialect being that spoken in the department of Loreto in Peru. The Spanish forms were used to obtain the forms in the other four languages.

The Resfgaro entries are from the data I gathered in Peru. The Bora was supplied to me by a literate Bora from Brillo Nuevo, Miqueas Soria, who was about 17 years old in 1972. The Ocaina j.s from Leach (1969), which lists in the Uvohsa dialect, excopt where entries are followed by (D), indicating the Dyohxaya dialect. The Huitoto is from Minor \& Minor (1971).

The orthography for the Resigaro is that used throughout this thesis. The orthography for Bora is that used in Bora bilingual schools in Peru. It
```

is described in Thiesen o. Thiesen (MS). The con-
cept behind this orthography -- as behind those for
Ocaina and Huitoto Muinane (but not Resigaro as pre-
sented here) -m is that symbols should have values
as close as possible to those they have in the pre-
valent dialect of Spanish. Thus, the comments in
Leach (1969:163-4) and Minor \& Minor (1971:137-8)
will facilitate an approximate appreciation of the
pronunciation of Bora (except that plosivos are either
voiceless -- written b, d, g, etc. -- or voiceless
aspirated -- written p, t, k, etc.).

```

In all three cases, these orthographies are phonemic, with minor concessions to Spanish spelling rules (e.g., \(k\) / is \(\underline{C}\) before \(a\), \(\underline{o}\) and \(\underline{u}\), but qu before \(\underset{\sim}{i}\) end e).

No attempt at analysis of this data is attempted herein, though even a brief perusal reveals that Reslgaro and Bora are closer to each other than to either of the other two languages, and Ocoina and Huitoto Muinene are closer to each other than to the former two,

There are cases of clear cognates affecting all four languages, and all possible combinations of two and three languages, but the degree of difference between the lenguages is such that no sets of equiva.
lences spring to view, and considerable work would be necessary to arrive at such equivalences.






15. woman's breast (nipple)
(pezón, teta)
16. abdomen (vientre)
27. \({ }^{\text {S }}\) back (espalda)
18. shoulder (hombro)
19. S arm (brazo)
20. upper arm (brazo
superior)
21. elbow (codo)
22. S hand (mano)
23. finger (dedo de mano)
24. fingernail (una)
25. Seg (pierna)
26. thigh (muslo)
27. Snee (rodilla)
HUITOTO MUINANE
\begin{tabular}{|c|}
\hline jiitta; iíta \\
\hline jainnoì \\
\hline irsni \\
\hline uiáti \\
\hline joraì; joraitodibu \\
\hline cinnére \\
\hline nopúcotdúa \\
\hline
\end{tabular}
nopúcotdúa
nopúcotaúa
iráncic

\begin{tabular}{|c|}
\hline BORA \\
\hline hatyájiś \\
\hline hétyábáa \\
\hline 17íhiy \({ }^{\text {h }}\) \\
\hline wáháró \\
\hline tsíximené \\
\hline keéne \\
\hline nújp\&oy \({ }^{\text {d }}\) \\
\hline tethin \\
\hline ctachbouú \\
\hline úneúh \\
\hline cetaj \\
\hline nééwáw \\
\hline tyóhca \\
\hline cujuw \({ }^{\text {a }}\) \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline & RESİGARO \\
\hline 42. \({ }^{\text {S }}\) husband (narido) & -jíigí \\
\hline 43. \({ }^{\text {S }}\) wife (esposa) & -íní \\
\hline 44. S father (papá) & ab?pe \\
\hline 45. \({ }^{\text {S }}\) mother (mand) & aáne \\
\hline 46. baby; infant (niño, criatura) & yaánú \\
\hline 47. old man (viejo) & phaigí \\
\hline 48. \({ }^{\text {S }}\) water (agua) & hooní \\
\hline 49. \({ }^{\text {S }}\) river (río) & teé?1 \\
\hline 50. island (isla) & tétyoi \\
\hline 51. \({ }^{\text {S }}\) Iake ( \({ }_{\text {ago }}\) ) & hánel \\
\hline 52. swanp (pantano) & gákadmí \\
\hline 53. waterfall (caída de agua) & Yodoo?fígut \\
\hline 54. rapids (catarata, raudal) & ví1si? \({ }^{\text {cha }}\) \\
\hline 55. \({ }^{\text {S }}\) fire (candela, fuego) & ókOniigí \\
\hline
\end{tabular}







HUITOTO MUINANE
turuma
jíco
\(\ldots\)
citdo
jíco
neníngo; baìná-
ngo; juíàó
ilìni
jitaórocingo
tdillí
iu
meecu



\begin{tabular}{|c|}
\hline FUITOTO MUINANE \\
\hline meréjaiño \\
\hline dobdili; eréno \\
\hline 宔永e \\
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
teema \\
cuéma; cuéogoma
\end{tabular}} \\
\hline \\
\hline \\
\hline juri \\
\hline mero \\
\hline eímox \\
\hline migui \\
\hline jàco \\
\hline
\end{tabular}


\begin{tabular}{|c|c|}
\hline & RESIGARO \\
\hline 107. capybara (ronsoco, oarpincho) & hopbl \\
\hline 108. anteater (oso horaiguero) & piígí \\
\hline 109. paca (paca, majás) & natpu \\
\hline 110. crocodile (caimán, la-
garto) & pegíinú \\
\hline 111. iguana (iguana) & mañat? \\
\hline 112. tortoise (galapago) & --- \\
\hline 113. river turtle (tortuga, motelo) & haádú \\
\hline 114. collared peccary (saino, sajino) & hapíitsu \\
\hline 115. white-lipped peccary (jabaif́ mayor, huangana) & anevíidógí \\
\hline 116. agouti (agutí) & phíi?tsí \\
\hline 117. cat (gato) & miisí \\
\hline
\end{tabular}
\[
\begin{aligned}
& \text { 118. rat (rata) } \\
& \text { 119. nouse (ratón) } \\
& \text { 120. S tail (cola) } \\
& \text { 121. Snake (serpiente, ou- } \\
& \text { lebra) }
\end{aligned} \begin{gathered}
\text { sna } \\
\text { 122. anaconda, water bca } \\
\text { (anaconda) }
\end{gathered}
\]
\[
\begin{aligned}
& \text { RESIGARO } \\
& \text { hiigí } \\
& \text { tyuákb } \\
& \text {-tshíipí } \\
& \text { oná?kó } \\
& \text {-á } \\
& \text { oná?kó } \\
& \text {--- } \\
& \text { todokáakú } \\
& \text { ko?píidú } \\
& \text { pí?ní } \\
& \text { anáads } \\
& \text { y̌í́o } \\
& \text { yoódú }
\end{aligned}
\]
\begin{tabular}{|c|c|}
\hline OCATNA & HUITOTO MUINANE \\
\hline munóśnco & joítí \\
\hline tsbraaxo & jeedo; mau; niñóe \\
\hline ohoo & oda \\
\hline tyorooho & jaic \\
\hline toxóóhyo & --- \\
\hline namañ̂i & nonóraì \\
\hline cararaho & ràidu \\
\hline goobsjo; tyoorc & acåiño; gucu \\
\hline afótsoyi & iguillácol \\
\hline fahtíntryo & pitía o \\
\hline faaro; cútrana & ̇ílva; noeova \\
\hline noxaahcho; llío & nocál \({ }^{\text {do }}\) \\
\hline tyódra & jirillicas \\
\hline
\end{tabular}

hottoto muinane


\begin{tabular}{|c|}
\hline BORA \\
\hline túrisíhyó \\
\hline ¢กnư \\
\hline \\
\hline péétsob \\
\hline pááocajós \\
\hline cáraca \\
\hline ámoobé \\
\hline wájcy6ji \\
\hline déhtsfibs \\
\hline tsuúheu \\
\hline úuoswa \\
\hline wáaníh' \\
\hline waß́jyú \\
\hline tákíhxíba \\
\hline
\end{tabular}

131. parakeet (perico, pu-
huicho)
buzzard (gallinazo)
guan (pava de nonte)
hen (gallina)
(zed 'opeosod) पsty
piranha (piraña)

fly (mosca)
flea (pulea)
louse (piojo)

termite (coricjén, hor-

\begin{tabular}{|c|c|}
\hline OCAINA & HUITOTO MUINANE \\
\hline foraaja & callango \\
\hline ooru & dicóá ; jebecingo \\
\hline orootyo & orócongo \\
\hline tyanâánhin & deíre; jatíces \\
\hline tyojáánhavo & --- \\
\hline tyaváĺro & caipónedu; iperi \\
\hline  & anéna \\
\hline opaavi & rabe \\
\hline opaavi & --- \\
\hline tsíín & cuullialleba; moolleba \\
\hline dyaanjuin; juxaan & ria \\
\hline ajion; mKánjin & \(i j i\) \\
\hline
\end{tabular}
\begin{tabular}{|c|}
\hline BORA \\
\hline piinyebá \\
\hline paáwájú \\
\hline niipájú \\
\hline bajupañ \\
\hline tsbjcomuju \\
\hline cánewájú \\
\hline ánéhé \\
\hline entânáánú \\
\hline únéhéháán \\
\hline WAJjc6 \\
\hline néve \\
\hline únohéjphoyó; \\
\hline úrehé pañotu \\
\hline ts'áne nújpacys \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline & RESÍGiRO \\
\hline 145. ant (hormiga) & piórne \\
\hline 146. spider (arana) & paagáu \\
\hline 147. chigger (nigua, pique) & itshfit6 \\
\hline 248. brush (monte) & tébahú \\
\hline 149. open grassland (pajonal, sabana) & --- \\
\hline 150. hill (cerro, loma) & tégahú \\
\hline 151. \({ }^{\text {S }}\) tree (Sarbol) & avtane?6 \\
\hline 152. \({ }^{\text {S }}\) leaf (hoja) & apana?amí \\
\hline 153. tree leaf (hoja de árbcl) & apán<? \({ }^{\text {amíá }}\) \\
\hline 154. \({ }^{\text {S }}\) flower (flor) & giiví \\
\hline 155. \({ }^{\text {S }}\) fruit (fruta) & niÍkú \\
\hline 156. sop (savia) & evitsóogí \\
\hline
\end{tabular}
\[
\begin{aligned}
& \text { 157. S root (raiz) } \\
& \text { 158. S seed (semilla) } \\
& \text { 159. stick (palo) } \\
& \text { 160. S grass (hierba) } \\
& \text { 161. corn, naize (naíz) } \\
& \text { 162. nanioc (yuca) } \\
& \text { 163. nanioc flour (harina } \\
& \text { de yuca) } \\
& \text { 164. tabacco (tabaco) } \\
& \text { 165. cotton (algodón) } \\
& \text { 166. gourd (calabazo, poro) } \\
& \text { 167. yan (name) } \\
& \text { 168. sweet potato (canote) } \\
& \text { 169. achiote (achiote, bija) }
\end{aligned}
\]
\[
\begin{aligned}
& \text { RESIGiRO } \\
& \text { sí?osíxh' sagú } \\
& \text { sí?osíkhó nigaakú } \\
& \text { sí?osíkhó nigaakú? } \\
& \text { sagú? } \\
& \text { sí?osíkhó po?tsáa- } \\
& \text { vágaahí } \\
& \text { pá?osíkúná } \\
& \text { patophé } \\
& \text { de?po } \\
& \text { ché?ké?6 } \\
& \text { koónobú } \\
& \text {---- }
\end{aligned}
\]
FUITOTO MUIN：NE
cunátàici
jìgape

势
 rapócana
inlána
cuè




RESGGRO
henがó
naání？úmí
naikoogígí
ke？vígí

phú
tsófará（incl） mulé（exci）
ne？a
na？



195.
196.
197.
198.
199.
200．\({ }^{\text {S }}\)完 ס 203. 204．we（nosotros） 205．\({ }^{\text {S }}\) ye（ustedes） 206．\({ }^{\text {S }}\) they（eilos）
OYFOISRTY
noké 210. our hands (nuestras nanos) fa?ảkéné
211. your hands (sus nanos de ha?ákéné
ustedes)
212. their hands (las manos na?akéné
de ellos)
213. my bow (ni areo) (Nos. 213-218 are only available for Bora. T parative list.)

\footnotetext{
219. \({ }^{\mathrm{S}}\) big (grande)
}
220. \({ }^{\text {S }}\) suall (pequeño)
\begin{tabular}{|c|c|c|c|c|}
\hline & RESİGMRO & BOR: & OCSINL & FUITOTO INUTNANE \\
\hline 207. my hand (ri main) & noké & tathójtsisu &  & --. (onol \\
\hline 208. thy hand (tu mano) & piké & aíhyojtsisu & --- & --- \\
\hline 209. his hand (la nano de él) & gike & aábyehójtsú; Aádihojtśa & --- & --- : \\
\hline 210. our hands (nuestras nenos) & ) farakend & néhójtsine & --- & --- \\
\hline 211. your hands (sus manos de ustedes) & ha?âkéné & arứháh oj̣tsìné & --- & --- \\
\hline 212. their hands (las manos de ellos) & na?âkéne & adtyehójutsine & --- & --- \\
\hline 213. my bow (ri areo) & --- & tátylabooná & --- & -- \\
\hline (Nos. 213-218 are oniy available parative list.) & e for Bora. & fore, the rest & is group isp & fron this con- \\
\hline 219. \({ }^{\text {S }}\) big (grande) &  & mityané; nítyanecobá & boxu; oxííja & aillue; jeerie \\
\hline 220. \({ }^{\text {S }}\) small (pequeño) & -oja.ja? & ayanéwú; uhjenemúa & \[
\begin{aligned}
& \text { sifrih; s6o } \\
& \text { toógo; } x a
\end{aligned}
\] & --- \\
\hline
\end{tabular}


\begin{tabular}{|c|c|c|}
\hline BORA & OCisinis & HUITOTO MUININE \\
\hline  & －－－ & íxpe（Iengua） \\
\hline níiwácoh & \begin{tabular}{l}
oohfo； \\
ohfotohófe
\end{tabular} & －－－ \\
\hline ［éjkeépaájú & johxóbho（gar－ ganta） & \begin{tabular}{l}
 \\
（Earganta）；cínojì； \\
jerátci（cuello）
\end{tabular} \\
\hline nénéhdóró & caáánxo & uriragoi \\
\hline г．eráhba；mehalil & juuhxo；juuh－ xomo（espalda） & enódo（espalãa） \\
\hline nejứwátsijityó & jáhońóncona & thagálioz（brazo） \\
\hline h6ts系jkejú & önónpoca & onóbeci \\
\hline tájkií & \begin{tabular}{l}
odsáátsi（pierna \\
y pie）
\end{tabular} &  \\
\hline \begin{tabular}{l}
injjı́nst； \\
tahjineé
\end{tabular} & tyafóánjin；ohfo－ tohófe（p．del b & ainè⿱⿱亠䒑十纟 razo） \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline & RESIGARO \\
\hline 234．tongue tip（punta de la lengua） & －e？h＇epé e？pб \\
\hline 235．long hair（pelo largo） &  \\
\hline 236．around the neck（toda la garganta I cuello） & －iñochí \\
\hline 237．Adan＇s applo（nuez de la garganta） & －－－ \\
\hline 238．upper back（la espalda， parte superior） & －－－ \\
\hline 239．lower arr（brazo info－ rior） & －kép \\
\hline 240．Wrist（1a mineca） & －ké \\
\hline 241．lower leg（la pierna inferior） & －kaavaí \\
\hline 242．boly hair（el pelo del cuerpo，vello） & －tsíinú \\
\hline
\end{tabular}
\[
\begin{aligned}
& \text { HUITOTO MUINNE } \\
& \text { ducubeniro; jebego主; } \\
& \text { ocácagí } \\
& \text { jebeo } \\
& \text { íá́tairo } \\
& \text { uillíe } \\
& \text { pìdítirà̀ (nubes } \\
& \text { negras) } \\
& \text { ille } \\
& \text { cinére } \\
& \text { jacapò̀ } \\
& \text { guànádo (piedre- } \\
& \text { eilla) } \\
& \text { jà̀́áare (roca } \\
& \text { escarpada) }
\end{aligned}
\]
\begin{tabular}{|c|c|}
\hline & RESIGARO \\
\hline 243. stomach (estomago) & -vafo \\
\hline 244. \({ }^{\text {S }}\) intestines (intestinos) &  \\
\hline 245. old woman (la vieja) & phaipíyé \\
\hline 246. \({ }^{\text {S }}\) clouds at rest (nubes quietas) & iÎtsłú \\
\hline 247. stora clouds (nubes de tormenta) & iítshú \\
\hline 248. stream (quebrada) &  \\
\hline 249. swamp (aguajal, pantano) & gákaání \\
\hline 250. field (chacra) & yakcié \\
\hline 251. pebbles (piedrecitas) & kovéé?kovó? \\
\hline 252. huge rocks (rocas) &  \\
\hline
\end{tabular}
\begin{tabular}{|c|}
\hline \[
d+r o p e
\] \\
\hline ranítda；teecaiño \\
\hline \begin{tabular}{l}
bìtani；janáìco； \\
jípoco
\end{tabular} \\
\hline bedá \\
\hline －－－ \\
\hline －－－ \\
\hline nipóde（Ċqué cosa？） \\
\hline －－－ \\
\hline nana（toalo） \\
\hline điegána \\
\hline are \\
\hline icuìro；igorrà \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline mesígiro & BORA & OCATMA \\
\hline ajuap & juúvá & \begin{tabular}{l}
neajon； \\
toruhtya
\end{tabular} \\
\hline hipeégí & thbotá & －－－ \\
\hline nuáhiéu & nưajúw\｛ & fojóbvonu \\
\hline \multicolumn{3}{|l|}{ADOITIONAL VOCIBULIRY TROM THE SWIDESH LIST} \\
\hline gipí；hi－ & aánuú；iñee & bíin；bínjon \\
\hline Ei？ithé；hé？e－ & tsarapih & xahiinia \\
\hline kéení & núhá & bón \\
\hline kóoní & íánah \({ }^{\text {j }}\) & dsoh \\
\hline nií & －－－ & －－－ \\
\hline phê？to？ & \[
\begin{gathered}
\text { páneéréh; } \\
\text { panébré }
\end{gathered}
\] & chíí；jéntih \\
\hline gnepúa & mítyané & －ó6xu \\
\hline tseinó？ & ctamene & Gárii \\
\hline da？ní & \begin{tabular}{l}
wáhdahí壬ve； \\
bâhriñ̃euvú
\end{tabular} & dyacán； xoñưáhce \\
\hline
\end{tabular}

253．path（trocha）
254．window blinds（estera）
255．shelter（tarbo）
this（este）
that（aquél）
（¿иятпп？）¿очи
what？（¿que？）
not（no）
\(a 11\)（todos）

菉 望呙
259. 260.
261.
262.
263.
－




\[
\begin{aligned}
& \text { 265. flesh (oarne) } \\
& \text { 266. blood (sangre) } \\
& \text { 267. grease (grasa) } \\
& \text { 268. egg (huevo) } \\
& \text { 269. hurn (cuerno) } \\
& \text { 270. feather (pluma) } \\
& \text { 271. claw (uña) } \\
& \text { 272. belly (barriga) } \\
& \text { 273. liver (hígado) } \\
& \text { 274. drink (beber) } \\
& 275 . ~ e a t ~(c o m e r) ~ \\
& 276 . ~ b i t e ~(m o r d e r) ~ \\
& 277 .
\end{aligned}
\]
\[
\begin{array}{ll}
\text { 279. know (saber) } \\
\text { 280. sleep (dormir) } \\
\text { 281. die (mcrir) } \\
\text { 282. kill (matar) } \\
\text { 283. swim (nadar) } \\
\text { 284. fly (volar) } \\
\text { 285. walk (andar) } \\
\text { 286. onme (venir) } \\
\text { 287. lie (acostarse) } \\
\text { 288. sit (sentarse) } \\
\text { 289. stand (estar de pie) } \\
\text { 290. to give (dar) } \\
\text { 291. say (decir) }
\end{array}
\]
\[
\begin{aligned}
& \text { RESÍGARO } \\
& \text {-maná́ -tó? } \\
& \text {-ímú } \\
& \text {-kainée -Yú } \\
& \text {-kainée -khú } \\
& \text {-n?vápú } \\
& \text {-ađú } \\
& \text {-hí?vu } \\
& \text {-tsa?nú } \\
& \text {-hepítakaá( } \pm \text { nú }) \\
& \text {-i?tsháké( }+ \text { nú }) \\
& \text {-i?tónú } \\
& \text {-aa?ní } \\
& \text {-kemú }
\end{aligned}
\]


\begin{tabular}{|c|c|}
\hline 292. & burn (arder) \\
\hline 293. & mcuntain (sierra) \\
\hline & red (rojo) \\
\hline & green (verde) \\
\hline & yellow (amarillo) \\
\hline 297. & full (11eno) \\
\hline 298. & new (nueva) \\
\hline 299. & round (refonas) \\
\hline & ary (seco) \\
\hline & name ( n mabre) \\
\hline 302. &  \\
\hline 303. & . when (¿cuándo?) \\
\hline
\end{tabular}
\[
\begin{aligned}
& \text { 304. where? (¿dónde?) } \\
& \text { 305. here (aquí) } \\
& \text { 306. there (allí) } \\
& \text { 307. other (otrs) } \\
& \text { 308. few (pocos) } \\
& \text { 309. fog (neblina) } \\
& \text { 310. flow (vorrer -- del } \\
& \text { 311. sea (mar) } \\
& \text { 312. wet (majads) } \\
& \text { 313. wash (Zavar) } \\
& \text { 314. Worm (gusano) }
\end{aligned}
\]
\[
\begin{aligned}
& \text { ocaina } \\
& \text { xaviin } \\
& \text { juhtóbhfu } \\
& \text { bach; aavo; } \\
& \text { juubo } \\
& \text { ajátra } \\
& \text { inbi } \\
& \text { annu } \\
& \text { ánururah } \\
& \text { jutyát́xo } \\
& \text { bójo; xaviintyó- } \\
& \text { injánjun } \\
& \text { faahxa (pesar) }
\end{aligned}
\]
327. child (niño)
328. dark (oscuro)
329. cut (cortar)
330. wide (ancin)
331. narrow (estrecho)
332. far (lejos)
333. near (cerca)
334. thick (grueso)
335. thin (delgado)
336. sinort (corto)
337. heavy (pesaco)
\begin{tabular}{|c|c|c|c|}
\hline RESÍGARO & BORA & OCAINA & HUITOTO MUINiNE \\
\hline nií tsó? vii? tsú & tsưhjíxvatune & - & gairráde (embotar) \\
\hline tsó?vil? tsk & tsứhji̇vanêh & jadu & jaírede \\
\hline tso?kó? & ifñúvané & Qánịna; avóóhxo; ñááhun & janórede \\
\hline amaa?kátshí & toócuné & bacóŕna; dsosu; asavも ña (pudrirse) \(^{\text {(pin }}\) & tabíde ) \\
\hline he?ní? & rúturútu néneé & fííyi & rixigairode \\
\hline tsí?kí? & tsatujkevéh & fósintya & --- \\
\hline hamee?natoo & tsaímiyêh & johaahcho; baróf́ta (corregir) & --- \\
\hline apá?mí?osí & nániñéjou & uroohfatí & jarúpe \\
\hline katso?osí & ̇̇mėánéjoú & fóoftya & já́oina; nabéti \\
\hline phaigí & tsưứcaśne; kébné & jahíńnima; uroojun & --- \\
\hline ñoi -khl & tákiyohoó & tsiofi; tsocra; xuuru & gittde; melléno( \(\pm\) tde); llegide \\
\hline
\end{tabular}
338. dull (embotado)
339. sharp (filoso)
340. dirty (sucio)
341. rotten (podrido)
342. smosth (liso)
343. straight (recto)
344. correct (oorrecto)
345. left (isquierdo)
346. right (derecho)
347. ald (viejo)
348. rub (frotar)



349. pull (jalar)
350. push (eapujar)
351. throw (echar)
352. hit (golpear)
353. split (hender)
354. pierce (punzar)
355. aig (escarbar)
356. tie (atar)
357. sew (coser)
358. fall (caerse)
359. swell (hincharse)
\[
\begin{aligned}
& \text { RESÍGARO } \\
& \text {-váfó -hénetú } \\
& \text {-hadá?pd } \\
& \text { sii? -khú } \\
& \text {-i?kanú } \\
& \text { soo? -khú } \\
& \text { fóo -khú } \\
& \text {-ífó } \\
& \text { ne? -khú } \\
& \text { eke? -khú } \\
& \text { (agarrar) } \\
& \text { hipofo } \\
& \text { tsení } \\
& \text { metshóovigí }
\end{aligned}
\]


372. dust (pulvo)
373. alive (vivo)
374. rope (cuerda)
375. year (año)

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….............................. cfi. Lisker, Leigh. 1971.

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Propositions and Surface Structure Sentences in Palifur (Arawahan)" Lingua 26: 252-280```


[^0]:    I certify that the conditions of the Ordinonce and Regulations relating to the Degreo of Ph.D. have been fulfilled.

[^1]:    A letter dated 9th fugust 1.974 from my main infornant, Pablo Andrade Ocagene, indicates that the Puerto Isango comanity of sone 200 Ocainas has relocated the village half-an-hour's journey (by canoe) dowariver fron the 1972 location. The Resigaro speakors in the comunity have moved along with the ocainas.

[^2]:    $3_{\text {Details }}$ of tho transcription I an using for Resfgaro are to be found in Part $I$, below.

[^3]:    ${ }^{4}$ Presurably Wavrin gave Spanish "corto" ("short"), which can also mean "I cut", and in reply was given "you cut". The sane Reslgaro phrase, transcribed slightly differently -- te(w)te(w) pi-ke -reappears lator, inexplicably glossed as "nous vivons"
    SThe glottol in [ ] is present etically, but not nomally indic. ated in the present doscrivtion, sinco it is rorphophonologically conditioned (cf. I.2.3.3.2., below).

[^4]:    Cecilia, who was my informant for a brief while in Brillo Nucvo, said [dr] where all wy othor informants said [d]. However, both she and they said that she did not spoak Rosigaro well, since she was separated from her people and spoke Bora all the tine. Hence data fron her is not includod in the prosent description. It nay be that she spoke a dialect of Reslearo and that Wavrin's informants came fron the same group. This night explain sone of the more consistent differencos botween his data and mine, though it does not account for the inconsistencies. In any case, it is clear that the language in both instances is the sane onc -- down to the people's nare for their own group: Wavrin: $r^{\wedge-\bar{a}}(\mathrm{~h})$ panihin for dakeming. Further, iny informants wore awaro that tho Spanish name for ther is MResfearo".

[^5]:    8 Adelina has a slight speech defect which results in almost constant nasalization. S.I.I. merber Miss Ilo Leach, who has work.ed in Adelina's village for wany years, analyzine the Ocaina language, has noticod this in hdelina's spoaking of ocaina (in which nasalization is onic) (Personal comunication). However, I do not suspect anything as serious as a cleft palate, since Adelina's pronuciation is otherwise problen-free, and she docs not betray the sorts of inpediwents normal in cases of cleft palate. Perhajs the problen is in sonc way rolated to hor control of her valu. Fone of the other informants had any such problons.

[^6]:    These may be conpared to Halliday's scales of abstraction, where Feature node parallels Halliday's abstract, Manifostation mode parallels his concrete, and Distribution mode parallels his syntagatic.

[^7]:    $\overline{10}$ I view contrast mode ns not being on a par with variation and distribution zodes, since aspects of variation and distribution are in thenselves contrastive and identificational.

    Thus, contrast mode is ierely a convenient bringing-together of some of the nost salient characteristics of the other two modes. This means that it canot do other thon repeat information given in greater detail in the variation and distribution modes.

    It way be argued that this mode is therefore suporfluous to the description, as a separate section. However, it is retained in the present work as an introduction to each structure at each level, since it helps the reader to focus on the particular aspect of the language which is to be analysed.

[^8]:    11Brend has made use of this teminology within the context of tagreaics (1968:19), but since hor description only hordes one level, it is not cloar what tho inplications would bo in terms of the entire hierarchy.
    I2 The tera "sub-classes", rather than "classes", is adopted to distinguish between subdivisions of the najor setw of units throughont the language, and tho sets thenselvos. Tho sets are temed "classes", and the subdivisions "sub-classoc". An alternative solution, adopted by Pride (1965) is to use the teri: "hyperclase" for "set", as defined here, and "class "for subdivisions thereof (o. \%. , pp.cit. , p. 12). This confors to pire's arlier use of the profix mhrer-" for sets of sets, yet since this terninology has now fallon sonewhat into disuse, with the recognition of tagnones at different levels, and the adoption of Longacre's "syntagneme" to roplace "hypertagnene", the more gencrally-accopted torns "class" and "submclass" aro here preforrod. The basic structural divisions of classes at any given lovel (e.g., of noun stems) are terned "types", and subdivisions of types aro termed "sub-types".

[^9]:    $\overline{13_{\text {There }}}$ are not 60-odd verb phrase classes, but six, at most, and this may be roducoable to four -m Ditransitive, Transitive Intransitive and Stative, with a Quotative multiplication of

[^10]:    I5A practice lone accepted by tagncmicists in syntax, but ignored in morphology.

[^11]:    I隼he fact that Loos's thesis is cast in a Transfomational fomat does not affect the relevance of this comparison, since to be valid, the tagmenic rodel would havo to produce a dict.. ionary of similar somistication, and Loob's sample lexicon illustrates the sort of limitations such a requirenent inposes on research projects in which analysis of the lexicon is not the najor objective.

[^12]:    The torms used to describe the points of articulation are not to be considored as descriptive, but rather, contrastive in torms of the system. Thus, "labial" refors to phonemes in which the main articulators are both lips, yet the title "bilabial" is unnecessary, since there are no labio-dental sounds in the longuage. Siuilarly, /ty/, /dy/, /n/ and/E/ are rualized with the tongue furthur forward in the nouth then the other phom nencs labolled "palatal", being in fact palatalized alveolers,

[^13]:    Cf. Jakobson and Halle, 1956, especially pp. 29-32, where their 12 binary oppositions are listed and described, and pp. 44-49, where the establishrent of this "dichotomous scale" is defended. ${ }^{7}$ cf. Chozsky and Halle, 1963:413.
    $8_{\text {We here ignore, as irrelevant to the present argunent, the series }}$ $/ \mathrm{ph} /, / \mathrm{th} /, \mathrm{kh} /$, which would have $\left[\begin{array}{c}{[\text { Voice }]} \\ {[+ \text { Mspn. }]}\end{array}\right.$

[^14]:    $9_{\text {Though }} / \mathrm{s} /$ is opposed to no voiced fricative at the sare point of articulation, since there is a hole in the pattorn at the point where $/ 2 /$ would be expected, voicolessness is considered as cuic in terms of the systern as a whole, evon though it is not contrastive in this limited context. (cf. discussion under 1.2.1.1.7., above.)

[^15]:    10 cf. Walton and Walton, "Phonenes of [Bora] Muinane" (1967: 41). The variation that they cite for [ $\quad$ ] $]$ and [j] is from one idiolect to another.
    Leach (1969:164) indicates that in Ocaina the phonone /y/ has allophoncs ranging frou: [ 4 ] to [j].

[^16]:    $\overline{12} \mathrm{All}$ the data bo fer available leads to the conclusion that $/ \mathrm{r} /$ and $/ \mathrm{x} /$ fall outside the phonological system of Resigaro. However, it could be argued that $/ x / x i l l s$ the mole ${ }^{\text {mi }}$ at the voiceless velar fricative position, and perhaps even that $/ \mathrm{r} /$ hos evolved from a voiced alveolar fricative (another "hole"), although this is less convincing, and $/ r /$ is at the present time not at all fricative. For the reasons given in I. 2. I. 5.l. and $1.2 .7 .5 .2 ., / r /$ and $/ x /$ are at presert considered to be marginel, and outeide the system.
    ${ }^{13}$ It is interesting to note that there are both glottal and velar voiceless fricatives in Ocaina, the language of my informant's father, which he also speaks fluently. However, the Resigaro words for "Sunday" and "to rest" are not direct loans from Ocaina, in which the words are jayofvuxha and jayoovu, respectively. (cf. Agnew and Pike, 1957, and Leach, 1969.

[^17]:    14 For the interpretation of long vocoids as sequences of two short vocoids, cf. section 1.2.2.6., below.

[^18]:    differentes ontrent dans les memes combinaisons, soit aveo dos elements prosodiques, soit avec des seghents voisins dans la chaino, que los noyaux syllabiques unis ot longs. Il faut conclure de ce parallelisme que les voyelles longues ... constituent une succession de deux phonemes vocaliques identiques." (1971:38)
    I7Pike adopted a similar solution for handing ifixteco long Vowels and gliding toncs: "Mixteco long vowels must be regerded as constituting two basic units of Iongth since (1) every long vowel carries two tonerios; (2) no short vowol carries two tonemes; (3) the long vowols are paralleled by clusters of diverse vowels, each vowol having its own tonome; ..." (1948:79, fn 3)

[^19]:    Numerals refer to sub-classes of consonants which may occur in the positions indicated.
    ${ }^{2}$ In the case of vowels, sub-script numerals merely serve to distinguish the two vowels in the nucleus

[^20]:    $\overline{4} \mathrm{cf} .2 .2 .3 .$, below, on rules of syllable division.

[^21]:    $5_{\text {Note Wavrin's transcription of "lake" (p.215) and "our eye" }}$ (p.217): "lake" (hl.ne. G) : (h) (ü)nëhə
    "our eye" (ve. .fi. ${ }^{\text {( }}$ ) : wa-tncho (sic - t is error by Wavrin) Both cases clearly indicate that he perceived three syllables in each word. 6
    $6_{\text {This }}$ effect of a high tone on syllable boundarics may be explicable on phonetic and physiological grounds, in that high tone is generally produced more energetically than low tone. i.e., stress and high tone co-occur, the fomer being one of the aspects of the manifestation of the latter (though not a very pronounced aspect). Thus, when a high tone is produced after a low tone, it is inevitable that an extra "pulse" be realized and observed.

[^22]:    There is one exception to Rule 4 that is not covered by Rule 5, and this is the word hihuuu "pigeon, dove", in which all the vowels after the first syllable have the same tone and are etically one syllable. However, my infomant recognized this as an unusual word (by laughing when I asked him to say it). It is clearly of onomatopoeic origin, and is thus defined as being not necessarily subject to the rules of syllable structure, the sane as cortain initative sounds which do not, howevor, have the status of words, and which have been heard in some texts, particularly in traditional ficsta songs.

[^23]:    $\overline{9_{\text {Such }}}$ sequences are attested in Bora, where they consist of two sequences of two like vowels. cf. Thiesen, MS, phonemes of Bora. Long vowel sequences are a charactoristic of more distantiy-related Euitoto Muinane. cf. Minor, 1956.

[^24]:    of thic dats, tho numerals (as all other entities) are described a step at a tire, progressing from one lovel to the next. Should it bo desired to see all the nunerals at a glance (for comparativo purposes, etc.), these will bo found in the appendices. Numerals lajo are listed in numerical order in Appendix II (entrios 180-189), and nay also be found (ajong with all othor numerals) listed in alphabetical order for Rosigaro and Spanish in Appendix I.

[^25]:    The small anount of derivation at verb stom lovel is a consequence of the largessale derivation at Group level (cf. Chapter 4, below). As explained there this dorivation connot be handled at Word level or lower, due to the lack of internal cohesion of the resultont units.
    ${ }^{2}$ Here, absence of a tone mark indicatus that tone may be high or low, `indicates that it is (or becomes) low, and indicatos that it is high.

[^26]:    $7{ }_{7}$ When a word ending in a vowel is followed by one beginning with a vowel, the juncture feature glottal stop occurs (cf. I.2.3.3.2., above). The nominalization is viewed as operating on the whole VG to produce what is gramatically one noun stem (even if it may be possible to view this as not being a single phonemic unit). It is therefore convenient to write this without a break, and hence it becomes necessary to indicate the glottal stop.

[^27]:    ${ }^{8}$ Contrast with the noun sooht "a lie" (the false word itself -cf. -ht in description of classifiers, in 3.2.2.2.1., below). This case demonstrates an increase in voicing lag for the nasal in the root, as for sub-type i, above, though the same does not happen with tho $\underset{A}{ }$ in the next example, nor with the $\underline{n}$ in the following one.

[^28]:    $\overline{17}$ Types and sub-classes of dicotive sten are alnost completely co-extensive -- a consequonce of the fact that the structural differences that lead to the ee inbljshnent of different types bring about semantic chaness which affect the distribution.

[^29]:    In Resigaro this verb is clearly intransitive, though it may be nade transitive by addition of the causative suffix. cf. 3.1.2.3., below.
    ${ }^{2}$ This verb is not attested without the reflexive surfix.

[^30]:    4cf. omission of the final syllable of tofva, "to obtain", in 4.1.2.2.

[^31]:    $\overline{7}$ Contrast the opposite (and optional) effect of the reciprocal suffix -- cf. 3.1.2.2.2., above.

[^32]:    $\overline{I 2}^{1}$ In this connection, it may be questioned whether the goner-ally-onitted -ni of aa?n1 "to give" is related. The answors to these questions nust mwait further rescarch.

[^33]:    14 ance all examples in this To facilitat all examples in this section. The feminine dual mariser given in equally-well occur in all cases.

[^34]:    $\widehat{15}$ Not repeated in succeeding glosses, since all examples in the second person in this section are of the plural, as indicated by the paragraph heading.

[^35]:    18 Or on the head verb of a complex verb piece, when on imper. ative directional is present -- of. 3.1.2.6.2.2., below. ${ }^{19}$ The singular and plural forms here are variants of those ex. ernplified under ma?u.
    $20_{\text {Footnote }} 19$ applies.
    21 Except when these contain imperative directionals -- cf. 3.1.2.6.2.2., below.
    ${ }^{22}$ For presence of $=$ na $(<-n()$, cf. section 3.1.2.5.1., above.

[^36]:    33 cf. non-finally.

[^37]:    34 Levinsohn informs me that this is also the caso in Huitoto Minica, on which Minor has gathered data.

[^38]:    35 From informant's gloss, pertenece a tal cona. $36_{\text {This }}$ is only attested with the one word given, in contrast to -pl 合, below, which has a wide distribution, cf. form of pronoun for 3 rd person singular, feminine.

[^39]:    ${ }^{37}$ This gives on interesting insight into Resigaro beliefs concerning the shape of the earth. Note also the insight into their cosmology given by application of the animate classifier to the word for "star": hiviigi.

[^40]:    17 There is a further difference of neaning -- whatever the filler of the axis slot -- when the Pp fills the Predicate slot. cf. 6.2.2.3., and 7.1.1.1., below.

[^41]:    12The clause level tagmeme Purposive may occur more than once in a clause, with the same or different types of filler of the axis slot in the PP in each case -- of. 7.2.1.2.3., section 2, Peripheral Tagmemes, below.

[^42]:    13 The only difference between these three types -- that of filler of the relator slot, and consequent change of meaning and use -- is considered adequate for the establishment of three separate types within the Class of Concomitant phrases (though not adequate for the establishment of different phrase classes, for which at least two structural differences would be required), since it leads to greater clarity in the description.

[^43]:    $\overline{14}$-pat -pa before -net, to avoid two continguous syllables with sequences of two vowels. ${ }^{15}$ Previous footnote also applies here.

[^44]:    $\overline{16}$ In this case the rising tone of nes becomes a falling tone. 17 Compare with Negative Imperative $\{-$ ma? $u\}$ in 3.1.2.6.1.2.1., above, and desiderative clitic $\{-$ ma?u\} in 7.2.1.2.6.3.1., below. Note also the privative $\left\{\begin{array}{l}\text { ma- }\} \text { in } 5.1 .2 .2 .2 ., ~ a b o v e . ~\end{array}\right.$

[^45]:    21cr. 6.2.5.2.2., above, where it is generally glossed as "without". (Type ii Concomitant Phrase)

[^46]:    $\overline{22_{\text {Tack }}}$ of aspiration here distinguishes this rolator from the Conditional marker, 6.2.7.1., above.
    $27_{\text {This }}$ gloss is parallel to some that may be obtained for Resigero clauses containing a Concomitant Phrase whose axis

[^47]:    $\overline{28}$-atat $<$-at "restrictive" (cf. 3.2.2.2.4.) The occurronce of this nominal suffix here confirms that the embedded clause is considered as truly nominalized.

[^48]:    32 There are two other forms which are occasionally glossed as "behind". However, structural analysis indicates that these are in fact examples of sub-types $v$ and vi of Loc-

[^49]:    35 It is not not that means "beside" or "behind", but the combination of $\overline{\mathrm{n}}$ with other elements that gives these meanings.

[^50]:    ${ }^{36}$ It may be that -gix8 is derived from -gi, though *-k 8 is not attested elsewhere.

[^51]:    Tnless one analyses at levels beyond the sentence, when certain tagmemes here viewed as optional in certain contexts may be seen to be obligatory because of the broader context. However, in the present description, analysis does not go beyond the sentence.

[^52]:    This solution parallels the establishment of types of Predicate tagnene.

[^53]:    noun in the Head slot could reduce this to mopitst non. $\sigma_{\text {This }}$ relation may also be expressed by an intransitive clause, as in Hoaa-aठ va?agaja? Ja "John has a knife"
    
    ${ }^{7}$ cf. Longacre, 1965 b on "boosting".

[^54]:    Long Objects such as this are generally placed (by extraposition) at the end of the clause, with a dumy object pre. ceding the Predicate. For details, cf. 7.2.1.2.3.1.1. and 7.2.2.2.3.1.2., below.

[^55]:    $\overline{1 I_{O n}}$ this construction, cf. 5.1.2.2.1. (Verb Pieco type ii, sub-type i.

[^56]:    $\overline{12}$ This could also be glossed, in appropriate circumstances, "Although he sleeps, she works". cf. discussion in 6.2.1.2.

[^57]:    ${ }^{4}$ The difference between iterative and habitucl is clear on both structural and senantic grounds in Resigaro: Structurally, iterative is indicated by use of a NomCl in the Tenporal slot in tho clause, whilo habitual is indicated by Verb Piece type ii, sub-type i (cf. 5.1.2.2.1.). Semontically, iterative refers to the inherent correlation between two events (working and getting tircd, cotching fish and eatirg well, etc.), which holds in any time-scale, whereas hobitual refers nerely to repoated action in tho past.

[^58]:    $\overline{16}$ In the Imperative, thero aro only four types, since nontronsitive clauses cannot be inperative.

[^59]:    $\overline{18}$ For interrogatives in the LP in the Predicate slot, of. 7.2.2.1.2.2., Group 2, below.

[^60]:    $\overline{20}$ It may also indicate lack of accompaninent or negative action -- of. 6.2.5.2., above.

[^61]:    ${\overline{ } 1_{\text {Since }}}$ the Verb Group is discontinuous, with the phonological form of the Object fused with its first part, and the phonological form of the Subject fused with its second part, the indication of constituent tagmenes here does not atterapt to show this dotail.

[^62]:    ${ }^{22}$ Again, wi.th a complex Verb Group, the assimilated subject occurs between the two constituent elements.
    ${ }^{23}$ If the proposed performer of the desired action is coreferential with the desirer of the action, the desiderative clitic is usually used on the verb.
    e.g. da?mita-ma?u
    $\frac{\text { he-eat - desid }}{S: N P_{2}^{1} P: V P}$
    "He wants to eat"
    (cf. 7.2.1.2.6.3., below.)

[^63]:    28The differences in position apparently correspond to differences of emphasis given to the various constituents of the clause, or to the introduction of new information, as opposed to infornation already given.

[^64]:    $3 I_{\text {Phere }}$ is no allomorph ${ }^{*}$-mb? of the desiderative -- contrast 3.1.2.6.1.2.1., above.

[^65]:    $\overline{32}$ This reflects on the general reluctance in Resfgaro to make any statement involving the second person except a command or a question -- which is logical, since to tell a person what they are doing or what they want to do is of little if any information-value (though of course in sone languages such statements form part of greetings procedures).

[^66]:    37 The LP may fill the predicate slot in Clause type i. cf. 7.1.1.1.1.3.(ii), above.

[^67]:    $\overline{38}$ For anothor interrogative fillor of the Temporal slot, cf. last paragraph under Group l, above.
    39 For another interrogativo fillor of tho Purposive slot, cf. Group 1, above.
    40 These two interrogatives may be viewed as representing the only Interrogative Phrases in Resigaro, all other in-

[^68]:    terrogatives (i.e., those described in Groups 1-5) being intarrogative words. However, since no detailed analysis of the interrogative is made, a separate Interrogative Phrase is not established.

[^69]:    "This may change to a level low tone, or to a falling tone in some contexts, as may be observed in various examples, including (i), bclow.

[^70]:    42 The information conroyad by non-transitive clauses may also be conveyed by intransitive clauses in which the predicate is fillut by 独 "to be", as indicated in footnotes to section 7.I.I.I.I., above. The resulting clauses may be relativized. .
    ${ }^{43}$ Since the distinctions in Resigaro between these two are seen more clearly by parallol traatnent, I do not here describe each type in separate sections.

[^71]:    44For exceptions to the last two parts of this general rule, of. the detailed description which follows.

[^72]:    ${ }^{45}$ The previous footnote applies equally here.

[^73]:    50 There is no morpheme in the Resigaro here corresponding to the English "one". Thus, a more "literal" gloss might be: "The $\varnothing$ who killed her". i.e., there is no Head for the Relativized Clause to modify, so this itself becomes the Head of a different type of NP. cf. 6.1.2.2., above, for further details.

[^74]:    $I_{\text {There }}$ are no complex sentences in Resigaro, since all "subordinate" (dependent) clauses fill Clause- or Phraselevel slots, as described in chapters 6 and 7, above, and thus form an integral part of the independent clauses in which they occur, without leading to the establishment of structurally different relationships from those present when the Clause- or Phrase-level tagmeme in question has a non-clausel filler. This is fully exemplified and explained in the chapters referred to.

[^75]:    ${ }^{2}$ It is probable that the final syllable of hamee?nt is also identifiable with the restrictive.

[^76]:    5 When the Benefactive Phrase has a nominalized clausc in the axis slot, the relation between this embedded clause and the matrix clause is one of Cause-Effect. This is close to the Grounds-Implication function when -pokt? is part of the type $v$ comector at Sentence level, the difference paralleling that between Concessive and Adversative referred to in the footnote on mikt, above: Groundsamplication shows the speaker's reaction to a situation, whereas Cause-Effect merely states neutrally a causal relationship.

    In relating the semantic to the syntactic difference, we see that the situation here is the reverse of that in the previous case: here, the speaker's reaction is shown at Sentence level, and the clause embedded in the BP is neutral, whereas Sentence-level Adversative is neutral, and Phrase-level Concessive is not.

