

**BOLIVIAN INDIAN GRAMMARS: TWO**

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# BOLIVIAN INDIAN GRAMMARS: II

*Prepared under the direction*

*of*

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# *Introduction*

Ten grammars of indigenous Bolivian languages are presented in the two volumes of Bolivian Indian Grammars. The data were gathered and analyzed by members of the Bolivia Branch of the Summer Institute of Linguistics, which has carried on linguistic investigations in this country since 1955.

The corpus on which each grammar has been based was closed far short of an exhaustive treatment. Nevertheless each analysis is based on a minimum of 200 pages of text dictated spontaneously. Gaps in the patterns have been filled in by elicited materials, but no patterns have been established on the basis of elicited materials alone. Most of the linguists have not only gathered far more than the minimum amount of texts, but have also become fluent in speaking the languages, and intimately acquainted with the culture through years of living in the tribal villages.

The grammars are presented in the tagmemic model<sup>1</sup> of Pike with adaptation of the matrices<sup>2</sup> and syntax paradigms<sup>3</sup> developed by him, as well as the basic concepts which characterize the tagmemic model: (1) the postulation of three hierarchies, the phonological, grammatical, and lexical or semantic; (2) the segmentation of the construction occurring on a given level into a string<sup>4</sup> of tagmemes manifested by lower-level constructions or units; (3) the definition of the tagmeme as a class-slot correlative with an obligatory versus optional (+ or -) characteristic; (4) the assumption that units and patterns exist in a language; (5) the stipulation that a well-defined unit be described in terms of identificational-contrastive features, variants, and distribution; and (6) the establishment of emic (versus etic) units.

<sup>1</sup> Pike, Kenneth L. 1954, 1955, 1960. *Language in relation to a unified theory of the structure of human behaviour*, Part I, II, III. Glendale, Summer Institute of Linguistics.

<sup>2</sup> Pike, Kenneth L. 1962. "Dimensions of Grammatical Constructions," *Language*, Vol. 38:3, part 1, July-September.

<sup>3</sup> Pike, Kenneth L. 1963. "A Syntactic Paradigm," *Language*, Vol. 39, No. 2, April-June.

<sup>4</sup> Longacre, Robert E. 1960. "String Constituent Analysis," *Language*, Vol. 36, No. 1, January-March.

The grammars begin with a description of the highest level for which a formal definition has been described, and proceed from level to level, ending with roots and affixes. Each construction which manifests a tagmeme in the formulas is analysed on a lower level, or, in case of recursive constructions, on the same or a higher level. Rewrite operations<sup>5</sup> for the generation of sentences from the formulas are not explicit, but are implicit in the grammars. By substituting each formula or lexical unit for its symbol, from the highest level to the root and affix, the grammar generates the grammatical sequences of the language insofar as the grammar and lexicon are correct and complete.

In these volumes of grammars which are uniform in underlying theory and general form of presentation, a comparison of sets of matrices might serve as a guide or outline for typological studies. For example, a glance at the clause matrices of Chacobo and Quechua immediately calls attention to major structural differences between the two languages: the basic cleavage between transitive and intransitive, and between complete and incomplete in the Chacobo, whereas these categories are relatively unimportant in Quechua, which emphasizes an affirmative-negative set of contrasts. Both of these languages have very complex clause structures, but the complexity in the Chacobo is in markedly different areas than that in the Quechua. A comparison of the clause matrices of these two languages with that of Movima again emphasizes the differences in the general structure of the languages.

On the other hand a comparison of sets of matrices for the purpose of establishing or corroborating a genetic relationship is sometimes or in some areas fruitful, sometimes not. It would be difficult to argue a relationship between the Tupi-guaranian Sirionó and Guarani on the basis of Chart I of the Guarani grammar (Guarani 1.1) and Chart I, which most nearly corresponds to it in the Sirionó grammar (Sirionó 2.3.1), although minor features of the grammars are strikingly alike. The combination of function words on the clause level (Sirionó 2.3.3. and 4.12) and of particles in the verb phrase (Sirionó 3.1.2) which are peculiar to Sirionó corresponds very closely to the clutter of clitic particles of the verb phrase periphery which is characteristic of Guarani (Guarani 2.1.3). Likewise the series of predicates P1, P2, P3, P4 and the anteverb within one clause in Guarani (1.1.2) are parallel to the series of dependent clauses filling

<sup>5</sup> Longacre, Robert E. 1964. Grammar Discovery Procedures, a Field Manual. The Hague, Mouton and Co.

Sat slots in the content string (Sirionó 2.3.1.2) and the preverb in the verb phrase (Sirionó 3.1.2) of Sirionó.

The comparison of clause matrices in the Arawakan languages is more encouraging. Those of Baure (Chart II, 2.1.1) and Ignaciano (Chart I, 2.1.1.1) show noteworthy similarities as well as differences. In the Tacanan family the matrices of the clause, verb phrase, and verb of Tacana and Eseejja suggest similarity of structure, although some major differences appear (Eseejja Chart I, 2.1.1, Chart II, 3.1.1, and Chart III, 4.1.1; Tacana Chart I, 2.1, Chart II 3.2;1, and Chart IV, 4.1.1.1).

In noting both contrasts and similarities consideration must be given to differences in presentation which reflect the linguist's preferences rather than structural contrasts. An instance is the apparent difference between the Eseejja and Tacana verb charts, due to the presence of the quotative verbs 40 and 50 in Eseejja and the auxiliary verbs 50 in Tacana. This difference is easily determined to be primarily one of presentation by comparing the roots of the two sets of verbs (Eseejja 4.1.6.1 and Tacana 4.1.4), and their ultimate distribution in the quotative clauses (Eseejja 2.1.2 and 3.1.2.1; Tacana 2.2.2).

The comparison of the independent, dependent, and included clause matrices of Quechua (Chart I, 2.1.1 with those of Aymara (unpublished grammar notes by Warkentin, Heaslip, McNeil of the Summer Institute of Linguistics) shows a very striking similarity.

A few miscellaneous features which are particularly exotic or which may be of theoretical interest in the various grammars of this volume are listed below:

(1) In Quechua, included clauses whose distribution class is determined by the verb class (ditransitive, transitive, etc.) and by the noun case (subjective, objective, locative, etc.) of the verbal noun in the filler of the predicate slot result in an exceedingly complex system (Quechua 2.1, 2.4, 4.1, 4.2, et al).

(2) In Guarani, a supersegmental morphophoneme of nasalization occurs (Guarani 4.1).

(3) In Sirionó there is a unique morphophonemic span (Sirionó 5.2).

(4) Itonama and Guarani are characterized by complex levels of morphophonemics (Itonama 5.2, Guarani 4.2).

(5) In Movima are found noun phrases of extraordinary recursiveness, traced through at least eight layers, which are of high frequency in text and in conversation (Movima 2.3).

(6) Of the great variety of rare semantic categories which cor-

respond to grammatical classes in the various sections of these volumes, those which are described as "rhythm" suffixes classifying action in Itonama are perhaps the most unusual (Itonama 4.1, Classes 1220 and 1230).

#### Conventions of analysis and symbolism

In the following paragraphs various conventions and symbols are explained by means of notes and illustrations.

Generally in the tagmemic model units are considered to be in emic contrast on the basis of two structural differences<sup>6</sup>. These may be two differences in composition (one of which may be recognized by difference in transform potential) which necessitate the writing of separate formulas, or, following Pike, they may be one structural difference and one difference in distribution. For the purposes of these volumes we have further defined the basis of emic distinction as follows: A difference in distribution together with a difference in class of slot fillers which is relevant on different levels and/or is correlated with other emic distinctions (such as the difference in the lists of transitive and intransitive verbs in most languages) establishes emic contrast; however, a difference in distribution plus a difference in lists of slot fillers which are primarily semantically determined does not establish emic contrast. For example, we may describe one phrase, N 1, as manifesting both time and location tagmemes, although the time slot is filled only by a list of those phrases which include a word indicating time, while the location slot is filled by a different list of those phrases which include a word indicating place:

...+T:N 1 +L:N 1 ...

When only one difference between the formulas of two emic classes is apparent, a difference in distribution is to be assumed.

In two of the grammars, the Chacobo and Baure, it was found economical to describe the nuclei of the clauses separately from the margins. The resultant distinction between clause and clause nucleus is not considered to be a bona fide difference in level. The clauses are therefore shown as emically different, although the formulas combining nuclei and margins show that only the nuclei contrast.

We have not tested all combinations implied in the formulas. In a language with a great many clause classes with numerous marginal tagmemes each manifested by a variety of classes of constructions, the potential number of combinations is astronomical. In such cases when no restriction is apparent we have assumed that all possible combinations occur.

<sup>6</sup> Pike, 1962 and Longacre, 1964.

Wherever it has been a matter of choice we have kept the higher levels simple at the expense of complexity on the lower levels.

Pike's technique of multiplication<sup>7</sup> is frequently used; that is, each unit of a matrix (or each formula of a paradigm) is modified in the same way so that a corresponding matrix is established.

Co-occurrent tagmemes are said to be in portmanteau relationship when they are manifested simultaneously by the same construction.

When the formulas of a tagmemic paradigm are identical with the formulas of the tagmatic paradigm except for the slot fillers, the fillers are shown in the tagmemic paradigm, and the tagmatic paradigm is omitted.

When there is variation of order of tagmemes the most frequent order is shown in the formula, and the variations are described.

In tagmemic grammars a phrase is generally described as a construction involving an obligatory tagmeme and at least one other tagmeme, obligatory or optional. For the grammars in these volumes the phrase is better defined as a unit of the level between clause and word, which characteristically manifests a clause-level tagmeme. For economy of description in some instances we have treated as a phrase a single tagmeme manifested by one word, a unit which cannot be expanded, when it shares the distribution of a class of phrases.

In many of the grammars there are hesitation words which may interrupt any construction on any level. We have described the occurrence of the hesitation only where it is frequent or characteristic.

In the matrices each vector is represented by a millennium, century, decade or unit, in an arrangement such that the item in each cell is designated by a combination of the numerical symbols of the row and vector. For example in Chart I, Emic Clause Classes, of Quechua (2.1), the Intr column is numbered 30, and the Ig corr row is numbered 02. The symbol C1 30 refers to any intransitive clause; that is, to any of the clauses 31a to 34b. The symbol C1 02 refers to any interrogative corroborative clause, that is, to C1 12, 22, 32, 42, or 52. The symbol C1 32 refers to the intransitive interrogative corroborative clause. Similarly a row symbol 103 may be combined with decade symbols of the columns to produce the symbols 113, 123, etc.

In general the order of formulas in the paradigms follows column by column the order of the corresponding matrix.

<sup>7</sup> Pike, 1962.

In the abbreviations lower case letters symbolize units which fill slots on the morphological level. The symbols of all higher level units and of all tagmemes begin with capitals. The sentence is labeled Sent, and the clause, C1; a construction whose symbol begins with a capital and which has no other indication of level, may be assumed to be a phrase; i.e. N is to be read "noun phrase," n is to be read "noun." The list of abbreviations gives only the forms with capitals, except in those cases in which the form with capital is not employed.

In citations of the indigenous language, however, capital letters are morphophonemic symbols, which are explained in the morphophonemic section of each grammar. Citations are written morphophonemically only where the morphophonemic form is particularly relevant.

In citations of the indigenous languages, the intonation contours are approximately marked by punctuation. Beyond that the contours are identified only to the extent that they are essential to the description of the grammar.

Class and numerical symbols are generally given together, except that affixes are symbolized by the numerical symbol alone. When, however, an affix numbered under a particular word class occurs in the composition of a different word class, that affix is shown with class symbol as well as numerical symbol:

vb stem 12 = ...+Caus: 3217, but

n stem 4 = +...-Caus:vb affix 3217.

Distribution classes of roots and constructions as well as morphophonemic classes are to be marked in the lexicon of a language. Loans are generally treated as roots.

N not followed by a numerical symbol, symbolizes any noun phrase.

A series designated by a hyphen refers to any one member of the series unless otherwise specified. The symbol C1 11-34 refers to any one clause numbered from 11 to 34. The symbol vb A-L refers to any one verb with a letter symbol from A to L of the alphabet.

If the formula of C1 11-34 includes a corresponding series, for example if it contains the tagmeme +P: Vb 11-34, it is to be assumed that in each clause of the series the numerical symbol within the formula will be identical with the numerical symbol of the clause. This means that in the example above the predicate of C1 23 will be manifested by Vb 23.

+(+A +B) indicates that the occurrence together of the tagmemes A and B is optional but that neither occurs without the other.

+(+A ±B) indicates that the occurrence of tagmeme A or of the

two tagmemes together is optional, but that tagmeme B does not occur without tagmeme A.

+(+A +B) indicates that the occurrence of either one of the tagmemes or of the two tagmemes together is obligatory.

+/-/- indicates that the occurrence of a tagmeme is optional under stated conditions, and obligatory under other conditions, and that it does not occur under other stated conditions.

(...)<sup>n</sup> indicates that the parenthetical item is optionally repeated an indefinite number of times.

T<sup>3</sup> indicates that the tagmeme T optionally occurs up to three times in a construction. In morphophonemic writing a superscript merely distinguishes symbols.

T 1, T 2 symbolize two tagmemes which are formally contrastive although they are similar in function.

The formula +Base: n r 1/4 Res/8/vb r 10 +Cpd: n r 3 AS is to be read as follows: the obligatory Base tagmeme manifested by a noun root of class 1, by members of a restricted list of noun roots 4, by a noun root of class 8, or by a verb root 10; plus the obligatory tagmeme Compound manifested by members of noun root class 3 which arbitrarily select fillers of the Base slot with which to occur.

The symbol Res is thus employed of an etic class which is relevant at only one point in the grammar. The list of n r 2 Res in one formula is assumed to be a different list from that of n r 2 Res in another formula in the same language.

In the tagmeme +Base: n r 2 (imo), the form cited in the parenthesis is the only n r 2 which manifests the Base.

When corresponding slot symbols are differentiated by number in tagmemic formulas, the number may be omitted in the tagmatic formula when the fillers clearly show the differentiation: P 22 and P 23 in the tagmemic formulas may be written as P: Vb 22 and P: Vb 23 respectively in the tagmatic formulas.

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# *Abbreviations and Symbols*

A	agent
Abil	abilitative
Abs	absolute
Ac	accompaniment
Act	active
Ad	additive
Adj	adjective
Adjl	adjectival
Adv	adverb
Advs	adversative
Aff	affirmative
An	animate
Antic	anticipatory
Ap	appositive
AS	arbitrary selection
Asp	aspect
Asr	assertive
At	attributive

Att	attitude
Aug	augmentative
Aux	auxiliary
Ben	benefactive
C	consonant
C	complement
Caus	causative
Cd	coordinate
Cert	certification
Char	characterizer
Cir	circumstantial
Cit	citation
Clar	clarification
Clas	classification
Clos	closure
Cn	connective
Col	collective
Com	complete
Con	contour
Cond	condition
Conj	conjunction
Cont	continuative
Coop	cooperative
Cop	copulative

Corr	corroborative
Cp	comparative
Cpd	compound
Ctd	contained
Decl	declarative
Def	definite
Dem	demonstrative
Dep	dependent
Depr	deprecatory
Desc	descriptive
Desid	desiderative
Det	determinative
Detr	detrimental
Dim	diminutive
Dir	direction
Dis	discourse
Ditr	ditransitive
Div	diversification
Dub	dubitative
Dup	duplication
Dur	durative
End	endearment
Emph	emphatic

Eq	equative
Ev	evaluative
Ex	existential
Excl	exclusive
Exclam	exclamatory
Exp	expectation
Ext	external
Exten	extensive
Extra	extraordinary
F	function
Fem	feminine
Frag	fragment
Frust	frustrative
Fv	formative
Gen	genitive
Gd	gender
Hab	habitual
Hes	hesitation
Hm	human
Hort	hortatory
Hyp	hypothetical
I	item

<b>Id</b>	identical, identification
<b>Ig</b>	interrogative
<b>Imper</b>	impersonal
<b>Impv</b>	imperative
<b>Inan</b>	inanimate
<b>Inc</b>	incipient
<b>Incl</b>	inclusive
<b>Incom</b>	incomplete
<b>Ind</b>	independent
<b>Indef</b>	indefinite
<b>Indic</b>	indicative
<b>Indir</b>	indirect
<b>Inf</b>	infinitive
<b>Info</b>	information
<b>Inst</b>	instantaneous
<b>Instr</b>	instrumental
<b>Inten</b>	intention
<b>Intens</b>	intensifier
<b>Inton</b>	intonation
<b>Intr</b>	intransitive
<b>Intro</b>	introducer
<b>Intrv</b>	intransitivizer
<b>Inv</b>	invitation
<b>IO</b>	indirect object
<b>It</b>	iterative

J	juncture
L, loc	locative
Lim	limitative
M	manner
Mar	margin
Masc	masculine
Mk	marker
Mod	modification
Mov	movement
N	noun
Neg	negative
Neu	neuter, neutral
Nl	nominal, nominalizer
Nuc	nucleus
Num	number, numeral
O	object
Obl	obligatory
Onom	onomatopoetic
Opt	optative
P	predicate
Par	partitive

Part	particle
Pas	passive
Per	periphery
Perc	perceptive
Perf	perfect
Perm	permissive
Permn	permanent
Pl	plural
Pos	position
Posd	possessed
Postpos	postpositive
Prepos	prepositive
Pres	present
Prevb	preverb
Priv	privative
Pro	pronoun
Prob	probability
Prog	progressive
Proh	prohibitive
Ptc	participle
Ptcl	participial
Ptn	potential
Pur	purpose
Q	question

Qual	qualifier
Quan	quantitative
Quot	quotative

R	root
Rad	radical
Rec	reciprocal
Recp	receptor
Red	reduplication
Ref	referent
Refl	reflexive
Rel	relative, relationship
Rep	repetitive
Repr	reportative
Res	restricted
Resp	respectively

S	subject
Sat	satellite
Sem	semelfactive
Sent	sentence
Seq	sequence
Sg	singular
Sim	simultaneous
Spec	specifier
Sub	subordinate

Subj	subjunctive
Subs	substantive
Suc	successive
T	time
Temp	temporal, temporary
Tr	transitive
Trn	transition
Trv	transitivizer
V	vowel
Vb	verb
Vbl	verbal
Voc	vocative

## **PERSONS**

- 1 sg
- 2 sg
- 3 sg (f)
- 3 sg (m)
- 1 pl (excl, incl)
- 2 pl
- 3 pl

+      obligatory  
-      minus

<u>+</u>	optional
/	or
,	and
{ }	tagmemic formula
[ ]	tagmatic formula
~	variation under stated conditions

PITCH

1	low
2	mid
3	high

# *Itonama*

by Elizabeth Camp and Millicent Liccardi

Itonama<sup>1,2</sup>, an independent language<sup>3</sup>, with ten or less speakers whose original language is Itonama, about 100 bilinguals who speak Spanish equally well, and 150 to 200 who speak Spanish but understand Itonama. These are residents of the towns of Magdalena, San Ramón, and Huacaraje and their environs, in the provinces of Iténez and Mamoré in the department of Beni, Bolivia.

1. The sentence
- 1.3. The sentence fragment
- 1.4. The intonation
2. The clause
- 2.2. The independent clause
- 2.3. The dependent clause
3. The phrase
- 3.1. The verb phrase
- 3.2. The noun phrase
- 3.3. The pronoun phrase
- 3.4. The adjective phrase
- 3.5. The locative phrase

<sup>1</sup>The phonemes of Itonama are: a, b, č, č̄, d, e, h, ?, i, ay, k, k̄, l, m, n, o, p, r, s, t, t̄, t̄y, u, ɿ, b, w, y.

<sup>2</sup>Liccardi and Grimes, 1961.

<sup>3</sup>McQuown, 1955.

- 3.6. The time phrase
- 3.7. The adverb phrase
- 4. The word
  - 4.1. The inflectional word affix class 1000
  - 4.2. The verb
    - 4.2.2. The independent verb
    - 4.2.3. The dependent verb
    - 4.2.4. The auxillary verb
  - 4.3. The noun
  - 4.4. The pronoun
  - 4.5. The adjective
  - 4.6. The adverb
  - 4.7. The locative
  - 4.8. The demonstrative
  - 4.9. The time word
  - 4.10. The causal word
  - 4.11. The interrogative
  - 4.12. The onomatopoetic word
  - 4.13. The particle
- 5. The morphophonemics

### 1. The sentence

#### 1.1. Tagmemic sentence paradigm

Sent 1 = {+Nuc:C1 01 +Inton:Contour 1}

Sent 2 = {+Nuc:C1 02 +Inton:Contour 2}

Sent 3 = {+Nuc:C1 03 +Inton:Contour 1-2}

#### 1.2. Citation sentence paradigm

Sent 1 = askiyaba?na 'I'm-going-to-make-a-corn-drink'.  
           se?kačube?behke warusu opo?roma 'we-pour rice  
           hide' (we pour the rice on the hide).

Sent 2 = a?dulawahna 'are-you-going?'  
           počone ka?nodosine?ko 'like-that did-you-not-say'  
           (did you not say it like that?).

Sent 3 = kote ko?maki-mo uwa?ka 'when you-give-me meat'  
 (when are you going to give me meat?).  
 ito?ko de?mama?ča 'where are-we-going?'.

### 1.3. The sentence fragment

#### 1.3.1. Tagmemic sentence fragment paradigm

Sent frag 1 = {+Comt:part Res +Nuc:part/adj /N 1-2/C1 lll/  
 121/134/141/pro/T/adv +Voc:N Res +Inton:Con-  
 tour 1}

Sent frag 2 = {+Ig:ig +M:adv 6/Dub:part 11 +Inton:Con-  
 tour 1}

Sent frag 3 = {+Nuc:part 7/14/Pro/causal 2/adv 7 +Inton:  
 Contour 2}

Sent frag 4 = {+Nuc:adv 7 +T:t/Aff:part 4 +Inton:Con-  
 tour 1}

Sent frag 5 = {+Ig:ig +Nuc:L +Inton:Contour 1}

Sent frag 6 = {+Nuc:N +T:C1 111/131 +Inton:Contour 1}

Sent frag 7 = {+M:adv 6-7 +Dub<sup>2</sup>:part 11 +Nuc:N +Inton:  
 Contour 1}

Sent frag 8 = {+Dub:part 11 +Nuc:dem +L:loc +Inton:  
 Contour 1}

Sent frag 9 = {+Nuc:onom +Inton:Contour 3}

The tagmeme +Hes:part 15/11 occurs optionally in any order in any syntactic construction in the language. We omit it from the formulas.

#### 1.3.2. Citation sentence fragment paradigm

Sent frag 1 = da?i--bene 'let's-go--of-course' (come on,  
 let's go).

kadomohe--lepe?kebe čunabuwa 'greeting--sisters  
 fellow-countrywomen' (hello sisters, fellow  
 countrywomen).

wa?ihna--ko?ni 'and--you'.

Sent frag 2 = kote--dahne 'when--maybe?'.

Sent frag 3 = mahya 'how-goes-it?'.

Sent frag 4 = počone?o--aha 'like-that-again--yes' (yes, like that).

Sent frag 5 = ito?ko--yononi ohčokosno abite 'where--there inside the-jungle' (there where it was, inside the jungle).

Sent frag 6 = kasuwela ka?ninaymapi--ka?neyut?uwa?tyo biskočo panke?te 'pot your-container--when-you-make biscuits cakes' (in your pot and container when you make biscuits and cakes).

Sent frag 7 = do?ne--do?odahne--peča--nipura 'only--may-be--could-it-be--Pura' (maybe only Pura).

Sent frag 8 = dahne--diyo?e--na?abi 'maybe--these--here'.

Sent frag 9 = hm Sound of jaguar

#### 1.4. The intonation

Pitches of the intonation contour are given for the three final syllables only.

Contour 1 decl = 2-3-2/2-2-2/2-3-3/3-3-3

Contour 2 ig = 2-2-3

Contour 3 onom = Varies according to sound imitated

#### 2. The clause

##### 2.1. Emic clause classes

	Tr 10	Ditr 20	Intr 30	Quot 40	St 50
Decl-Intent 01	11	21	31	41	51
Ig corr 02A	12A	22A	32A	42A	52A
Ig aff-neg 02B	12B	22B	32B	42B	52B
Ig info 03	13	23	33	43	53

Chart I. Emic independent clause classes

	Tr 10	Ditr 20	Intr 30	Quot 40	St 50
Dep A (prefix) 101	111	121	131	141	151
Dep B (suffix) 102	112	122	132	142	152
Dep C (nom)	103	123	133	143	153
Dep D (loc)	104	124	134	144	154

Chart II. Emic dependent clause classes

2.2. The independent clause2.2.1. Tagmemic independent clause paradigm

Cl 11 = {+S +P 11 +O}

Cl 12A = {+S +M 12A +Aux 12A +P 12A +O}

Cl 12B = {+S +M 12B +Aux 12B +P 12B +O}

Cl 13 = {+Ig +S +P 11 +O}

Cl 21 = {+S +P 21 +IO +O}

Cl 22A = {+S +M 22A +Aux 22A +P 22A +IO +O}

Cl 22B = {+S +M 22B +Aux 22B +P 22B +IO +O}

Cl 23 = {+Ig +S +P 21 +IO +O}

Cl 31 = {+S +P 31}

Cl 32A = {+S +M 32A +Aux 32A +P 32A}

Cl 32B = {+S +M 32B +Aux 32B +P 32B}

Cl 33 = {+Ig +S +P 31}

Cl 41 = {+S +P 41 +IO +Cit}

Cl 42A = {+S +M 42A +Aux 42A +P 42A +IO +Cit}

Cl 42B = {+S +M 42B +Aux 42B +P 42B +IO +Cit}

Cl 43 = {+Ig +S +P 41 +IO +Cit}

Cl 51 = {+S +P 51 +C}

Cl 52A = {+S +M 52A +Aux 52A +P 52A +C}

Cl 52B = {+S +M 52B +Aux 52B +P 52B +C}

Cl 53 = {+Ig +S +P 51 +C}

2.2.2. Tagmatic independent clause paradigmCl 11 = [+Cn:part 1/Causal:causal +Report:part 2 +L:  
L/N/Cl 104 +(T 1:Cl 101-102/T)<sup>2</sup> +(T 2:Cl 101)<sup>2</sup>

+T 3:C1 101/N 1/3/C1 113/133/153 +S: N/Pro/C1  
103/Adj +Dub:part 11 +M: Adv +Aux:aux vb 1-2  
+P: Vb 11-12/16-17 +S Ap:N 2-3 +O: N/Pro/C1  
103/Adj +Voc: N]

C1 12A = [+Cn:part 1/Causal:causal +S: N/Pro/C1 103/Adj  
+Dub:part 11 +M: Adv/adv 8 +Aux:aux vb 1-2/4  
+P: Vb 13A-13B +O: N/Pro/C1 103/Adj +L: L/N/  
C1 104 +T 1:C1 101 +T 2:C1 101/T +Voc: N]

C1 12B = [+Cn:part 1/Causal:causal +S: N/Pro/C1 103/Adj  
+Dub:part 11 +M: Adv +Aux:aux vb 1-2 +P: Vb  
14 +O: N/Pro/C1 103/Adj +L: L/N/C1 104 +T 1:  
C1 101 +T 2:C1 101/T +Voc: N]

C1 13 = [+Ig: ig +S: N/Pro/C1 103/Adj/Ig 1-2 +Dub:part 11  
+Aux:aux vb 1-2 +P: Vb 17/111 +O: N/Pro/C1  
103/Adj +T: T +L: L]

C1 21 = [+Cn:part 1/Causal:causal +Report:part 2 +(T 1:  
C1 101-102/T)<sup>2</sup> +(T 2:C1 101)<sup>2</sup> +T 3:C1 101/N 1/  
3/C1 113/133/153/Adj +S: N/Pro/C1 103/Adj  
+Dub:part 11 +M: Adv +Aux:aux vb 1-2 +P: Vb  
21-22/26-27 +IO: N/Pro/C1 103/Adj +O: N/Pro/  
C1 103/Adj +L: L/N/C1 104 +Voc: N]

C1 22A = [+Cn:part 1/Causal:causal +S: N/Pro/C1 103/Adj  
+Dub:part 11 +M: Adv/adv 8 +Aux:aux vb 1-2/4  
+P: Vb 23A-23B +IO: N/Pro/Adj/C1 103 +O: N/  
Pro/C1 103/Adj +L<sup>2</sup>: L/N/C1 104]

C1 22B = [+Cn:part 1/Causal:causal +S: N/Pro/C1 103/Adj  
+Dub:part 11 +M: Adv +Aux:aux vb 1-2 +P: Vb  
24 +IO: N/Pro/C1 103/Adj +O: N/Pro/C1 103/Adj  
+L<sup>2</sup>: L/N/C1 104]

C1 23 = [+Ig: ig +S: N/Pro/C1 103/Adj/Ig 1-2 +Dub:part 11  
+M: Adv +Aux:aux vb 1-2 +P: Vb 27 +IO: N/Pro/  
C1 103/Adj +O: N/Pro/C1 103/Adj +T: T +L: L]

C1 31 = [+Cn:part 1/Causal:causal +Report:part 2 +(T 1:  
C1 101-102/T)<sup>2</sup> +(T 2:C1 101)<sup>2</sup> +T 3:C1 101/  
N 1/3/C1 113/133/153 +Inst:n +S: N/Pro/C1 103/  
Adj +Dub:part 11 +M: Adv +Aux:aux vb 1-2

- +P: Vb 31-32/36-37/N/Adj +S Ap<sup>2</sup> : Cl 133/n +L<sup>2</sup>:  
L/N/Cl 104 +Voc: N]
- Cl 32A = [+Cn:part 1/Causal:causal +S:N/Pro/Cl 103/Adj  
+Dub:part 11 +M:Adv/adv 8 +Aux:aux vb 1-2/4  
+P:Vb 33A-33B/N/Adj +(T 1:Cl 101)<sup>4</sup> +T 2:Cl  
101/T +L: L/Cl 104/N]
- Cl 32B = [+Cn:part 1/Causal:causal +S:N/Pro/Cl 103/Adj  
+Dub:part 11 +M:Adv +Aux:aux vb 1-2 +P:Vb  
34/N/Adj +(T 1:Cl 101) +T 2:Cl 101/T +L:L/  
N/Cl 104]
- Cl 33 = [+Ig:ig +S:N/Pro/Cl 103/Adj/ig 1-2 +Dub:part 11  
+M:Adv +Aux:aux vb 1-2 +P:Vb 37/ig 7/N/Adj  
+T:T +L:L +Voc: N]
- Cl 41 = [+Cn:part 1/Causal:causal +Report:part 2 +(T 1:  
Cl 101-102)<sup>2</sup> +(T 2:Cl 101)<sup>2</sup> +T 3:Cl 101/N 1/3Cl  
113/133/153 +S:N/Pro/Cl 103/Adj +Dub:part 11  
+M:Adv +P:Vb 41-42/46-47 +S Ap:N 2-3 +IO:N/  
Pro/Cl 103/Adj +(Cit:Dis/onoma)/O:n +Voc: N]
- Cl 42A = [+Cn:part 1/Causal:causal +S:N/Pro/Cl 103/Adj  
+Dub:part 11 +M:Adv/adv 8 +Aux:aux vb 1-2/4  
+P:Vb 43A-43B +IO:N/Pro/Cl 103/Adj +Cit:  
Dis/onoma +T:T]
- Cl 42B = [+Cn:part 1/Causal:causal +S:N/Pro/Cl 103/Adj  
+Dub:part 11 +M:Adv +Aux:aux vb 1-2 +P:Vb  
44 +IO:N/Pro/Adj/Cl 103 +Cit:Dis/onoma +T:T]
- Cl 43 = [+Ig:ig +S:N/Pro/Cl 103/Adj/ig 1-2 +Dub:part 11  
+M:Adv +Aux:aux vb 1-2 +P:Vb 47 +IO:N/Pro/  
Cl 103/Adj +Cit:Dis/onoma +T:T]
- Cl 51 = [+Cn:part 1/Causal:causal +Report:part 2 +(T 1:  
Cl 101-102)<sup>2</sup> +(T 2:Cl 101)<sup>2</sup> +T 3:Cl 101/N 1/3/  
Cl 113/133/153 +L:L/N/Cl 104 +S:N/Pro/Cl  
103/Adj +Dub:part 11 +M:Adv +Aux:aux vb 1-2  
+P:Vb 51-52/55-57 +C:N 4]
- Cl 52A = [+Cn:part 1/Causal:causal +S:N/Pro/Cl 103/Adj  
+Dub:part 11 +M:Adv/adv 8 +Aux:aux vb 1-2/4  
+P:Vb 53A-53B +C:N 4 +L:L/N/Cl 104 +T:T]
- Cl 52B = [+Cn:part 1/Causal:causal +S:N/Pro/Cl 103/Adj

+Dub:part 11 +M:Adv +Aux:aux vb 1-2 +P:Vb  
 54 +C:N 4 +L:L/N/Cl 104 +T:T]  
 Cl 53 = [+Ig:ig +S:N/Pro/Cl 103/Adj/ig 1-2 +Dub:part 11  
 +M:Adv +Aux:Aux vb 1-2 +P:Vb 57 +C:N 4  
 +L:L +T:T]

Order is not fixed in the clause. However, a tagmeme and its appositive tagmeme occur, the one preceding and the other following the predicate. Formulas given above show the most frequent tagmeme arrangement.

In the Cl 01 usually three or four tagmemes occur and in the Cl 02-03 usually one to three tagmemes occur. The limit is six tagmemes in any one clause. When the T tagmeme occurs more than once, it occurs either preceding or following the P tagmeme, or both.

### 2.2.3. Citation independent clause paradigm

Cl 11 = ho?naha--na?abi--asmay?ye--počone?o--mama?na--  
 dihk?issipayuwač?e--dahneyabača--dahnebisi-  
 ta?nemo asmiku 'now--here--my-children--also  
 --they-are-going--they-miss-you--when-you-  
 came--when-you-visited-me my-house' (now, for  
 this reason my children are going to miss you be-  
 cause you used to come and visit me in my house).  
 ito?ko--sahnaywehča--opi?i uka?tYe 'how--when-  
 we-sell--little flour' (how can we sell a little  
 flour?).  
 osni?ka--dahwo?ne--sič?a?na?na--asme?ka--  
 asme?tYana?k?a pinimakayya--asmečasčebe?tYo--  
 asmebenahča wahwono--peča asmemihča?tYana--  
 asmepe?čudube 'I--only--I-care-for--my-daugh-  
 ter--when-I-wash her-clothes--when-I-look-for-  
 clothes--when-I-look-for soap--could-it-be when-  
 I-wash-for-others--when-I-gain' (I alone care  
 for my daughter by finding clothes for her and  
 washing them, by looking for soap so I can earn  
 money by washing for others).

- Cl 12A = biruma--duhduča?bahe--lepe--kastiliano--  
           dahwo?ne 'because--do-we-want--sister--  
           Spanish--only' (because do we want only Spanish,  
           sister?).
- ohlomiko?na--dahne--dumama?na--duhdupadara?te--  
           dihnipadara--na?abi 'Sunday--maybe--going--are  
           -we-talking--our-language--here' (are we going  
           to speak our language here on Sunday?).
- Cl 12B = mama?na--smuduwaupači?ko--smekisihča 'going--  
           am-I-not-finishing--when-I-sew' (am I not going  
           to finish sewing?).
- Cl 13 = kote--mama?na--ke?yut?uwa?ko--itahwi 'when--  
           going--you-make--hammock' (when are you going  
           to make the hammock?).
- Cl 21 = wa?ihna--smisiyetahča?ča smeyeta?čo--dahwo?ne  
           --sikak?ede--pa?ihke misidili ho?naha misičobo  
           li?sia mikahana?na sečo?eta?ča sečotilahko  
           'and--I-who-live when-I-was-born--only--I--  
           show--priests who-are today which-is church  
           which-is-old where-I-lived where-I-grew-up'  
           (and I showed the priests who now live in the old  
           church where I lived when I was growing up).  
           pa?ohna--askidipak?eda?tebe--ko?ni--asmipadara--  
           na?abi asmiku 'they-say--they-say-I'm-going-to-  
           advise-you--you--my-language--here-my-house'  
           (they say I'm going to teach you my language here  
           at my house).
- Cl 22A = umu--dopočone--dumama?na--sahdaymaki--sihni-  
           t'ye?ke--uwaka--čuka?te semana 'man--is-it--  
           like-that--is-he-going-to--give-us--us--meat--  
           next week' (is the man going to give us meat like  
           that next week?).
- Cl 22B = umu--počone--mama?na--ahmidimaki?ko--ahme?e  
           --uwaka 'man--like-that--he-is-going--he--  
           didn't-give--his-son--meat' (is the man not  
           going to give his son meat like that?).
- Cl 23 = kote--ko?ni--ke?pak?eda?ko--ka?nay?ye--ka?nipa--

dara 'when--you--you-advice--your-children--your-language' (when are you going to teach your children your language?).

C1 31 = pasimat?o--čakahna--warusu--ho?naha 'much--ripened--rice--now' (now a lot of rice has ripened).

pačaste--dahneyaba?a?ko--dahnečebe?t'yo kariote  
meyuwa?lelesko--de?yasahi?na 'so-that--when-we-come--when-we-look-at Iscariot when-he-hangs--we-are-thirsty' (because when we come to look at Iscariot hanging we are thirsty).

sismama?na--lepe 'I-am-going--sister' (sister, I'm going).

C1 32A = dopočone--dahne--duhmala 'is-it-like-that--maybe--is-it-good' (is it good like that?).

C1 32B = umu--počone--mama?na--ahmudu?ba?t'yo 'man--like-that--going-to--is-he-not-dying' (is the man not going to die like that?).

C1 33 = ito?ko--ko?ni--mama?na--ka?nehko--yumani  
'where--you--going-to--you-sleep--tonight'  
(where are you going to sleep tonight?).

C1 41 = kowe?te--misidili?te--sine?ča?ke--asmeyuwe?ne?ka  
asmeyuwe?nes--ahmepak?eda?čamo 'before--those-who-were--they-said--my-grandmother my-grandfather--when-they-advised-me' (my grandmother and my grandfather, who lived a long time ago, said these things when they taught me).

C1 42A = ko?ni--dopočone--dumama?na--ka?dosine--labā  
'you--is-it-like-that--is-it-going--are-you-saying--go' (are you going to say "go" like that?).  
wa?ihna--a?dosine--dada?t'ye 'and--did-you-say--o.k.' (did you say, "o.k.?").

C1 42B = ko?ni--počone--mama?na--ka?nodosi?ne?ko--labā  
'you--like-that--going to--are-you-not-saying--go' (are you not going to say "go" like that?).

C1 43 = kote--ke?mama?na--ko?sine?ko sismama?na 'when

--you-are-going-to--you-say I-am-going' (when are you going to say, 'I am going'?).

C1 51 = kowe?te--kasiki--siyeta?te--paulo mayube 'before --leader--was--Paul Mayuhue' (the leader before was Paul Mayuhue).

na?abi--sidil? --karayana mikikiwa?na meyakana mačiriri 'here--they-are--rich who-know when they-read paper' (the rich people are the ones who know how to read).

C1 52A = mayistr?ka--dopočone--dumama?na?ka dosiye-ta?ka--senyora malele 'teacher--is-it-like--that--is-she-going-to--is-she--Mrs. Malele' (is the teacher going to be Mrs. Malele?).

C1 52B = kasiki--mama?na--ahmodosiye?ta?ko--paulo mayube 'leader--is-going-to--is-he-not--Paul Mayuhue' (isn't the leader going to be Paul Mayuhue?).

C1 53 = ohko?tYo--dahne--mama?na--siyeta?ko--kasiki 'who--maybe--is-going-to--he-is--leader' (who is going to be the leader?).

### 2.3. The dependent clause

#### 2.3.1. Tagmemic dependent clause paradigm

C1 111 = {+S +P 111 +O +O Ap}

C1 112 = {+S +P 112 +O}

C1 113 = {+S +P 113 +O}

C1 114 = {+Intro +S +P 114 +O}

C1 121 = {+S +P 121 +O +IO +O +O Ap }

C1 122 = {+S +P 122 +O +IO}

C1 123 = {+S +P 123 +O +IO}

C1 124 = {+Intro +S +P 124 +IO +O}

C1 131 = {+S +P 131 +S Ap}

C1 132 = {+S +P 132}

C1 133 = {+S +P 133 +S Ap}

C1 134 = {+Intro +P 134 +S}

- Cl 141 = {+IO +S +P 141 +Cit}
- Cl 142 = {+S +P 142 +IO +Cit}
- Cl 143 = {+S +P 143 +IO +Cit}
- Cl 144 = {+Intro +S +P 144 +IO +Cit}
- Cl 151 = {+S +P 151 +C}
- Cl 152 = {+S +P 152 +C}
- Cl 153 = {+S +P 153 +C}
- Cl 154 = {+Intro +S +P 154 +C}

### 2.3.2. Tagmatic dependent clause paradigm

- Cl 111 = [+Cn: part 1/Causal:causal +T:T/N 1-2 +S:N/  
Pro/Cl 103 +Dub:part 11 +M:adv 6-7 +Aux:  
vb 1-3 +P:Vb 111 +O:N/Pro/Cl 103 +L:L/Cl  
104/N 1-2/n 31 +O Ap:Cl 113]
- Cl 112 = [+M:adv 6-7 +S:N 1/dem/pro +P:Vb 112 +O:N  
1/Cl 113/adj 23 (pačuka?te) +L:L/N 1/Cl 134  
+T:T/nl
- Cl 113 = [+T:T/N1 +S:N 1/3/Pro/Adj/Cl 133 +M:adv 6-7  
+Aux:aux vb 1-2 +P:Vb 113 +O:N 1/3 +L:L/Cl  
133-134/N 1 +S Ap:N 4]
- Cl 114 = [+Intro:ig 5/Causal:causal +S:N 1/pro +Dub:  
part 11 +M<sup>2</sup>:Adj +P:Vb 114 +O:N 1/Cl 153  
+L:L/N 1/n 31 +T:Tl
- Cl 121 = [+Cn: part 1/Causal:causal +T:T/N 1-2 +S:N/  
Pro/Cl 103 +M:adv 6-7 +Aux:aux vb 1-3 +P:  
Vb 121 +O:N/Pro/Cl 103 +IO:N 1/pro/dem/adj  
23 (pačuk?a?te) +O Ap:Cl 113 +L:L/Cl 104/N  
1-2/n 31]
- Cl 122 = [+S:N 1/dem/pro +M:adv 6-7 +P:Vb 122 +O:N 1  
+IO:pro/adj 23 (pačuk?a?te) +L:L/N 1/Cl 134  
+T:T/n Res]
- Cl 123 = [+S:N 1/3/Pro/Adj/Cl 133 +M:adv 6-7 +Aux:aux  
vb 1-2 +P:Vb 123 +O:N 1/3 +IO:N 1/pro +T:T/  
N 1 +L:L/Cl 133-134/N 1]
- Cl 124 = [+Intro:ig 5 +S:N 1/pro +P:Vb 124 +L:L/N 1/n  
31 +IO:N 1/pro +O:N 1]

- Cl 131 = [+Cn:part 1/Causal:causal +T:T/N 1-2 +S:N/  
Pro/Cl 103 +Dub:part 11 +M:adv 6-7 +Aux:aux  
 vb 1-3 +P:Vb 131 +L:L/Cl 104/N 1-2/n 31 +S  
 Ap:N 1/3]
- Cl 132 = [+S:N 1/dem/pro +T:T/n +M:adv 6-7 +P:Vb 132  
 +L:L/N 1/Cl 134]
- Cl 133 = [+T:T/N 1 +S:N 1-2/Pro/Adj/Cl 133 +M:adv 6-7  
 +Aux:aux vb 1-2 +P:Vb 133 +S Ap:n +L:L/Cl  
 133-134/N 1]
- Cl 134 = [+Intro:ig 5 +Dub:part 11 +M:adv 6-7 +P:Vb 134  
 +S:N 1/pro +L:L/N 1/n 31 +T<sup>2</sup>:T]
- Cl 141 = [+Cn:part 1/Causal:causal +IO:pro/n +S:N/Pro/  
 Cl 103 +Dub:part 11 +M:adv 6-7 +Aux:aux vb  
 1-3 +P:Vb 141 +T:T/N 1-2 +Cit:Dis/onom]
- Cl 142 = [+S:N 1/dem/pro +T:T/n +M:adv 6-7 +Aux:aux  
 vb 1-2 +P:Vb 142 +IO:pro/n +Cit:Dis/onom]
- Cl 143 = [+T:T/N 1 +S:N 1/3/Pro/Adj/Cl 133 +M:adv 6-7  
 +Aux:aux vb 1-2 +P:Vb 143 +IO:pro/n +Cit:Dis/  
 onom]
- Cl 144 = [+Intro:ig 5 +S:N 1/pro +T:T +M:adv 6-7 +Aux:  
 aux vb 1-2 +P:Vb 144 +IO:N 1/pro +Cit:Dis/  
 onom]
- Cl 151 = [+Cn:part 1 +T:T +S:N 1/pro +Dub:part 11  
 +Aux:aux vb 1-3 +P:Vb 151 +C:N 4]
- Cl 152 = [+S:N 1/pro +T:T +M:adv 6-7 +P:Vb 152 +C:N  
 4]
- Cl 153 = [+T:T +S:N 1/pro +M:adv 6-7 +Aux:aux vb 1-2  
 +P:Vb 153 +C:N 4]
- Cl 154 = [+Intro:part 5 +S:N 1/pro +Dub:part 11 +M:adv  
 6-7 +P:Vb 154 +C:N 4 +T:T]

In Cl 101/103-104 not more than four tagmemes occur simultaneously, except for Cl 121/123-124 whose limit is five. Most frequently not more than from one to three tagmemes occur. In Cl 102 the maximum number of tagmemes per clause is three.

### 2.3.3. Citation dependent clause paradigm

- Cl 111 = čask?a?ne--smewaupačume--čask?ak?a?ne  
 asmiwaye?te 'one--when-I-finished--one which-  
 I-spun' (when I finished the one which I spun).  
 dahne--ka?nekasnadina--udame--počone?o 'maybe--  
 when-you-pick--corn--also' (when you pick corn  
 again).  
 peča--diwiwi --meyopowa?namo 'could-it-be--south-  
 wind--when-it-kills-me' (maybe when the south  
 wind kills me).
- Cl 112 = počone--ubuwa orobaya--k?apačuwa 'like-that--  
 people Orobaya--when-they-finished' (when the  
 people of Orobaya finished what they were doing).
- Cl 113 = ubuwa--miyat'ulu?na--torito 'people--who-dance  
 --bull-dance' (the people who dance the bull  
 dance).
- osni--smipadara?te--na?abi--asunta waruwa 'I--I-  
 who-speak--here--Asunta Huaruhua' (I, Asunta  
 Huaruhua, who am speaking here).
- Cl 114 = k?iyashnuk?ohwa--owo?wo 'where-when-they-  
 finished--wax' (where they were when they  
 finished gathering the wax).  
 ak?ič?a?ka--dihk?imalo?ko--yab+ kapime 'because--  
 where-they-tempt--there lagoon' (because there  
 in the lagoon where they tempt).
- Cl 121 = osni--ho?naha--asmipadara?te--asmepak?eda?ča--  
 nuča?u?ka 'I--today--that-which-I-speak--when-  
 I-advise--this-woman' (now when I tell this  
 woman what I'm saying).
- Cl 122 = wase?wa--sipak?edawa--pačuka?te--asmipadara  
 'yesterday--when-I-advised--another--my-word'  
 (yesterday when I taught another my language).
- Cl 123 = umu--ahmimaqui--ahme?e--udame--kumani 'man--  
 he-who-gave--his-son--corn--last-night' (the  
 man who gave his son corn last night).
- Cl 124 = ito?ko--sihni?ke--sihk?ikak?eda?ča?ča--sihničuna-  
 buwa--uwu 'where--we--where-we-showed--

- our-fellow-countrymen--river' (where we showed the river to our fellow countrymen).
- Cl 131 = miyahdi?ke?ka mikahana?na?ka--meyapila?a-la?ča?k?a--pikasno pibunu 'that-which-is-sick she-who-is old--when-they-hurt--her-side her-stomach' (when her side and stomach hurt, the sickness of an old woman).
- Cl 132 = sisyawa?awa--k?abi gran chako--en julio 'when-I-went--there the-Gran Chaco--in July' (when I went to the Gran Chaco in July).
- Cl 133 = nadili--mitila?ča?ke--asmay?ye 'these--which-are-grown--my children' (these, my children, who are grown).
- Cl 134 = peča--bo?ne--sihk?issiyabahko?o--počone 'maybe --later--where-we-come-again--like-that' (where we might come again later).
- Cl 141 = uhmala kawararo--dahnaysine 'pretty leaf--when-I-say' (when I say "the leaf is pretty").
- pačaste--počone--udio--mesihne?ko 'so-that--like-that--Jews--when-they-said' (because when the Jews said it like that).
- Cl 142 = mama?na--ko?sinewa--aha 'going-to--when-you-say--yes' (at the time when you are going to say "yes?").
- Cl 143 = dihnitYe?ke--kadayya--dihnisinehk?a 'we--what--that-which-we-say' (what we say).
- Cl 144 = ito?ko--sihk?isine?čahk?a--pačuka?te--ke?musčuru?na 'where--where-we-said--another--you-are-a rascal' (where we said to the other one, "you are a rascal").
- Cl 151 = mayistru?ka--panaysiyeta?tyo--ano?ka pura 'teacher--when-she-was--mama Pura' (when the teacher was mama Pura).
- kowe?te--ahmaysidili?ča 'before--when-they-were' (when they lived a long time ago).
- Cl 152 = wase?wa--počone--piskiye?ta?wa 'yesterday--

like-that--when-she-was' (yesterday when she was like that).

- C1 153 = kasiki--ahmisiyeta--paulo mayube 'leader--he-who-was--Paul Mayuhue' (the leader who was Paul Mayuhue).
- C1 154 = ito?ko--sihni?ke--sihk?isidili?ko?o--sihnimoyo-k?ela 'where--we--where-we-are--we-who-are-bad' (where we who are bad will be).

### 3. The phrase

The Cn tagmeme optionally occurs in any order in any syntactic construction and is not written into the formulas on the phrase level.

#### 3.1. The verb phrase

##### 3.1.1. Tagmemic verb phrase formula

- Vb 11-57, 111-154 = {+Mod:adv 1-5/part 3 +H:vb 11-57/111-154}

The Mod tagmeme optionally follows the H tagmeme.

##### 3.1.2. Verb phrase citation

Vb 11A = čaka--skik?ičuduwa?na 'maybe--I-am-going-to-buy'.

sipisipu--bene 'I-have-flat-thing--of-course' (of course I have it).

Vb 12C = wa?na?ko--ahmič?aba?ča 'no--he-doesn't want' (no, he doesn't want it).

Vb 31D = pahi--kičiskahna 'very--surface-ripe' (it's very ripe).

Vb 111B = ahmaypisipu--bene 'when-he-has--of course' (when he has it, of course).

Vb 131A = pahi--asmaybohča 'very--when-I-dance' (when I dance a lot).

#### 3.2. The noun phrase

### 3.2.1. Tagmemic noun phrase paradigm

N 1 = {+Spec:dem +Mod<sup>2</sup>:adj/n +H:n 10/C1 103 +Ap<sup>2</sup>:N  
1-2/C1 103}

N 2 = {+Mod:adj +H:n 20 +Gen:N 1/4/adj/Pro}

N 3 = {+Spec:dem +H:n 10/C1 103 +Cd<sup>3</sup>:N 1/2/4/C1 103  
+Mod:adj}

N 4 = {+Title:part 12/n 10 Res +H:n 31 +Cd:n 31}

The order of the Mod, H, and Gen tagmemes in N 1-2 is free.

### 3.2.2. Citation noun phrase paradigm

N 1 = yot?ahka--k?ak?a?ne?ka--t?iyaya?t?y a--ahme?ka  
sirilo wasiko 'that-fem--one-fem--child--his-  
daughter Sirilo Huasico' (that one daughter of  
Sirilo Huasico).  
nu?upu--wunau 'this--village'.  
sato--abite 'saint--wood' (a wooden saint).  
miyat?ulu?na--mibohe--mirebahča?ke 'those-who-  
dance-utyulu--those-who-dance--those-who-are-  
happy' (those who do the utyulu-dance who are  
happy).

N 2 = piniwa?e--dihlepe 'her-cotton--our-sister' (our  
sister's cotton).  
ahmiku--pačuka?te 'his-house--another' (another's  
house).

N 3 = keteno--mayiru--udame--ahmiyarusu--pasimat?o  
'sugar-cane--bananas--corn--his-rice--much'  
(much sugar cane, bananas, corn, and rice).

N 4 = senyorita--emilya 'Miss--Millie'.  
ano?ka--asunta--waruwa 'mama--Asunta--  
Huaruhua'.

### 3.3. The pronoun phrase

#### 3.3.1. Tagmemic pronoun phrase

Pro = {+H:pro/dem +Mod:adj 10-20 +(Ap:n/N 4/Cd 113)/  
Cd:n/Cd 133}

The Mod tagmeme optionally precedes the H tagmeme.

### 3.3.2. Pronoun phrase citation

Pro = pini--sisaramo?ka 'she--of-San-Ramón'.

osni?ka--asunta waruwa 'I--Asunta Huaruhua'.

sa?idose--sihni?ke 'we-twelve--we' (we twelve).

### 3.4. The adjective phrase

#### 3.4.1. Tagmemic adjective phrase formula

Adj = {+Mod:adj 10/adv 4/6 +H:adj +Ap:adj/Cd:adj}

The Mod tagmeme optionally follows the H tagmeme.

#### 3.4.2. Adjective phrase citation

Adj = dahwo?ne--časpapi?i 'only--length-little' (only a short length).

obente--mil 'twenty--thousand'.

otere--kuwaturu 'three--four' (three or four).

### 3.5. The locative phrase

#### 3.5.1. Tagmemic locative phrase formula

L = {+H:loc +Ap<sup>3</sup>:N 1-2/4}

The Ap tagmemes optionally precede or both precede and follow the H tagmeme.

#### 3.5.2. Locative phrase citation

L = maralena--trinira--sahwaki--yononi 'Magdalena--Trinidad--San-Joaquin--there' (there in Magdalena, Trinidad, and San Joaquin).

k?abi--uhmunano omesa 'there--it's-top table' (there on top of the table).

### 3.6. The time phrase

#### 3.6.1. Tagmemic time phrase formula

T = {+H:t +Ap<sup>2</sup> : N 1/Cl 133/153/t}

#### 3.6.2. Time phrase citation

T = ho?naha--kuwarisma 'now--Lent' (now during Lent).

ho?naha--na?adu apača--misiča?uwayo 'now--this year--that-which-is-seated day' (now, this year, this day).

### 3.7. The adverb phrase

#### 3.7.1. Tagmemic adverb phrase formula

Adv = {+H:adv 6-7 +Cd:adv 6-7}

#### 3.7.2. Adverb phrase citation

Adv = do?ne--počone 'only--like-that' (only like that).

## 4. The word

### 4.1. The inflectional word affix class 1000

The classifier class 1110 (see 5.2.2.1)

1111 MV- Classifier

The person class 1120 (see 5.2.2.1)

1121 SI- first person singular

1122 KE?- second person feminine singular

1123 E?- second person masculine singular

1124 PI- third person feminine singular

1125 AH- third person masculine singular/third person plural

1126 SE?- first person plural exclusive

1127 DE?- first person plural inclusive/second person plural

- 1228 PIH- third person feminine plural/third person singular honorific

The direction class 1210

- 1211 -H Direction away (see 5.1.4)

- 1212 -? Direction toward

The affirmative rhythm class 1220 (see 5.2.1.2)

- 1221 -NA Indefinite, non-specific, general

- 1222 -NAHE Polyphase

- 1223 -NA?KE Multiplex

- 1224 -TE Continual, customary state

- 1225 -ČA?KE Continual multiplex

The negative-dependent rhythm class 1230 (see 5.2.1.2)

- 1231 -NAKO Indefinite, non-specific, general

- 1232 -ČAHKO Multiplex

- 1233 -ČA?ČA Continual multiplex

- 1234 -tYö Dependent polyphase

The subject suffix person class 1240 (see 5.1.4)

- 1241 -?KA third person feminine singular

- 1242 -YE third person masculine plural/third person plural

The suffix object person class 1250

- 1251 -mo first person singular/first person plural

- 1252 -be second person singular/second person plural

#### 4.2. The verb

##### 4.2.1. Emic verb classes

		Tr 10	Ditr 20	Intr 30	Quot 40	St 50
01 Decl Aff	01A	11A	21A	31A	41A	51A
	01B	11B	21B	31B		
	01C		21C	31C		
	01D	11D	21D	31D	41D	51D
	01E	11E	21E	31E		
	01F	11F	21F			
02 Decl Neg	02A	12A	22A	32A	42A	52A
	02B		22B			
	02C	12C	22C	32C	42C	52C
	02D	12D	22D			
03 Ig Aff	03A	13A	23A	33A	43A	53A
	03B	13B	23B	33B		
	03C		23C	33C		
	03D	13D	23D	33D	43D	53D
	03E	13E	23E	33E		
	03F	13F	23F			
04 Ig Neg	04A	14A	24A	34A	44A	54A
	04B		24B			
05 Intent Aff	05A					55A
	05B					55B
06 Intent Neg	06A	16A	26A	36A	46A	56A
	06B		26B			
07 Subj	07A	17A	27A	37A	47A	57A
	07B	17B	27B			

Chart III. Emic independent verb classes

		Tr 10	Ditr 20	Intr 30	Quot 40	St 50
101 Dep prefix	101A	111A	121A	131A	141A	151A
	101B	111B	121B	131B		
	101C	111C	121C	131C		
	101D	111D	121D		141D	
	101E	111E	121E			
	101F	111F	121F			
102 Dep suffix	102A	112A	122A	132A	142A	152A
	102B	112B	122B			
103 Nom	103A	113A	123A	133A	143A	153A
	103B	113B	123B	133B		
	103C	113C	123C			
104 L	104A	114A	124A	134A	144A	154A
	104B	114B	124B			

Chart IV. Emic dependent verb classes

#### 4.2.2. The independent verb

##### 4.2.2.1. The inflected independent verb

###### 4.2.2.1.1. Tagmemic independent verb paradigm

Transitive

- vb 11A = {+S +Base 11 +Dir +Rhythm 1 +O}
- vb 11B = {+S +Base 12 +( +Dir +Rhythm 1) +O}
- vb 11D = {+O +Base 11 +Dir +Rhythm 1 +S}
- vb 11E = {+O +Base 12 +( +Dir +Rhythm 1) +S}
- vb 11F = {+O +Base 14 +( +Dir +Rhythm 1) +Indir +S}
- vb 12A = {+S 1 +Base 13 +Dir +Rhythm 2 +O}
- vb 12C = {+S 2 +Neg 1 +Base 13 +Dir +Rhythm 2 +O}
- vb 12D = {+S 2 +Neg 1 +Base 14 +( +Dir +Rhythm 2)  
+Indir +O}
- vb 13A = {+S +Ig +Base 11 +Dir +Rhythm 1 +O}
- vb 13B = {+S +Ig +Base 12 +( +Dir +Rhythm 1) +O}
- vb 13D = {+O +Ig +Base 11 +Dir +Rhythm 1 +S}

- vb 13E = {+O +Ig +Base 12 +(Dir +Rhythm 1) +S}  
 vb 13F = {+O +Ig +Base 14 +(Dir +Rhythm 1) +Indir  
+S}  
 vb 14A = {+S +Neg 1 +Ig +Base 13 +Dir +Rhythm 2  
+O}  
 vb 16A = {+S +Neg 1 +Intent +Base 13 +Dir +Rhythm 2  
+O}  
 vb 17A = {+S +Base 13 +Dir +Rhythm 2 +O}  
 vb 17B = {+S +Base 14 +(Dir +Rhythm 2) +Indir +O}

#### Ditransitive

- vb 21A = {+S +Base 21 +Dir +Rhythm 1 +IO}  
 vb 21B = {+S +Base 22 +(Dir +Rhythm 1) +IO}  
 vb 21C = {+S +Base 23 +(Dir +Rhythm 1) +Indir +IO}  
 vb 21D = {+IO +Base 21 +Dir +Rhythm 1 +S}  
 vb 21E = {+IO +Base 22 +(Dir +Rhythm 1) +S}  
 vb 21F = {+IO +Base 23 +(Dir +Rhythm 1) +Indir +S}  
 vb 22A = {+S 1 +Base 24 +Dir +Rhythm 2 +IO}  
 vb 22B = {+S 1 +Base 23 +Dir +Rhythm 2 +Indir +IO}  
 vb 22C = {+S 2 +Neg 1 +Base 24 +Dir +Rhythm 2 +IO}  
 vb 22D = {+S 2 +Neg 1 +Base 23 +Dir +Rhythm 2 +Indir  
+IO}  
 vb 23A = {+S +Ig +Base 21 +Dir +Rhythm 1 +IO}  
 vb 23B = {+S +Ig +Base 22 +(Dir +Rhythm 1) +IO}  
 vb 23C = {+S +Ig +Base 23 +(Dir +Rhythm 1) +Indir  
+IO}  
 vb 23D = {+IO +Ig +Base 21 +Dir +Rhythm 1 +S}  
 vb 23E = {+IO +Ig +Base 22 +(Dir +Rhythm 1) +S}  
 vb 23F = {+IO +Ig +Base 23 +(Dir +Rhythm 1) +Indir  
+S}  
 vb 24A = {+S +Neg 1 +Ig +Base 24 +Dir +Rhythm 2 +IO}  
 vb 24B = {+S +Neg 1 +Ig +Base 23 +Dir +Rhythm 2  
+Indir +IO}  
 vb 26A = {+S +Neg 1 +Intent +Base 24 +Dir +Rhythm 2  
+IO}  
 vb 26B = {+S +Neg 1 +Intent +Base 23 +Dir +Rhythm 2  
+Indir +IO}  
 vb 27A = {+S +Base 24 +Dir +Rhythm 2 +IO}

vb 27B = {+S +Base 23 +(+Dir +Rhythm 2) +Indir +IO}}

#### Intransitive

vb 31A = {+S +Base 31 +Dir +Rhythm 1}}

vb 31B = {+S +Base 32 +(+Dir +Rhythm 1)}}

vb 31C = {+Base 34 +Dir 1 +Rhythm 1 +S}

vb 31D = {+Base 31 +Dir +Rhythm 1 +S}}

vb 31E = {+Base 32 +(+Dir +Rhythm 1) +S}}

vb 32A = {+S 1 +Base 33 +Dir +Rhythm 2}

vb 32C = {+S 2 +Neg 1 +Base 33 +Dir +Rhythm 2}

vb 33A = {+S +Ig +Base 31 +Dir +Rhythm 1}}

vb 33B = {+S +Ig +Base 32 +(+Dir +Rhythm 1)}}

vb 33C = {+Ig +Base 34 +Dir 1 +Rhythm 1 +S}

vb 33D = {+Ig +Base 31 +Dir +Rhythm 1 +S}}

vb 33E = {+Ig +Base 32 +(+Dir +Rhythm 1) +S}}

vb 34A = {+S +Neg 1 +Ig +Base 33 +Dir +Rhythm 2}

vb 36A = {+S +Neg 1 +Intent +Base 33 +Dir +Rhythm 2}

vb 37A = {+S +Base 33 +Dir +Rhythm 2}

#### Quotative

vb 41A = {+S +Base 41 +(+Dir +Rhythm 1) +(+Indir +O)}}

vb 41D = {+O +Base 41 +(+Dir +Rhythm 1) +Indir +S}}

vb 42A = {+S 1 +Base 41 +(+Dir +Rhythm 2) +(+Indir +O)}}

vb 42C = {+S 2 +Neg 1 +Base 41 +(+Dir +Rhythm 2)  
          +(+Indir +O)}}

vb 43A = {+S +Ig +Base 41 +(+Dir +Rhythm 1) +(+Indir +O)}}

vb 43D = {+O +Ig +Base 41 +(+Dir +Rhythm 1) +Indir +S}}

vb 44A = {+S +Neg 1 +Ig +Base 41 +(+Dir +Rhythm 2)  
          +(+Indir +O)}}

vb 46A = {+S +Neg 1 +Intent +Base 42 +(+Dir +Rhythm 2)  
          +(+Indir +O)}}

vb 47A = {+S +Base 41 +Dir +Rhythm 2 +(+Indir +O)}}

#### Stative

vb 51A = {+S +Base 51 +(+Quant +Dir +Pl)/(+Dir +Rhythm 1)}}

vb 51D = {+Base 51 +(+Quant +Dir +Pl)/(+Dir +Rhythm 1)  
          +S}

- vb 52A = {+S 1 +Base 52 +Dir +Rhythm 2}  
 vb 52C = {+S 2 +Neg 1 +Base 52 +Dir +Rhythm 2}  
 vb 53A = {+S +Ig +Base 51 +(Dir +Rhythm 1)}  
 vb 53D = {+Ig +Base 51 +(Dir +Rhythm 1) +S}  
 vb 54A = {+S +Neg 1 +Ig +Base 52 +Dir +Rhythm 2}  
 vb 55A = {+S +Intent +Base 51 +(Quant +Dir +Pl  
+Dir +Rhythm)}  
 vb 55B = {+Intent +Base 51 +(Quant +Dir +Pl) +(Dir  
+Rhythm 1) +S}  
 vb 56A = {+S +Neg 1 +Intent +Base 52 +(Quant +Pl)  
+Dir +Rhythm 2}  
 vb 57A = {+S +Base 51 +Dir +Rhythm 2}

#### 4.2.2.1.2. Tagmatic independent verb paradigm

When the inflected adverb fills the Base slot of verb 31A-37A, identical tagmemes are not duplicated in the verb inflection. A tagmeme obligatory in an adverb is likewise obligatory when that adverb fills the Base slot of a verb, although it may occur among the verb affixes following the Base.

##### Transitive

- vb 11A = [+S ref:1120 +Intent:2142-2143 +Rep Inc:2130  
+Asp 1:2120 +Base:vb stem 11-13 +Dir:1210  
+Rhythm:1220 +O ref:1250/Refl:2220 +Rep:2230]  
 vb 11B = [+S ref:1120 +Intent:2142-2143 +Rep Inc:2130  
+Asp 1:2120 +Base:vb stem 14 +(Dir:1210  
+Rhythm:1220) +O ref:1250/Refl:2220 +Rep:  
2230]  
 vb 11D = [+O ref:1120 +Intent:2142-2143 +Rep Inc:2130  
+Asp 1:2120 +Base:vb stem 11-13 +Dir:1210  
+Rhythm:1220 +Refl:2220 +S ref:1240 +Rep:  
2230]  
 vb 11E = [+O ref:1120 +Intent:2142-2143 +Rep Inc:2130  
+Asp 1:2120 +Base:vb stem 14 +(Dir:1210  
+Rhythm:1220) +Refl:2220 +S ref:1240 +Rep:  
2230]

- vb 11F = [+O ref:1120 +Intent:2142-2143 +Rep Inc:2130  
           +Asp 1:2120 +Base:vb core 301-313 Res +( +Dir:  
           1210 +Rhythm:1220) +Indir:2210 +S ref:1240  
           +Rep:2230]
- vb 12A = [+S ref:1121 +Rep Inc:2130 +Asp 1:2120 +Base:  
           vb stem neg 11-14 +Dir:1210 +Rhythm:1231-1233  
           +O ref:1250/Refl:2220 +Rep:2230]
- vb 12C = [+S ref:1122-1128 +Rep Inc:2130 +Asp 1:2120  
           +Neg:2110 +Base:vb stem neg 11-14 +Dir:1210  
           +Rhythm:1231-1233 +O ref:1250/Refl:2220  
           +Rep:2230]
- vb 12D = [+S ref:1122-1128 +Neg:1110 +Rep Inc:2130  
           +Asp 1:2120 +Neg:2110 +Base:vb core neg 301-  
           313 Res +( +Dir:1210 +Rhythm:1231-1233)  
           +Indir:2210 +O ref:1250 +Rep:2230]
- vb 13A = [+S ref:1120 +Ig:2141 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 11-13 +Dir:1210 +Rhythm:  
           1220 +O ref:1250/Refl:2220 +Rep:2230]
- vb 13B = [+S ref:1120 +Ig:2141 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 14 +( +Dir:1210 +Rhythm:  
           1220) +O ref:1250/Refl:2220 +Rep:2230]
- vb 13D = [+O ref:1120 +Ig:2141 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 11-13 +Dir:1210 +Rhythm:  
           1220 +Refl:2220 +S ref:1240 +Rep:2230]
- vb 13E = [+O ref:1120 +Ig:2141 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 14 +( +Dir:1210 +Rhythm:  
           1220) +Refl:2220 +S ref:1240 +Rep:2230]
- vb 13F = [+O ref:1120 +Ig:2141 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb core 301-313 Res +( +Dir:1210  
           +Rhythm:1220) +Indir:2210 +S ref:1240 +Rep:  
           2230]
- vb 14A = [+S ref:1120 +Neg:1110 +Ig:2141 +Rep Inc:2130  
           +Asp 1:2120 +Base:vb stem neg 11-14 +Dir:  
           1210 +Rhythm:1231-1233 +O ref:1250/Refl:2220  
           +Rep:2230]
- vb 16A = [+S ref:1120 +Neg:1110 +Intent:2142-2143 +Rep

Inc:2130 +Asp 1:2120 +Base:vb stem neg 11-14  
 +Dir:1210 +Rhythm:1231-1233 +O ref:1250/  
 Refl:2220 +Rep:2230]

vb 17A = [+S ref:1120 +Rep Inc:2130 +Asp 1:2120 +Base:  
 vb stem 11-14 +Dir:1210 +Rhythm:1231-1233  
 +O ref:1250]

vb 17B = [+S ref:1120 +Rep Inc:2130 +Asp 1:2120 +Base:  
 vb core 301-313 Res +(+Dir:1210 +Rhythm:1231-  
 1233) +Indir:2210 +O ref:1250 +Rep:2230]

#### Ditransitive

vb 21A = [+S ref:1120 +Intent:2142-2143 +Rep Inc:2130  
 +Asp 1:2120 +Base:vb stem 21-22 +Dir:1210  
 +Rhythm:1220 +IO ref:1250/Refl:2220 +Rep:  
 2230]

vb 21B = [+S ref:1120 +Intent:2142-2143 +Rep Inc:2130  
 +Asp 1:2120 +Base:vb stem 24 +(+Dir:1210  
 +Rhythm:1220) +IO ref:1250/Refl:2220 +Rep:  
 2230]

vb 21C = [+S ref:1120 +Intent:2142-2143 +Rep Inc:2130  
 +Asp 1:2120 +Base:vb stem 11-14 Res +(+Dir:  
 1210 +Rhythm:1224) +Indir:2210 +IO ref:1250/  
 Refl:2220 +Rep:2230]

vb 21D = [+IO ref:1120 +Intent:2142-2143 +Rep Inc:2130  
 +Asp 1:2120 +Base:vb stem 21-22 +Dir:1210  
 +Rhythm:1220 +Refl:2220 +S ref:1240 +Rep:  
 2230]

vb 21E = [+IO ref:1120 +Intent:2142-2143 +Rep Inc:2130  
 +Asp 1:2120 +Base:vb stem 24 +(+Dir:1210  
 +Rhythm:1220) +S ref:1240 +Rep:2230]

vb 21F = [+IO ref:1120 +Intent:2142-2143 +Rep Inc:2130  
 +Asp 1:2120 +Base:vb stem 11-14 Res +(+Dir:  
 1210 +Rhythm:1224) +Indir:2210 +Refl:2220  
 +S ref:1240 +Rep:2230]

- vb 22A = [+S ref:1121 +Rep Inc:2130 +Asp 1:2120 +Base:  
           vb stem neg 21-22/24 +Dir:1210 +Rhythm:1231-  
           1233 +IO ref:1250/Refl:2220 +Rep:2230]
- vb 22B = [+S ref:1121 +Rep Inc:2130 +Asp 1:2120 +Base:  
           vb stem neg 11-14 Res +Dir:1210 +Rhythm:1231-  
           1233 +Indir:2210 +IO ref:1250/Refl:2220 +Rep:  
           2230]
- vb 22C = [+S ref:1122-1128 +Neg:1110 +Rep Inc:2130  
           +Asp 1:2120 +Base:vb stem neg 21-22/24 +Dir:  
           1210 +Rhythm:1231-1233 +IO ref:1250/Refl:  
           2220 +Rep:2230]
- vb 22D = [+S ref:1122-1128 +Neg:1110 +Rep Inc:2130  
           +Asp 1:2120 +Base:vb stem neg 11-14 Res +Dir:  
           1210 +Rhythm:1231-1233 +Indir:2210 +IO ref:  
           1250/Refl:2220 +Rep:2230]
- vb 23A = [+S ref:1120 +Ig:2141 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 21-22 +Dir:1210 +Rhythm:  
           1220 +IO ref:1250/Refl:2220 +Rep:2230]
- vb 23B = [+S ref:1120 +Ig:2141 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 24 +( +Dir:1210 +Rhythm:  
           1220) +IO ref:1250/Refl:2220 +Rep:2230]
- vb 23C = [+S ref:1120 +Ig:2141 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 11-14 Res +( +Dir:1210  
           +Rhythm:1220) +Indir:2210 +IO ref:1250/Refl:  
           2220 +Rep:2230]
- vb 23D = [+IO ref:1120 +Ig:2141 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 21-22 +Dir:1210 +Rhythm:  
           1220 +Refl:2220 +S ref:1240 +Rep:2230]
- vb 23E = [+IO ref:1120 +Ig:2141 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 24 +( +Dir:1210 +Rhythm:  
           1220) +Refl:2220 +S ref:1240 +Rep:2230]
- vb 23F = [+IO ref:1120 +Ig:2141 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 11-14 Res +( +Dir:1210  
           +Rhythm:1220) +Indir:2210 +Refl:2220 +S ref:  
           1240 +Rep:2230]
- vb 24A = [+S ref:1120 +Neg:111 +Ig:2141 +Rep Inc:2130

- +Asp 1:2120 +Base:vb stem neg 21-22/24 +Dir:  
1210 +Rhythm:1231-1233 +IO ref:1250/Refl:  
2220 +Rep:2230]
- vb 24B = [+S ref:1120 +Neg:1111 +Ig:2141 +Rep Inc:2130  
+Asp 1:2120 +Base:vb stem neg 11-14 Res +Dir:  
1210 +Rhythm:1231-1233 +Indir:2210 +IO ref:  
1250/Refl:2220 +Rep:2230]
- vb 26A = [+S ref:1120 +Neg:1111 +Intent:2142-2143 +Rep  
 Inc:2130 +Asp 1:2120 +Base:vb stem neg 21-22  
 +Dir:1210 +Rhythm:1231-1233 +IO ref:1250/  
 Refl:2220 +Rep:2230]
- vb 26B = [+S ref:1120 +Neg:1111 +Intent:2142-2143 +Rep  
 Inc:2130 +Asp 1:2120 +Base:vb stem neg 11-14  
 Res +Dir:1210 +Rhythm:1231-1233 +Indir:2210  
 +IO ref:1250/Refl:2220 +Rep:2230]
- vb 27A = [+S ref:1120 +Rep Inc:2130 +Asp 1:2120 +Base:  
 vb stem 21-22/24 +Dir:1210 +Rhythm:1231-1233  
 +IO ref:1250/Refl:2220 +Rep:2230]
- vb 27B = [+S ref:1120 +Rep Inc:2130 +Asp 1:2120 +Base:  
 vb stem 11-14 Res +(+Dir:1210 +Rhythm:1231-  
 1233) +Indir:2210 +IO ref 1250/Refl:2220 +Rep:  
 2230]

### Intransitive

- vb 31A = [+S ref:1120 +Intent:2142-2143 +Rep Inc:2130  
 +Asp 1:2120 +Base:vb core 301-309 +Dir:1210  
 +Rhythm:1220 +Refl:2220 +Rep:2230]
- vb 31B = [+S ref:1120 +Intent:2142-2143 +Rep Inc:2130  
 +Asp 1:2120 +Base:vb core 310-312 +(+Dir:1210  
 +Rhythm:1220) +Refl:2220 +Rep:2230]
- vb 31C = [+Base:vb core 313 +Dir:1212 +Rhythm:1221 (na)  
 +S ref:1250 +Rep:2230]
- vb 31D = [+Intent:2142-2143 +Rep Inc:2130 +Asp 1:2120  
 +Base:vb core 301-309 +Dir:1210 +Rhythm:1220  
 +Refl:2220 +S ref:1240 +Rep:2230]
- vb 31E = [+Intent:2142-2143 +Rep Inc:2130 +Asp 1:2120  
 +Base:vb core 310-312 +(+Dir:1210 +Rhythm:  
 1220) +Refl:2220 +S ref:1240 +Rep:2230]

- vb 32A = [+S ref:1121 +Rep Inc:2130 +Asp 1:2120 +Base:  
           vb core neg 301-312 +Dir:1210 +Rhythm:1231-  
           1233 +Refl:2220 +Rep:2230]
- vb 32C = [+S ref:1122-1128 +Neg:1111 +Rep Inc:2130  
           +Asp 1:2120 +Base:vb core neg 301-312 +Dir:  
           1210 +Rhythm:1231-1233 +Refl:2220 +Rep:2230]
- vb 33A = [+S ref:1120 +Ig:2141 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb core 301-309 +Dir:1210  
           +Rhythm:1220 +Refl:2220 +Rep:2230]
- vb 33B = [+S ref:1120 +Ig:2141 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb core 310-312 +(Dir:1210  
           +Rhythm:1220) +Refl:2220 +Rep:2230]
- vb 33C = [+Ig:2141 +Base:vb core 313 +Dir:1212  
           +Rhythm:1221 (na) +Rep:2230]
- vb 33D = [+Ig:2141 +Rep Inc:2130 +Asp 1:2120 +Base:vb  
           core 301-309 +Dir:1210 +Rhythm:1220 +Refl:  
           2220 +S ref:1250 +Rep:2230]
- vb 33E = [+Ig:2141 +Rep Inc:2130 +Asp 1:2120 +Base:vb  
           core 310-312 +(Dir:1210 +Rhythm:1220) +Refl:  
           2220 +S ref:1250 +Rep:2230]
- vb 34A = [+S ref:1120 +Neg:1111 +Ig:2141 +Rep Inc:2130  
           +Asp 1:2120 +Base:vb core neg 301-312 +Dir:  
           1210 +Rhythm:1231-1233 +Refl:2220 +Rep:2230]
- vb 36A = [+S ref:1120 +Neg:1111 +Intent:2142-2143 +Rep  
           Inc:2130 +Asp 1:2120 +Base:vb core neg 301-  
           312 +Dir:1210 +Rhythm:1231-1233 +Refl:2220  
           +Rep:2230]
- vb 37A = [+S ref:1120 +Rep Inc:2130 +Asp 1:2120 +Base:  
           vb core 301-312 +Dir:1210 +Rhythm:1231-1233  
           +Rep:2230]

## Quotative

- vb 41A = [+S ref:1120 +Intent:2142-2143 +Rep Inc:2130  
           +Asp 1:2120 +Base:vb core 401 +(Dir:1210  
           +Rhythm:1220) +Indir:2210 +O ref:1250 +Rep:  
           2230]
- vb 41D = [+O ref:1120 +Intent:2142-2143 +Rep Inc:2130

- +Asp 1:2120 +Base:vb core 401 +(+)Dir:1210  
+Rhythm:1220) \_Indir:2210 +S ref:1240 \_Rep:  
2230]
- vb 42A = [+S ref:1121 \_Rep Inc:2130 +Asp 1:2120 +Base:  
vb core neg 401 +Dir:1210 +Rhythm:1231-1233  
+(+)Indir:2210 +O ref:1250) \_Rep:2230]  
vb 42C = [+S ref:1122-1128 +Neg:1110 \_Rep Inc:2130  
+Asp 1:2120 +Base:vb core neg 401 +Dir:1210  
+Rhythm:1231-1233 +(+)Indir:2210 +O ref:1250)  
+Rep:2230]
- vb 43A = [+S ref:1120 +Ig:2141 \_Rep Inc:2130 +Asp 1:  
2120 +Base:vb core 401 +(+)Dir:1210 +Rhythm:  
1220) +(+)Indir:2210 +O ref:1250) \_Rep:2230]  
vb 43D = [\_O ref:1120 +Ig:2141 +Rep Inc:2130 +Asp 1:  
2120 +Base:vb core 401 +(+)Dir:1210 +Rhythm:  
1220) \_Indir:2210 +S ref:1240 +Rep:2230]  
vb 44A = [+S ref:1120 +Neg:1110 +Ig:2141 +Rep Inc:2130  
+Asp 1:2120 +Base:vb core neg 401 +Dir:1210  
+Rhythm:1220 +(+)Indir:2210 +O ref:1250 +Rep:  
2230]  
vb 46A = [+S ref:1120 +Neg:1110 +Intent:2142-2143 \_Rep  
Inc:2130 +Asp 1:2120 +Base:vb core neg 401  
+Dir:1210 +Rhythm:1231-1233 +(+)Indir:2210 +O  
ref:1250) \_Rep:2230]  
vb 47A = [+S ref:1120 +Rep Inc:2130 +Asp 1:2120 +Base:  
vb core 401 +Dir:1210 +Rhythm:1231-1233  
+(+)Indir:2210 +O ref:1250) \_Rep:2230]

## Stative

- vb 51A = [+S ref:1120 +Rep Inc:2130 +Base:vb core 501-  
502 +(+)Quant:1222 +Dir:1212 +Pl:1223)/(+Dir:  
1210 +Rhythm:1220) \_Refl:2220 \_Rep:2230]  
vb 51D = [\_Rep Inc:2130 +Base:vb core 501-502 +(+)Quant:  
1222 +Dir:1212 +Pl:1223)/(+Dir:1210 +Rhythm:  
1220) \_Refl:2220 +S ref:1240 +Rep:2230]  
vb 52A = [+S ref:1121 +Rep Inc:2130 +Base:vb core neg  
501-502 +Dir:1210 +Rhythm:1231-1233 +Rep:  
2230]

- vb 52C = [+S ref:1122-1128 +Neg:1110 +Rep Inc:2130  
           +Base:vb core neg 501-502 +Dir:1210 +Rhythm:  
           1231-1233 +Refl:2220 +Rep:2230]
- vb 53A = [+S ref:1120 +Ig:2141 +Rep Inc:2130 +Base:vb  
           core 501-502 +(+Dir:1210 +Rhythm:1220) +Refl:  
           2220 +Rep:2230]
- vb 53D = [+Ig:2141 +Rep Inc:2130 +Base:vb core 501-502  
           +(+Dir:1210 +Rhythm:1220) +Refl:2220 +S ref:  
           1240 +Rep:2230]
- vb 54A = [+S ref:1120 +Neg:1110 +Ig:2141 +Rep Inc:2130  
           +Base:vb core neg 501-502 +Dir:1210 +Rhythm:  
           1231-1233 +Refl:2220 +Rep:2230]
- vb 55A = [+S ref:1120 +Intent:2142-2143 +Rep Inc:2130  
           +Base:vb core 501-502 +(+Dir:1210 +Rhythm:  
           1220) +Refl:2220 +Rep:2230]
- vb 55B = [+Intent:2142-2143 +Rep Inc:2130 +Base:vb core  
           501-502 +(+Quant:1222 +Dir:1212 +Pl:1223)  
           +(+Dir:1210 +Rhythm:1220) +Refl:2220 +S ref:  
           1240 +Rep:2230]
- vb 56A = [+S ref:1120 +Neg:1110 +Intent:2142-2143 +Rep  
           Inc:2130 +Base:vb core neg 501-502 +(+Quant:  
           1222 +Dir:1212 +Pl:1223) +Dir:1210 +Rhythm:  
           1231-1233 +Rep:2230]
- vb 57A = [+S ref:1120 +Rep Inc:2130 +Base:vb core 501-  
           502 +Dir:1210 +Rhythm:1231-1233 +Rep:2230]

In verbs numbered D-F the O and IO tagmemes are mutually exclusive with the reflexive tagmeme.

#### 4.2.2.1.3. Citation independent verb paradigm

The apparent discrepancies between the number of tagmemes shown in the Itonama and that shown in the English translation is due to the interruption of the root in the Itonama by the negative infix 2110 (see 4.2.2.3.2.).

Transitive

- vb 11A = de-h-si-t<sup>y</sup>a-ne-?o 'we-excl -just-begun-again

-not-now-done -wash -indef -again' (we began to wash again).

ke?-čudu-?-na-mo 'you-fem -hit -toward -indef -me'  
(you hit me).

si-čudu-?-na-me 'I -hit -toward -indef -myself' (I hit myself).

doh-ko-si-tele-?-na-mo 'you-pl -going-to -not-now-done -pity -toward -indef -me' (pity me).

e?-yaspasadu-?-te-mo 'you-m -listen-to-voice -toward -continual -me' (you listen to me).

vb 11D = se-čebe-?-te-?ka-?o 'me -look-at -toward -continual -she -again' (she looked at me again).

vb 11E = as-ke-mačačano-?ka 'me -going-to -help -she'  
(she's going to help me).

vb 11F = ka?k?i-?-makapowa-hk?e-?-?o 'you-fem -just-begun-again -lose -indir -it -again' (you lost it again).

vb 12A = si-yaka?do-h-na-?a 'I -not-bite-the-mouth -away -not-indef -myself' (I didn't bite myself).

vb 12C = sih-ni-si-ya?pe-?-ko-?o 'we-excl -not -just-begun-again -not-eat -toward -not-indef -again'  
(we didn't begin to eat again just now).

vb 12D = ah-mi-?-makapo?wa-?-ča-hk?a-mo-?o 'it -not -just-begun-again -not-lose -toward -continual-not -indir -me -again' (I didn't lose it again).

vb 13A = ka?-du-wana?i-?-na-mo 'you-fem -ig -like-with-the-heart -toward -indef -me' (do you like me?).

vb 13B = dih-di-t'yusadu 'you-pl -ig -guard-the-inside'  
(are you guarding the inside?).

vb 13D = as-de-wana?i-?-na-?ka-?o 'me -ig -like-with-the-heart -toward -indef -she -again' (does she like me again?).

vb 13E = ka?-de-mačano-?ka 'you-fem -ig -help -she'  
(did she help you?).

vb 13F = as-de-makapowa-hk?e-?-?o 'me -ig -lose -indir -it -again' (did I lose it again?).

vb 14A = ka?-ni-di-yaspu?wa-?-na-mo 'you-fem -not -ig

-not-hear -toward -indef-not -me' (didn't you hear me?).

- vb 16A = a?-mi-ki-sa?mi-h-ka-mo 'you-m -no -going-to -not-fear -away -indef-not -me' (don't be afraid of me).  
 vb 17A = ko?-si-tya-?-na 'you-fem -not-now-done -wash -toward -indef-not' (if you wash).

#### Ditransitive

- vb 21A = as-ki-?-yate-s-ke-?o 'I -going-to -just-begun-again -ask -away -multiplex -again' (I'm going to ask again).  
 vb 21B = se?-pak?eda-?-ča-me 'we-excl -advise -toward -continually -ourselves' (we teach ourselves).  
 vb 21C = ka?-ki-?-yut?uwa-hk?e-mo-?o 'you-fem -going-to -just-begun-again -make -indir -me -again' (make it for me again).  
 vb 21D = ki-mate-s-ča-me-∅ 'going to -ask-with-the-hands -away -continual -himself -he' (he himself is going to beg).  
 vb 21E = as-ke-pak?ede-∅-?o 'me -going-to -advise -he -again' (he's going to tell me again).  
 vb 21F = se-yut?uwa-hk?e-?-ka-?o 'me -make -indir -she -again' (she makes it for me again).  
 vb 22A = si-ya?te-s-ka-?a 'I -not-ask -away -indef-not -myself' (I myself did not ask).  
 vb 22B = si-yut?u?wa-hk?a-?a 'I -not-make -indir -myself' (I didn't make it for myself).  
 vb 22C = sih-ni-ya?te-s-ča-?o 'we-excl -not -not-ask -away -not-multiplex -again' (we didn't ask again).  
 vb 22D = ka?-ni-yut?u?wa-?-ča-hk?a-mo 'you-fem -not -not-make -toward -not-multiplex -indir -me' (you didn't make it for me).  
 vb 23A = ka?-di-yate-s-na-mo-?o 'you-fem -ig -ask -away -indef -me -again' (did you ask me again?)  
 vb 23B = a?-di-nak?eda-me 'you-m -ig -weigh -yourself' (did you weigh yourself?).

- vb 23C = ka?-di-yut?uwa-?-ča-hk?e-mo 'you-fem -ig -make -toward -continual -indir -me' (did you make it for me?).
- vb 23D = di-yate-s-ke-ɸ 'ig -ask -away -multiplex -he' (did he ask?).
- vb 23E = sihk?i-de-pak?ede-ɸ-?o 'us-excl -ig -advise -he -again' (did he tell us again?).
- vb 23F = di-yut?uwa-hk?e-ɸ 'ig -make -indir -he' (did he make it for him?).
- vb 24A = ka?-ni-di-ya?te-s-ka-?a 'you-fem -not -ig -not-ask -away -indef-not -yourself' (didn't you yourself ask?).
- vb 24B = pi-ni-di-yut?u?wa-hk?a 'she -not -ig -not-make -indir' (didn't she make it for him?).
- vb 26A = sih-ni-kidi-ya?te-s-ča-?a 'we-excl -not -they-say -not-ask -away -continual-not -ourselves' (we ourselves aren't going to ask).
- vb 26B = ka?-ni-ki-yut?u?wa-hk?a-?o 'you-fem -not -going-to -make -indir -again' (don't make it again).
- vb 27A = os-yate-s-ko-?o 'I -ask -away -indef-not -again' (if I ask again).
- vb 27B = ko?-yut?uwa-hk?a-?a 'you-fem -make -indir -yourself' (if you make it for yourself).

#### Intransitive

- vb 31A = se?-si-ka-?-ke 'we-excl -not-now-done -come -toward -multiplex' (we returned).
- si-wa?ay-h-na 'I -cotton -away -indef' (I spin).
- de?-mala-?-ča?ke 'you-pl -good -toward -cont-multiplex' (you all are good).
- vb 31B = ke?-pa?u 'you-fem -dog' (you're a dog).
- si-počone 'I -like-that' (I'm like that).
- vb 31C = mayk?a-?-na-?o 'there-isn't -toward -dep-not -again' (there isn't any again).
- vb 31D = ku-wahbo-h-ke-ɸ 'going-to -appear -away -multiplex -they' (they're going to appear).
- vb 31E = 4ba?i-ɸ-?o 'baked -it -again' (it's baked again).

- kamala-?-ča-me-?ka 'pretty -toward -cont -herself -she' (she herself is pretty).
- vb 32A = si-s-da?bi-?-tyo-?o 'I -just-begun-again -not-be-tired -toward -indef-not -again' (I'm not tired again).
- vb 32C = ah-mi-ča?tVi-h-ča-?a 'he -not -not-comb -away -not-multiplex -himself' (he didn't comb his own hair).
- vb 33A = a?-do-sodo-?-tYe-?o 'you-m -ig -cough -toward -continual -again' (are you coughing again?).
- vb 33B = di-ba?i-∅ 'ig -bake -it' (is it baked?).
- vb 33C = du-mayk?a-?-na-?o 'ig -there-isn't -toward -dep-indef -again' (isn't there any again?).
- vb 33D = di-s-na?o-h-na-∅ 'ig -just-begun-again -go -away -indef -he' (did he go again?).
- vb 33E = di-s-ba?i-∅-?o 'ig -not-now-done -bake -it -again' (will it be baked again?).
- vb 34A = ka?-nu-du-da?bi-?-tYo 'you-fem -not -ig -not-be-tired -toward -not-indef' (aren't you tired?).
- vb 36A = ka?-no-ko?ne-h-ko 'you-fem -not -going-to -not-sleep -away -indef-not' (don't sleep).
- vb 37A = ∅-mama-?-ča 'they -go -toward -not-multiplex' (if they go).

#### Quotative

- vb 41A = si-si-ne-hk?e-be 'I -not-now-done -say -indir -you' (I said to you).
- vb 41D = ka?k?i-si-ne-∅ 'you-fem -not-now-done -say -he' (he said to you).
- vb 42A = si-h-si-?-ne-?-ko-?o 'I -just-begun-again -not-now-done -not-say -toward -indef-not -again' (I didn't say it again).
- vb 42C = a?-mi-si-?-ne-hk?a-mo 'you-m -not -not-now-done -not-say -indir -me' (you didn't say to me).
- vb 43A = as-do-si-ne-?o 'I -ig -not-now-done -say -again' (did I say it again?).
- vb 43D = as-de-si-ne-?ka 'me -ig -not-now-done -say -she' (did she say it to me?).

- vb 44A = ka?-no-do-si?-ne?-ča-hk?a-mo 'you-fem -not -ig  
           -not-now-done -not-say -toward -not-multiplex  
           -indir -me' (didn't you say it to me?).
- vb 46A = ka?-no-ko-si?-ne?-ča-hk?a-mo 'you-fem -not  
           -going-to -not-now-done -not-say -toward -not-  
           multiplex -indir -me' (don't say it to me).
- vb 47A = os-si-ne?-ko 'I -not-now-done -say -toward  
           -indef-not' (if I say it).

## Stative

- vb 51A = si-h-siyeta?-ča-me 'I -just-begun-again -be  
           -toward -continual -myself' (I myself am).  
       de?-sidili 'we-incl -be' (we are).
- vb 51D = sidili-he-?-ke-∅ 'be -many -toward -pl -they'  
           (there are many).  
       osipu-∅ 'be-flat-sg -it' (there is something flat).
- vb 52A = si-siye?ta?-ko 'I -not-be -toward -indef-not'  
           (I'm not).
- vb 52C = ah-mi-si?di?-ča?-a 'they -not -not-be -toward  
           -not-multiplex -themselves' (they themselves are  
           not living).
- vb 53A = ka?-do-siyeta?-o 'you-fem -ig -be -again' (are  
           you still living?).
- vb 53D = do-sidili-he-?-ke-∅ 'ig -be -many -toward -pl  
           -they' (are there many people?).  
       do-siso-∅ 'ig -be-flat-pl -they' (are there flat  
           things?).
- vb 54A = ka?-no-do-siye?ta 'you-fem -not -ig -not-be'  
           (aren't you living?).
- vb 55A = doh-doko-sidili?-ča-me 'you-pl -they-say -be  
           -toward -continual -yourselves' (they say you  
           yourselves are living).
- vb 55B = ko-sibo-he-?-ke-∅ 'going-to -be-projecting  
           -many -toward -pl -they' (there are going to be  
           many projecting things).  
       ko-sičobo-∅ 'going-to -be-projecting -it' (it's going  
           to be).

vb 56A = doh-no-kodo-sid̪?li-he-?-ke-?-ča 'you-pl -not -they-say -not-be -many -toward -pl -toward -not-multiplex' (they said you were not living).

vb 57A = pi-siyeta-?-ko 'she -be -toward -indef-not' (if she is).

#### 4.2.2.2. The verb stem

##### 4.2.2.2.1. Tagmemic verb stem paradigm

vb stem 11 = {+(+Ben:2350 +Dir:2340) +Ag:2330 +L:2320  
+Base:vb core 101-109}

vb stem 12 = {+Ben:2350 +Base:vb core 301-324 Res}

vb stem 13 = {+(+Ben:2350 +Dir:2340) +Ag:2330 +L:2320  
+Caus:2310 +Base:vb core 110-111/300 Res}

vb stem 14 = {+(+Ben:2350 +Dir:2340) +Ag:2330 +L:2320  
+Base:vb core 112-116}

##### Ditransitive

vb stem 21 = {+Ben:2350 +Ag:2330 +L:2320 +Base:vb core 201}

vb stem 22 = {+Ben:2350 +Base:vb r tr (dara)}

vb stem 24 = {+Ben:2350 +Ag:2330 +L:2320 +Base:vb core 202-203}

##### 4.2.2.2.2. Citation verb stem paradigm

##### Transitive

vb stem 11 = pu-ča-mi-kayčudu 'for-another -as-another's-agent -in-another-place -cook' (cook for someone else in another place).

po-k?i-mida 'for-another -dir -warn' (warn on behalf of another).

čudu 'hit'.

vb stem 12 = p̪i-yobi 'for-another -spit' (spit at another).

vb stem 13 = pu-ča-mi-yu-pa 'for-another -as-another's-agent -in-another-place -caus -plant' (plant for someone else in another place).

vb stem 14 = ča-mačano 'as-another's-agent -help' (help another).

Ditransitive

vb stem 21 = ča-mate 'as-another's-agent -ask' (ask for another).

vb stem 22 = pu-dara 'for-another -talk' (talk for another's benefit).

vb stem 24 = mi-maki 'in-another-place -give' (sell to another).

#### 4.2.2.2.3. The negative verb stem

##### 4.2.2.2.3.1. Tagmemic negative verb stem paradigm

Obtain formulas of vb stem neg 11-14/21-22/24 by multiplication of the formula of the corresponding vb stem 11-24 as follows: For the filler of the Base slot, substitute the corresponding vb core neg 101-502.

##### 4.2.2.2.3.2. The negative verb stem citation

vb stem neg 11 = pu-ču-mi-kay?čudu 'for-another -as-another's-agent -in-another-place -not-cook' (not cook for someone else in another place).

vb stem neg 14 = mi-ča?no 'in-another-place -not-help' (not help somewhere else).

vb stem neg 22 = pu-da?ra 'for-another -not-talk' (not talk for another's benefit).

#### 4.2.2.3. The verb core

##### 4.2.2.3.1. Tagmemic verb core paradigm

Transitive

vb core 101 = {+Base 101}

vb core 102 = {+Cpd +Base 102}

vb core 103 = {+L +Base 103}

vb core 104 = {+Cpd 1 +Cpd 2 +Base 104}

vb core 105 = {+Cpd 1 +L +Cpd 2 vb +Base 105}  
 vb core 106 = {+Cpd +L +Base 106}  
 vb core 107 = {+L +Cpd +Base 107}  
 vb core 108 = {+Cpd vb +Base 108 n}  
 vb core 109 = {+Cpd n +Cpd vb +Base 109}  
 vb core 110 = {+Base 110}  
 vb core 111 = {+Cpd n +Base 111}  
 vb core 112 = {+L +Base 112}  
 vb core 113 = {+Cpd vb +Base 113 vb st}  
 vb core 114 = {+Cpd n +L +Base 114}  
 vb core 115 = {+Base 115}  
 vb core 116 = {+Cpd n +Base 116}

#### Ditransitive

vb core 201 = {+Cpd n +Base 201}  
 vb core 202 = {+Base 202}  
 vb core 203 = {+Cpd n/L +Base 203}

#### Intransitive

vb core 301 = {+Base 301}  
 vb core 302 = {+Cpd n/vb +Base 302}  
 vb core 303 = {+L +Base 303}  
 vb core 304 = {+Cpd n/vb +L +Base 304 adj/vb}  
 vb core 305 = {+(+Cpd 1 n +Cpd 2 vb)/Cpd 3 n +Base 305}  
 vb core 306 = {+Cpd 1 n +L +Cpd 2 +Base 306}  
 vb core 307 = {+L +Cpd n/vb +Base 307}  
 vb core 308 = {+L Cpd n +Cpd n +Cpd vb +Base 308}  
 vb core 309 = {+Cpd vb +Base 321 vb st}  
 vb core 310 = {+Base 322 n}  
 vb core 311 = {+Base 323}  
 vb core 312 = {+L +Base 324}  
 vb core 313 = {+Cpd +Base 325}

#### Quotative

vb core 401 = {+Cpd n +Base 401}

#### Stative

vb core 501 = {+Cpd n +Cpd vb st +Base 501}  
 vb core 502 = {+Cpd n +Cpd vb st +Cpd vb +Base 502}

#### 4.2.2.3.2. Tagmatic verb core paradigm

In the following formulas the tagmemes Asp 2:2511/Neg 2:2512 which are shown preceding the Base are manifested by a prefix before a monosyllabic root, and by an infix preceding the final syllable of a polysyllabic root.

##### Transitive

- vb core 101 = [+Asp 2:2510 +Base:vb r tr Res +Cont:  
2610 +Aug:redup 1]
- vb core 102 = [+Cpd:n r AS/vb r tr AS +Asp 2:2511  
+Base:vb r Res +Cont:2610 +Aug:redup 1]
- vb core 103 = [+L:2521-2529/2534-2537/2539-2540/2542/  
2545/2548/2550 +Asp 2:2511 +Base:vb r tr AS  
+Cont:2610 +Aug:redup 1]
- vb core 104 = [+Cpd 1:n r AS/vb r tr AS +Cpd 2:vb r tr  
AS/n r AS +Asp 2:2511 +Base:vb r tr Res  
+Cont:2610 +Aug:redup 1]
- vb core 105 = [+Cpd:n r AS +L:2522/2525 +Cpd:vb r tr AS  
+Asp 2:2511 +Base:vb r tr Res +Cont:2610  
+Aug:redup 1]
- vb core 106 = [+Cpd:n r AS +L:2521/2523-2525/2528/2539-  
2540/2550 +Asp 2:2511 +Base:vb r tr AS +Cont:  
2610 +Aug:redup 1]
- vb core 107 = [+L:2521-2523/2525/2531/2536/2542 +Cpd:  
vb r tr AS/n r AS +Asp 2:2511 +Base:vb r tr  
AS +Cont:2610 +Aug:redup 1]
- vb core 108 = [+Cpd:vb r tr (ya?ka-) +Asp 2:2511 +Base:  
n r AS +Cont:2610 +Aug:redup 1]
- vb core 109 = [+Cpd 1:n r 12 (maS-) +Cpd 2:vb r tr (-na-)  
+Asp 2:2511 +Base:vb r st (du) +Cont:2610  
+Aug:redup 1]
- vb core 110 = [+Asp 2:2511 +Base:vb r tr AS +Cont:2610  
+Aug:redup 1]
- vb core 111 = [+Cpd:n r 12 (kA-) +Asp 2:2511 +Base:vb  
r tr AS +Cont:2610 +Aug:redup 1]
- vb core 112 = [+L:2522/2525-2528/2531/2550 +Asp 2:2511  
+Base:vb r tr AS +Cont:2610 +Aug:redup 1]

- vb core 113 = [+Cpd:vb r tr AS \_Asp 2:2511 +Base:vb r  
st AS \_Cont:2610 +Aug:redup 1]
- vb core 114 = [+Cpd:n r AS \_L:2524 +Asp 2:2511 +Base:  
vb r tr AS \_Cont:2610 +Aug:redup 1]
- vb core 115 = [\_Asp 2:2511 +Base:vb r tr AS \_Cont:2610  
+Aug:redup 1]
- vb core 116 = [+Cpd:n r 12 (kA-) \_Asp 2:2511 +Base:vb r  
tr AS (-tiki) \_Cont:2610 +Aug:redup 1]

#### Ditransitive

- vb core 201 = [+Cpd:n r Res \_Asp 2:2511 +Base:vb r  
ditr AS \_Cont:2610 +Aug:redup 1]
- vb core 202 = [\_Asp 2:2511 +Base:vb r ditr AS \_Cont:  
2610 +Aug:redup 1]
- vb core 203 = [+Cpd:n r AS/L:2521/2524 \_Asp 2:2511  
+Base:vb r ditr AS \_Cont:2610 +Aug:redup 1]

#### Intransitive

- vb core 301 = [\_Asp 2:2511 +Base:vb r intr AS/t r 5  
(wahse-) \_Cont:2610 +Aug:redup 1]
- vb core 302 = [+Cpd:n r AS/vb r intr AS \_Asp 2:2511  
+Base:vb r intr AS/n r (mačot?o)/adj r l  
(k?a)/ vb r st AS \_Cont:2610 +Aug:redup 1]
- vb core 303 = [+L:2521-2533/2536-2538/2540-2549 \_Asp 2:  
2511 +Base:vb r intr/vb r st AS/adj r l (k?a)  
+Cont:2610 +Aug:redup 1]
- vb core 304 = [+Cpd:n r AS/vb r tr AS/vb r intr AS \_L:  
2521/2523-2525/2548/2550 +Asp 2:2511 +Base:  
vb r intr AS/adj r l (k?a) \_Cont:2610 +Aug:  
redup 1)
- vb core 305 = [+(-Cpd:n r AS +Cpd:vb r tr [nuwa-l])/Cpd:  
n r AS \_Asp 2:2511 +Base:n r 13 (-no) \_Cont:  
2610 +Aug:redup 1]
- vb core 306 = [+Cpd:n r AS \_L:2550 +Cpd:vb r intr AS/n  
r AS \_Asp 2:2511 +Base:vb r intr AS \_Cont:  
2610 +Aug:redup 1]
- vb core 307 = [+L:2521-2524/2526 +Cpd:n r AS/vb r intr

- (pu-) +Asp 2:2511 +Base:vb r intr AS +Cont:  
 2610 +Aug:redup 1]
- vb core 308 = [+L:2528 (SV-)/Cpd:n r 12 (Ya-) +Cpd:n r  
 AS +Cpd:vb r intr (ya-) +Asp 2:2511 +Base:vb  
 r intr (ma-) +Cont:2610 +Aug:redup 1]
- vb core 309 = [+Cpd:vb r intr (moni-) +Asp 2:2511 +Base:  
 vb r st +Cont:2610 +Aug:redup 1]
- vb core 310 = [+Base:n/adj/adv Res]
- vb core 311 = [+Asp 2:2511 +Base:vb r intr (ba?) +Cont:  
 2610 +Aug:redup 1]
- vb core 312 = [+L:2525 (čV-) +Asp 2:2511 +Base:vb r  
 intr (-ba?ke) +Cont:2610 +Aug:redup 1]
- vb core 313 = [+Cpd:1111 +Base:adj r 1 (k?a-)]

#### Quotative

- vb core 401 = [+Cpd:n r 12 (Ya-) +Asp 2:2511 +Base:vb r  
 quot (-ne) +Cont:2610 +Aug:redup 1]

#### Stative

- vb core 501 = [+Cpd:n r 12 (če-) +Cpd:vb r st 1 (si-)  
 +Asp 2:2511 +Base:vb r st 2 AS +Cont:2610  
 +Aug:redup 1]
- vb core 502 = [+Cpd:n r 12 (če-) +Cpd:vb r st 1 (si-)  
 +Cpd:vb r tr (ye-) +Asp 2:2511 +Base:vb r st 2  
 (-ta) +Cont:2610 +Aug:redup 1]

#### 4.2.2.3.3. Citation verb core paradigm

The apparent discrepancies between the number of tag-memes shown in the Itonama and that shown in the English translations are due to the interruption of the root in the Itonama by the Asp 2 infix:2511. (see 4.2.2.3.2)

#### Transitive

- vb core 101 = kí-h-si-hísi 'later -sew -continually -very'  
 (sew continually later).
- tena 'boil'.
- vb core 102 = ma-kuma 'hand -hunt' (hunt).
- ya-h-ka 'later -sing' (sing later).

vb core 103 = ču-wulu 'in -fill' (fill in).

na-či-či 'up -loop -very' (loop).

vb core 104 = ka-nuwa-bo-ho-bo 'surface -go-before  
-dance -continually -very' (dance before  
something all the time).

vb core 105 = nis-kos-če-be 'chest -down -look-at  
-attempt' (look down at one's chest).

vb core 106 = ka-ču-be 'surface -on -pour' (pour on the  
surface).

vb core 107 = na-pu-be 'up -lie-down -pour' (pour into  
some reclining thing high up).

vb core 108 = ya?ka-ma?iru 'have -bananas'.

vb core 109 = ma-na-du 'hand -up -be-oval' (have some-  
thing oval in the hand).

vb core 110 = pa 'plant'.

k?a-h-t?i 'later -resent' (resent later).

vb core 111 = ka-h-t?i 'surface -later -feel' (feel it later).  
muspu-le 'hammock -stretch' (lie in the hammock).

vb core 112 = čo-sopi 'in -finish' (finish the inside).

vb core 113 = pisi-du 'have -be-oval' (have something  
oval).

čana-pu 'fast -be-flat' (go without food).

vb core 114 = may-yu-pila 'hand -with-respect-to -work'  
(make it like that).

vb core 115 = pečudube 'gain'.

vb core 116 = ka-tiki 'surface -stir' (stir).

#### Ditransitive

vb core 201 = te-he-te 'ask -continually -very' (ask con-  
tinually).

wanuya-te 'words-from-the-vital-organ -ask'  
(beseech).

vb core 202 = ye 'ask'.

vb core 203 = na-k?ede 'up -show' (weigh).

ma-k?ede 'hand -show' (show with the hands).

#### Intransitive

vb core 301 = puyu 'smoke'.

h-puyu-hu-yu 'later -smoke -continually -very'  
(smoke all the time later).

vb core 302 = nu-siri 'nose -drip' (the nose drips).

wanu-h-day 'vital-organ -later -be-afflicted'  
(heart is afflicted).

vb core 303 = kos-li 'down -dive' (dive).

vb core 304 = nas-wa-sa 'ground -a-short-distance -go'  
(go out).

vb core 305 = mu-no 'back -place' (be last).

ma-nuwa-no 'hand -go-before -place' (be first).

vb core 306 = may-yu-was-bi 'hand -with-respect-to  
-outside -work-late' (work late).

vb core 307 = kus-pu-ma-ha-ma 'under -lie -go  
-continually -go' (continually going along under).

vb core 308 = su-wa-kay-ma 'near -body -surface -go'  
(stick to the body).

vb core 309 = moni-du 'be-in-that-place -be-oval' (some-  
thing oval to be in that place).

vb core 310 = pa?u 'be-a-dog'.  
počone 'be-like-that'.

mala 'be-good'.

vb core 311 = ba?i 'bake'.

h-ba?i 'later -bake' (baked later).

vb core 312 = kus-ba?ke 'under -be-under' (be under).

vb core 313 = may-k?a 'when -one' (there isn't any).

#### Quotative

vb core 401 = ne-he-ne 'say -continually -very' (say con-  
tinually).

ya-ne 'mouth -say' (say).

#### Stative

vb core 501 = si-pu 'be -flat' (something flat is).

vb core 502 = si-ye-ta 'be -give-birth -be-standing' (to  
be).

#### 4.2.2.3.4. The negative verb core

#### 4.2.2.3.4.1. Tagmemic negative verb core paradigm

Obtain formulas of vb core neg 101-116/201-203/301-313/401/501-502 by multiplication of formulas of corresponding vb core 101-502 as follows: For the tagmeme +Asp 2:2511 substitute +Neg 2:2512.

#### 4.2.2.3.4.2. Negative verb core citation

vb core neg 104 = ya-ka-?-do 'mouth -body -not -bite'  
(not bite).

vb core neg 203 = ma-?-ki 'hand -not -give' (not give).

vb core neg 303 = la-?-ba 'away -not -go' (not go away).

#### 4.2.2.4. Emic verb root classes

##### Transitive

vb r tr = kisi- 'sew'; tena- 'boil'; yeba- 'weave';  
koro- 'stir'; ye- 'give-birth'; kikuwa-  
'know'; bo- 'dance'; če- 'look-at'; li- 'rub';  
tYa- 'wash'; -?i- 'like'.

##### Ditransitive

vb r ditr = te- 'ask'; -ki 'give'; k?edE 'advise, show'.  
(see 5.2.3.)

##### Intransitive

vb r intr = sodo- 'cough'; pi- 'fly'; ba- 'die'; tila-  
'grow'; pa?al?i- 'swim'; yobi- 'spit'; čiri-  
'ferment'; -woyo- 'yawn'; -li 'be hungry';  
t?o- 'arrive'.

##### Quotative

vb r quot = -ne 'say'.

##### Stative

vb r st 1 = si- 'to-be'.

vb r st 2 = -ta 'be-animate-standing-sg' (be).  
di 'be-animate-seated-pl' (be seated).

- bo 'be-upright-planted-projecting-pl' (be upright,  
planted, projecting).  
du 'be-oval-sg' (be oval).

#### 4.2.2.5. The independent verb affix

The inflectional verb affix class 2100-2200

Aspect 1 2120 (see 5.1.1)

2121 SI<sup>2</sup>- 'not-now-done-or-not-done-at-time-of-  
utterance'.

Repetitive inceptive 2130 (see 5.1.4)

2131 S- 'just-begun-again-or-the-recommencing-of-  
action-previously-done'.

Modal 2140 (see 5.2.1.1)

2141 kV- Intentive

2142 dV- Interrogative

2143 kVdV- Reportative

Indirective 2210 (see 5.2.7)

2211 -NAHK?E Indirective

Reflexive 2220 (see 5.1.3).

2221 -ME Reflexive, reciprocal

Repetitive 2230

2231 -?o 'again'.

The verb stem affix class 2300

Causative 2310

2311 yu- Causative

Locative 2320 (see 5.1.2)

2321 mU- 'away-or-in-another-place'.

Agentive 2330 (see 5.2.6)

2331 Ča- 'for'.

Directive 2340

2341 k?i- Directive

Benefactive 2350 (see 5.1.2)

2351 pu- 'to-benefit'.

The verb core affix class 2500-2600

Aspect 2 2510

2511 h- 'later-or-not-yet'.

2512 ?- Negative

## Locative 2520-2550

- 2521 NA- 'up'. (see 5.1.4)
- 2522 KV<sub>s</sub>- 'down'. (see 5.1.1)
- 2523 ča- 'up-from-or-out'.
- 2524 ni- Directional
- 2525 čV- 'inside-or-in-or-on'. (see 5.1.1)
- 2526 YV- 'a-short-distance'. (see 5.2.1.3)
- 2527 k?V- 'far'. (see 5.2.1.3)
- 2528 SV- 'near'. (see 5.2.1.3)
- 2529 KVčV- 'down-in'.
- 2530 la- Direction away
- 2531 nikVs- 'down'. (see 5.1.1)
- 2532 yanu- 'a-short-distance'.
- 2533 yawa- 'outside'.
- 2534 napas- 'up'.
- 2535 kani?- 'alongside'.
- 2536 kanu- 'before'.
- 2537 wasču- 'outside-on-or-in'.
- 2538 yasna- 'out-and-up'.
- 2539 tYusu- 'inside'.
- 2540 čUnU- 'inside'. (see 5.1.4)
- 2541 tYikis- 'in-down'.
- 2542 nakus- 'up-and-then-down'.
- 2543 čina- 'up-inside'.
- 2544 čawas- 'up-out-of'.
- 2545 ČAČU- 'up-from-and-into'. (see 5.1.4)
- 2546 čani- 'up-from-direction' (up from).
- 2547 časi- 'out-from-water-to-land'.
- 2548 nača- 'up-and-out-from'.
- 2549 kanisča- 'out-from-among'.
- 2550 yU- 'with-respect-to' (see 5.1.1)
- Customary 2610 (see 5.1.1)
- 2611 -?V 'continuously'.
- 2612 hV 'continuously-going-along'.

4.2.3. The dependent verb

#### 4.2.3.1. The inflected dependent verb

##### 4.2.3.1.1. Tagmemic dependent verb paradigm

- vb 111A = {+S ref +Dep 1 +Base 111 +Dir +Rhythm 2A  
+O ref}
- vb 111B = {+S ref +Dep 1 +Base 112 +(+Dir +Rhythm 2A)  
+O ref}
- vb 111C = {+S ref +Dep 1 +Base 114 +(+Dir +Rhythm 2A)  
+Indir +O ref}
- vb 111D = {+O ref +Dep 1 +Base 111 +Dir +Rhythm 1  
+S ref}
- vb 111E = {+O ref +Dep 1 +Base 112 +(+Dir +Rhythm 1)  
+S ref}
- vb 111F = {+O ref +Dep 1 +Base 114 +(+Dir +Rhythm 1)  
+Indir +S ref}
- vb 112A = {+S ref +Base 113 +Dir +Rhythm 2B +Dep 2  
+O ref}
- vb 112B = {+S ref +Base 114 +Indir +Dep 2/O ref}
- vb 113A = {+S ref +Nom +Base 111 +Dir +Rhythm 1 +O  
ref}
- vb 113B = {+S ref +Nom +Base 112 +(+Dir +Rhythm 1)  
+O ref}
- vb 113C = {+S ref +Nom +Base 114 +Indir +O ref}
- vb 114A = {+S ref +Base 113 +Dir +(Rhythm 2A +Dep 2)  
+O ref}
- vb 114B = {+S ref +Base 114 +(+Dir +Rhythm 2A) +Indir  
+O ref}
- vb 121A = {+S ref +Dep 1 +Base 121 +Dir +Rhythm 2A  
+IO ref}
- vb 121B = {+S ref +Dep 1 +Base 122 +(+Dir +Rhythm 2A)  
+IO ref}
- vb 121C = {+S ref +Dep 1 +Base 123 +(+Dir +Rhythm 2A)  
+Indir +IO ref}
- vb 121D = {+IO ref +Dep 1 +Base 121 +Dir +Rhythm 1  
+S ref}
- vb 121E = {+IOref +Dep 1 +Base 122 +(+Dir +Rhythm 1)  
+S ref}

- vb 121F = {+IO ref +Dep 1 +Base 123 +(+Dir +Rhythm 1)  
           +Indir +S ref}
- vb 122A = {+S ref +Base 124 +(+Dir +Rhythm 2B) +Dep 2  
           +IO ref}
- vb 122B = {+S ref +Base 123 +(+Dir +Rhythm 2B) +Indir  
           +Dep 2 +IO ref}
- vb 123A = {+S ref +Nom +Base 121 +Dir +Rhythm 1 +IO  
           ref}
- vb 123B = {+S ref +Nom +Base 122 +(+Dir +Rhythm 1)  
           +IO ref}
- vb 123C = {+S ref +Nom +Base 123 +(+Dir +Rhythm 1)  
           +Indir +IO ref}
- vb 124A = {+S ref +Base 124 +Dir +(\_Rhythm 2A +Dep 2)  
           +IO ref}
- vb 124B = {+S ref +Base 123 +(+Dir +Rhythm 2A) +Indir  
           +IO ref}
- vb 131A = {+S ref +Dep 1 +Base 131 +Dir +Rhythm 2A}
- vb 131B = {+S ref +Dep 1 +Base 132 +(\_Rhythm 2A)}
- vb 131C = {+S ref 1 +Dep 1 +Base 134 +Dir 1 +Rhythm  
           2A +Dir 2 +Rhythm 2A}
- vb 132A = {+S ref +Base 133 +Dir +Rhythm 2B +Dep 2}
- vb 133A = {+S ref +Nom +Base 131 +Dir +Rhythm 1}
- vb 133B = {+S ref +Nom +Base 132 +(\_Rhythm 1)}
- vb 134A = {+S ref +Base 133 +Dir +(\_Rhythm 2A +Dep  
           2)}
- vb 141A = {+S ref +Dep 1 +Base 141 +(\_Rhythm 2A)  
            $\underline{+}(\underline{+}\text{Indir } \underline{+}\text{O ref})$ }
- vb 141D = {+O ref +Dep 1 +Base 141 +Dir +Rhythm 1  
           +Indir +S ref}
- vb 142A = {+S ref +Base 141 +(\_Rhythm 2B)  
            $\underline{+}(\underline{+}\text{Indir } \underline{+}\text{O ref})$  +Dep 2}
- vb 143A = {+S ref +Nom +Base 141 +(\_Rhythm 1)  
           +Indir +O ref}
- vb 144A = {+S ref +Base 141 +(\_Rhythm 2A)  
            $\underline{+}(\underline{+}\text{Indir } \underline{+}\text{O ref})$ }
- vb 151A = {+S ref +Dep 1 +Base 151 +(\_Rhythm 2A)}
- vb 152A = {+S ref +Base 151 +(\_Rhythm 2B) +Dep 2}

vb 153A = {+S ref +Nom +Base 151 +(Dir +Rhythm 1)}  
 vb 154A = {+S ref +Base 151 +Dir +Rhythm 2A}

#### 4.2.3.1.2. Tagmatic dependent verb paradigm

- vb 111A = [+S ref:1120 +Dep:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 11-13 +Dir:1210 +Rhythm:  
           1230 +O ref:1250/Refl:2220 +Rep:2230]  
 vb 111B = [+S ref:1120 +Dep:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 14 +(Dir:1210 +Rhythm:  
           1230) +O ref:1250/Refl:2220 +Rep:2230]  
 vb 111C = [+S ref:1120 +Dep:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb core 301-313 Res +(Dir:1210  
           +Rhythm:1230) +Indir:2210 +O ref:1250 +Rep:  
           2230]  
 vb 111D = [+O ref:1120 +Dep:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 11-13 +Dir:1210 +Rhythm:  
           1220 +S ref:1240 +Rep:2230]  
 vb 111E = [+O ref:1120 +Dep:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 14 +(Dir:1210 +Rhythm:  
           1220) +S ref:1240 +Rep:2230]  
 vb 111F = [+O ref:1120 +Dep:1111 +Rep Inc:2130 +Asp  
           1:2120 +Base:vb core 301-313 Res +(Dir:  
           1210 +Rhythm:1220) +Indir:2210 +S ref:1240  
           +Rep:2230]  
 vb 112A = [+S ref:1120 +Rep Inc:2130 +Asp 1:2120  
           +Base:vb stem 11-14 +Dir:1210 +Rhythm:1232  
           +Dep:2710 +O ref:1250 +Rep:2230]  
 vb 112B = [+S ref:1120 +Rep Inc:2130 +Asp 1:2120 +Base:  
           vb core 301-313 Res +(Dir:1210 +Rhythm:1232)  
           +Indir:2210 +Dep:2710/0 ref:1250 +Rep:2230]  
 vb 113A = [+S ref:1120 +Nom:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 11-13 +Dir:1210 +Rhythm:  
           1220 +O ref:1250/Refl:2220 +Rep:2230]  
 vb 113B = [+S ref:1120 +Nom:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 14 +(Dir:1210 +Rhythm:  
           1220) +O ref:1250/Refl:2220 +Rep:2230]

- vb 113C = [+S ref:1120 +Nom:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb core 301-313 Res +( +Dir:1210  
           +Rhythm:1220) +Indir:2210 +O ref:1250 +Rep:  
           2230]
- vb 114A = [+S ref:1120 +Rep Inc:2130 +Asp 1:2120 +Base:  
           vb stem 11-14 +Dir:1210 +( +Rhythm:1231-1233  
           +Dep:2240) +O ref:1250 +Rep:2230]
- vb 114B = [+S ref:1120 +Rep Inc:2130 +Asp 1:2120 +Base:  
           vb core 201-313 Res +( +Dir:1210 +Rhythm:1231-  
           1233) +Indir:2210 +O ref:1250 +Rep:2230]
- vb 121A = [+S ref:1120 +Dep:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 21-22 +Dir:1210 +Rhythm:  
           1230 +IO ref:1250/Refl:2220 +Rep:2230]
- vb 121B = [+S ref:1120 +Dep:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 24 +( +Dir:1210 +Rhythm:  
           1230) +IO ref:1250/Refl:2220 +Rep:2230]
- vb 121C = [+S ref:1120 +Dep:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 11-14 Res +( +Dir:1210  
           +Rhythm:1230) +Indir:2210 +O ref:1250/Refl:  
           2220 +Rep:2230]
- vb 121D = [+IO ref:1120 +Dep:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 21-22 +Dir:1210 +Rhythm:  
           1220 +S ref:1240 +Rep:2230]
- vb 121E = [+IO ref:1120 +Dep:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 24 +( +Dir:1210 +Rhythm:  
           1220) +S ref:1240 +Rep:2230]
- vb 121F = [+IO ref:1120 +Dep:1111 +Rep Inc:2130 +Asp  
           1:2120 +Base:vb stem 11-14 Res +( +Dir:1210  
           +Rhythm:1220) +Indir:2210 +S ref:1240 +Rep:  
           2230]
- vb 122A = [+S ref:1120 +Rep Inc:2130 +Asp 1:2120  
           +Base:vb stem 21-22/24 +( +Dir:1210  
           +Rhythm:1232) +Dep:2710 +IO ref:1250 +Rep:  
           2230]
- vb 122B = [+S ref:1120 +Rep Inc:2130 +Asp 1:2120 +Base:  
           vb stem 11-14 Res +( +Dir:1210 +Rhythm:1232)  
           +Indir:2210 +IO ref:1250 +Dep:2710 +Rep:2230]

- vb 123A = [+S ref:1120 +Nom:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 21-22 +Dir:1210 +Rhythm:  
           1220 +IO ref:1250/RefI:2220 +Rep:2230]
- vb 123B = [+S ref:1120 +Nom:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 24 +(Dir:1210 +Rhythm:  
           1220) +IO ref:1250/RefI:2220 +Rep:2230]
- vb 123C = [+S ref:1120 +Nom:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb stem 11-14 Res +(Dir:1210  
           +Rhythm:1220) +Indir:2210 +IO ref:1250/RefI:  
           2220 +Rep:2230]
- vb 124A = [+S ref:1120 +Rep Inc:2130 +Asp 1:2120 +Base:  
           vb stem 21-22/24 +Dir:1210 +(\_Rhythm:1230  
           +Dep:2710) +IO ref:1250 +Rep:2230]
- vb 124B = [+S ref:1120 +Rep Inc:2130 +Asp 1:2120 +Base:  
           vb stem 11-14 Res +(Dir:1210 +Rhythm:1230)  
           +Indir:2210 +IO ref:1250/RefI:2220 +Rep:2230]
- vb 131A = [+S ref:1120 +Dep:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb core 301-309 +Dir:1210  
           +Rhythm:1230 +RefI:2220 +Rep:2230]
- vb 131B = [+S ref:1120 +Dep:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb core 310-312 +(Dir:1210  
           +Rhythm:1230) +RefI:2220 +Rep:2230]
- vb 131C = [+S ref:1125 +Dep:1111 +Base:vb core 313  
           +Dir 1:1212 +Rhythm:1231 (-na) +Dir 2:1212  
           +Rhythm:1231 (-ko)]
- vb 132A = [+S ref:1120 +Rep Inc:2130 +Asp 1:2120 +Base:  
           vb core 301-312 +Dir:1210 +Rhythm:1231-1232  
           +Dep 2710 +Rep:2230]
- vb 133A = [+S ref:1120 +Nom:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb core 301-309 +Dir:1210  
           +Rhythm:1220 +RefI:2220 +Rep:2230]
- vb 133B = [+S ref:1120 +Nom:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb core 310-312 +(Dir:1210  
           +Rhythm:1220) +RefI:2220/Rep:2230]
- vb 134A = [+S ref:1120 +Rep Inc:2130 +Asp 1:2120 +Base:  
           vb core 301-312 +Dir:1210 +(\_Rhythm:1231-1233  
           +Dep:2710) +Rep:2230]

- vb 141A = [+S ref:1120 +Dep:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb core 401 +(+Dir:1210 +Rhythm:  
           1230) +(+Indir:2210 +O ref:1250) +Rep:2230]
- vb 141D = [+O ref:1120 +Dep:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb core 401 +(+Dir:1210 +Rhythm:  
           1220) +Indir:2210 +S ref:1240 +Rep:2230]
- vb 142A = [+S ref:1120 +Rep Inc:2130 +Asp 1:2120  
           +Base:vb core 401 +(+Dir:1210 +Rhythm:1232)  
           +(-Indir:2210 +O ref:1250) +Dep:2710 +Rep:  
           2230]
- vb 143A = [+S ref:1120 +Nom:1111 +Rep Inc:2130 +Asp 1:  
           2120 +Base:vb core 401 +(+Dir:1210 +Rhythm:  
           1220) +(-Indir:2210 +O ref:1250) +Rep:2230]
- vb 144A = [+S ref:1120 +Rep Inc:2130 +Asp 1:2120 +Base:  
           vb core 401 +(-Dir:1210 +Rhythm:1230) +(-In-  
           dir:2210 +O ref:1250) +Rep:2230]
- vb 151A = [+S ref:1120 +Dep:1111 +Rep Inc:2130 +Base:  
           vb core 501-502 +(+Dir:1210 +Rhythm:1230)  
           +Refl:2220 +Rep:2230]
- vb 152A = [+S ref:1120 +Rep Inc:2130 +Base:vb core 501-  
           502 +(+Dir:1210 +Rhythm:1232) +Dep:2710  
           +Rep:2230]
- vb 153A = [+S ref:1120 +Nom:1111 +Rep Inc:2130 +Base:  
           vb core 501-502 +(+Dir:1210 +Rhythm:1220)  
           +Refl:2220 +Rep:2230]
- vb 154A = [+S ref:1120 +Rep Inc:2130 +Base:vb core 501-  
           502 +Dir:1210 +Rhythm:1231-1233 +Rep:2230]

#### 4.2.3.1.3. Citation dependent verb paradigm

- vb 111A = dah-ne-?-si-t<sup>y</sup>a-na-?o 'we-excl -when -just-  
           begun-again -not-now-done -wash -dep-indef  
           -again' (when we will begin to wash again).
- vb 111B = as-me-mačano-be 'I -when -help -you' (when I  
           help you).
- vb 111C = as-me-doyo-h-ka-hk<sup>?</sup>a-be 'I -when -hide -away  
           -dep-indef -indir -you' (when I hid you).

- vb 111D = as-me-s-čebe-?-te-?ka-?o 'me -when -just-  
begun-again -look-at -toward -cont -she -again'  
(when she looks at me again).
- vb 111E = ka?-ne-mačanohono-?-te-∅ 'you-fem -when -help  
-toward -cont -he' (when he helps you continu-  
ously).
- vb 111F = as-me-doyo-hk?e-∅-?o 'me -when -hide -indir  
-he -again' (when he hid me again).
- vb 112A = si-h-si-čebe-?ča-ba 'I -just-begun-again -not-  
now-done -look-at -toward -dep-multiplex -when'  
(when I look at him).
- os-čudu-?-ba-be-?o 'I -hit -toward -when -you  
-again' (when I hit you again).
- vb 112B = pi-s-doyo-hk?a-ba-?o 'she -just-begun-again  
-hide -indir -when -again' (when she hid it  
again).
- vb 113A = ah-mi-?-čaba-?-na-?o 'he -who -just-begun-  
again -want -toward -indef -again' (he who wants  
it again).
- vb 113B = pi-ni-?-mačano-?-te-be-?o 'she -who -just-  
begun-again -help -toward -cont -you -again'  
(she who began to help you again).
- vb 113C = ah-mi-doyo-hk?a-be 'he -who -hide -indir -you'  
(he who hid you).
- vb 114A = k?i-yone-?-ča-ba 'where-they -eat -toward  
-cont -when' (where they were when they finished  
eating).
- vb 114B = ahk?i-doyo-h-ča-hk?a-be 'where-he -hide -away  
-dep-multiplex -indir -you' (where he hid you).
- vb 121A = as-me-pimate-s-ča-?a 'I -when -ask-for-another  
-away -dep-multiplex -myself' (when I ask for  
myself).
- vb 121B = as-me-si-pak?ede-?-ča?ko-be-?o 'I -when -not-  
now-done -advise -toward -dep-multiplex -you  
-again' (when I will teach you again).
- vb 121C = sah-nay-yut?uwa-?-ča-hk?a-be 'we-excl -when

- make -toward -dep-multiplex -indir -you' (when we make it for you).
- vb 121D = as-me-yate-s-te-?ka-mo 'me -when -ask -away -cont -she -again' (when she asks me again).
- vb 121E = ka?-nay-pak?ede-ø-?o 'you-fem -when -advise -he -again' (when he advises you again).
- vb 121F = dah-ne-yaka-nahk?e-?ka-?o 'we-incl-when -sing -indir -she -again' (when she sings it for us again).
- vb 122A = se?-maki-ba-be 'we-excl -give -when -you' (when we give you).
- vb 122B = si-yut?uwa-?-ča-hk?a-be-ba 'I -make -toward -dep-multiplex -indir -you -when' (when I make it for you).
- vb 123A = ka?-ni-?-mate-s-ke-mo 'you-fem -who -just-begun-again -ask -away -multiplex -me' (you who ask me).
- vb 123B = pi-ni-maki-hk?a-mo 'she -who -give -indir -me' (she who gives to me).
- vb 123C = dih-ni-yaka-nahk?a-mo-?o 'you-pl -who -sing -indir -me -again' (you who sing it to me again).
- vb 124A = sihk?i-yate-s-ča-ba 'where-we -ask -away -dep-multiplex -when' (where we will be when we ask).
- vb 124B = dihk?i-si-yut?uwa-?-ča-hk?a-?o 'where-you-pl -not-now-done -make -toward -dep-multiplex -indir -again' (where you will be when you make it again).
- vb 131A = dah-ne-s-ne-h-ča 'we-incl -when -just-begun-again -sleep -away -dep-multiplex' (when we began to sleep again).  
s-me-yahdidi-?-ka?o 'I -when -be-sick -away -dep-indef -again' (when I was sick again).
- vb 131B = ah-me-ba?i 'it -when -bake' (when it is baked).  
sah-ne-si-mala-?-ča?ča 'we-excl -when -not-now-done -be-good -toward -cont-multiplex' (when we are good).

- as-me-t?iyaya 'I -when -be-a-child' (when I was a child).
- vb 131C = ah-may-mayk?a-?-na-?-ko 'it -when -there-isn't-any -toward -dep-indef -toward -dep-indef' (when there isn't any).
- vb 132A = si-si-yaba-ba 'I -not-now-done -come -when' (when I came).
- ɸ-laba-h-ča-ba 'they -go-away -dep-multiplex -when' (when they go away).
- vb 133A = as-mi-si-ča-?-ke-?o 'I -who -not-now-done -come -toward -multiplex -again' (I who return again).
- dih-ni-s-reba-h-te 'you-pl -who -just-begun-again -be-happy -away -cont' (you who are happy again).
- dih-ni-mu-?-ke 'you-pl -who -be-men -toward -multiplex' (you who are men).
- vb 133B = ah-mi-ba?i 'it -which -bake' (that which is baked).
- as-mi-da?ele 'I -who -be-fat' (I who am fat).
- vb 134 A = sihk?i-s-yaba-?-ča-ba 'where-we -just-begun-again -come -toward -dep-multiplex -when' (where we are when we come just now).
- vb 141A = ah-me-si-ne-?-ka-hk?a-mo 'he -when -not-now-done -say -toward -dep-indef -indir -me' (when he said it to me).
- vb 141D = s-me-si-ne-hk?e-?ka 'me -when -not-now-done say -indir -she' (when she says to me).
- vb 142A = os-si-ne-?-ča-ba-?o 'I -not-now-done -say -toward -dep-multiplex-when-again' (when I said it again).
- ko?-si-ne-hk?a-mo-ba 'you-fem -not-now-done -say -indir -me -when' (when you said to me).
- vb 143A = a?-mi-si-ne-?-ke-hk?e 'you-m -who -not-now-done -say -toward -multiplex -indir' (you who said it to him).
- vb 144A = sihk?i-h-si-ne-hk?a-be 'where-we-excl -just-

begun-again -not-now-done -say -indir -you'  
(where we said it to you).

vb 151A = dah-ne-sidili-?-ča-?a 'we-incl -when -be  
-toward -dep-multiplex -ourselves' (when we  
ourselves are).

vb 152A = se?-sidili-ča 'we-excl -be -when' (when we  
were).

vb 153A = dih-ni-sidili-?-ča?ča 'we-incl -who -be -toward  
-cont-multiplex' (we who are).

mi-siča?u 'it -be' (that which is).

vb 154A = sihk?i-sidili-?-ko-?o 'where-we-excl -be  
-toward -dep-indef -again' (where we were  
again).

#### 4.2.3.2. The dependent verb affix

##### 4.2.3.2.1. The inflected dependent verb affix class 2700

The dependent time class 2710

2711 -ba 'when'.

#### 4.2.4. The auxiliary verb

##### 4.2.4.1. The inflected auxiliary verb

###### 4.2.4.1.1. Tagmemic auxiliary verb paradigm

aux vb 1 = {+S ref: 1120A +Base: aux vb stem +Dir: 1212  
+Rhythm: 1221}

aux vb 2 = {+Base: aux vb stem +Dir: 1212 +Rhythm: 1221  
+S ref: 1240}

aux vb 3 = {+Dep: 1111 +Base: aux vb stem +Dir: 1212  
+Rhythm: 1231}

aux vb 4 = {+Ig: 2141 +Base: aux vb stem +Dir: 1212  
+Rhythm: 1221 +S ref: 1240}

###### 4.2.4.1.2. Citation auxiliary verb paradigm

- aux vb 1 = si-mama-?-na 'I -go -toward -indef' (I'm going to).  
 aux vb 2 = mama-?-na-∅ 'go -toward -indef -he' (he's going to).  
 aux vb 3 = me-mama-?-ko 'when -go -toward -dep-indef'  
                   (when it is going to).  
 aux vb 4 = du-mama-?-na-∅ 'if -go -toward -indef -it'  
                   (is it going to?).

#### 4.2.4.2. The auxiliary verb stem

##### 4.2.4.2.1. Tagmemic auxiliary verb stem formula

aux vb stem = {+Base:vb r intr (ma-) +Aug:redup 1}

##### 4.2.4.2.2. Auxiliary verb stem citation

aux vb stem = ma-ma 'go -go' (going).

#### 4.3. The noun

##### 4.3.1. The inflected noun

###### 4.3.1.1. Tagmemic inflected noun paradigm

###### Inflected noun 10

- n 11 = {+Base:n stem 1-9 +Gd:1241}  
 n 12 = {+Base:n stem 10 +(+Dir:1211 +Pl:1223)}  
 n 13 = {+Base:n stem 11 +(+Dir:1212 +Pl 1:1223 +Pl 2:  
                   3210)}  
 n 14 = {+Base:n stem 12 +(+Dir:1212 +Pl:1223)}  
 n 15 = {+Base:n stem 13-21}  
 n 16 = {+Nom:3130 +Asp 1:vb affix 2120 +Base:vb stem  
                   +Dir:1211 +Pl:1221/1223}}

###### Inflected noun 20

- n 21 = {+Person:1120 +Gen:1111 +Base:n 11-14}  
 n 22 = {+Gen:1120 +Base:n 15}

- n 23 = {+Person:1120 +Gen:1111 +Base:n r 14 +Gd:1240/  
 (+Dir:1210 +Pl:1223)}
- n 24 = {+Person:1120 +Gen:1111 +Parent:3110 +Base:n  
 r 15 +Dir:1212 +(+Generation:1221 +Gd:1240)/  
 Pl:1225}
- n 25 = {+Person:1120 +Gen:1111 +Base:n r 14 +Dir:1212  
 +Pl:1225/(+Generation:1221 +Gd:1240)}
- n 26 = {+Person:1120 +Gen:1111 +Base:n r 16 +(Dir:  
 1212 +Pl:1223)}
- n 27 = {+Person:1120 +Gen:1111 +Base:n r 15 +Gd:1240}
- n 28 = {+Person:1120 +Gen:1111 +Base:n r 17 +Dir:1212  
 +Generation:1221/Gd:1241/Pl:1225}

#### Inflected noun 30

- n 31 = {+Desc:3120 vb affix 2524 (ni-) +Base:n r 18 +Gd:  
 1241}

#### 4.3.1.2. Citation inflected noun paradigm

##### Inflected noun 10

- n 11 = Vku 'house'; Vlele 'grass'; na?u-?ka 'duck  
 -female' (female duck).
- n 12 = Vmu-h-ke 'man -away -multiplex' (men); Vpa?i  
 'priest'.
- n 13 = lepe-?-ke-be 'sister-not-consanguineous -toward  
 -multiplex -pl' (sisters not consanguineous).
- n 14 = mačot?o 'friend'; mačot?o-?-ke 'friend -toward  
 -multiplex' (friends).
- n 15 = mašano 'arm'; kasuwa 'face-hair' (beard).
- n 16 = we-yopowa-h-na?ke 'agent -kill -away -multiplex'  
 (killers).  
 we-si-ma-h-ne 'agent -not-now-done -walk -away  
 -indef' (walker).

##### Inflected noun 20

- n 21 = as-mi-ku 'I -my -house' (my house).  
 ah-mi-mačot?o 'he -his -friend' (his friend).
- n 22 = us-mašano 'my -arm'.

- ko?-ničt<sup>y</sup>iru 'your-fem -knee' (your knee).  
 oh-nisno 'his -chest'.  
 n 23 = as-mi-desname-?ka 'I -my -niece -fem' (my niece).  
       ka?-ni-yuwe-?-ke 'you-fem -your -grandparent-or-  
       grandchild -toward -multiplex' (your grand-  
       children).  
 n 24 = ah-may-may-ye-?-ne-?ka 'he -his -parent -parent-  
       or-child -toward -older-generation -fem' (his  
       mother).  
       dah-ne-may-ye-?-ča?ke 'we-incl -our -parent  
       -parent-or-child -toward -multiplex' (our  
       parents).  
 n 25 = as-me-desname-?-ča?ke 'I -my -uncle -toward  
       -cont-multiplex' (my uncle).  
       as-me-yama-h-ne-?ka 'I -my -parent-or-child-in-  
       law -away -indef -fem' (my mother-in-law).  
 n 26 = as-mi-čayne 'I -my -brother-in-law' (my brother-  
       in-law).  
       as-mi-čayne-?-ke 'I -my -brother-in-law -toward  
       -multiplex' (my brothers-in-law).  
 n 27 = as-may-?ye 'I -my -parent-or-child' (my children).  
 n 28 = as-me-mapi-?-ne 'I -my -husband-or-wife -toward  
       -indef' (my husband).  
       as-∅-mapi-?ka 'I -my -husband-or-wife -fem (my  
       wife).

### Inflected noun 30

- n 31 = mudu-lastina-?ka 'deceased -Lastinia -fem' (the  
       late Lastinia).  
       si-saramo 'of -San-Ramon'.  
       ni-pura 'dir -Pura' (Pura).  
       mayyubē Proper name

#### 4.3.2. The noun stem

##### 4.3.2.1. Tagmemic noun stem paradigm

- n stem 1 = {+Base:n r 1}

- n stem 2 = {+Base:n r 2 +Aug:redup 1}
- n stem 3 = {+(+Cpd:n r 12 [kA-]) (+L:vb affix 2525  
+L:vb affix 2521) (+Cpd:n r 12 [pay-l] +L:vb  
affix 2550) +Base:n r 3)}
- n stem 4 = {+Base:n r 4 +Aug:redup 2}
- n stem 5 = {+Cpd:n r 5 +Base:vb r st 2 (čobo)}
- n stem 6 = {+Cpd:n r Res +Base:n r 6}
- n stem 7 = {+Base:n r 7 +(Aug:redup 1 +Gd:1241)}
- n stem 8 = {+Cpd:n r 12 (čAs-) +Base:n r 8 +Aug:redup 1}
- n stem 9 = {+L:vb affix 2522 +Base:vb r st 2 (bo)}
- n stem 10 = {+Base:n r 9}
- n stem 11 = {+Base:n r 10}
- n stem 12 = {+Base:n r 11}
- n stem 13 = {+Base:n r 13AS}
- n stem 14 = {+Cpd:n r 12 AS +Base:n r 13 AS}
- n stem 15 = {+L:vb affix 2521/2524/2526-2528/2531 +Base:  
n r 13 AS}
- n stem 16 = {+Cpd:n r 12 AS +L:vb affix 2523-2525 +Base:  
n r 13 AS}
- n stem 17 = {+Cpd:n r 12 AS +L:vb affix 2525 +L:vb affix  
2521 +Base:n r 13 AS}
- n stem 18 = {+Cpd:n r 12 AS +Cpd:n r 12 AS +Cpd:n r 12  
AS +Base:n r 13 (-nV)}
- n stem 19 = {+Cpd:n r 12 AS +L:vb affix 2525-2528 +Cpd:  
n r 12 AS +Base:n r 13 AS}
- n stem 20 = {+(+Cpd 1:n r 12 [kA-] +Cpd 2:n r 12 [mVs-]  
+L 1:vb affix 2525 +L 2:vb affix 2524)/(+Cpd 1:  
n r 12 [kA-] +Cpd 2:n r 12 [mV-] +L:vb affix  
2521)/(+L 1:vb affix 2526-2528 +Cpd 1:n r 12  
[mV-] +L 2:vb affix 2523 +Cpd 2:n r 12 [čačal])  
+Base:n r 13 (-nV)}
- n stem 21 = {+(+L:vb affix 2522/2526-2528 +Cpd:n r 12  
[no-l])/(+L:vb affix 2521 +Cpd:n r 12 [pa-l])/  
(+Cpd:n r 12 AS/Shape:adj affix 4111-4115)  
+Cpd 2:n r 12 (WAMO-)} +Base:n r 13 (-t'yo)}

#### 4.3.2.2. Citation noun stem paradigm

- n stem 1 = VtYu 'tiger'; Vbite 'tree'; Vnihko 'mosquito';  
                   pusore 'bead'.
- n stem 2 = siwi-wi 'palm -palm' (palm sp).  
                   diwi 'south-wind -south-wind' (south wind).
- n stem 3 = Vbuwa 'person'.  
                   ču-na-buwa 'in -up -person' (fellowcountryman).  
                   pay-yu-buwa 'strength -with-respect-to -person'  
                   (companion).
- n stem 4 = tYili?-tYili 'hawk -hawk' (hawk).  
                   kuru?-kuru 'buzzard -buzzard' (buzzard).
- n stem 5 = wa-čobo 'fence -planted' (fence).  
                   muspa-čobo 'hammock -planted' (hammock stick).
- n stem 6 = muspa-lo 'hammock -stick'.  
                   pa-dara 'strength -talk' (word).
- n stem 7 = VtYahka 'moon' (month).  
                   t'aka-ka?-ka 'moon -moon -fem' (moon).
- n stem 8 = čas-t?ara?-ra 'covering -sticker -sticker'  
                   (sticker).
- n stem 9 = kos-bo 'down -planted' (piece of the hammock  
                   loom).
- n stem 10 = Vmu 'man'; Vpa?i 'priest'.
- n stem 11 = lepe 'sister-not-consanguineous'.  
                   sure 'daughter-not-consanguineous'.
- n stem 12 = mačot?o 'friend'.
- n stem 13 = nu 'nose'; nast?o 'blood'.
- n stem 14 = me?-ke 'arm -nail' (fingernail).  
                   mo-bi 'back -tail' (tail).
- n stem 15 = wanu-nu 'vital-organ -place' (stomach).  
                   nikos-no 'down -place' (down).
- n stem 16 = ma-či-tYiru 'arm -in -joint' (elbow).  
                   ni-či-tYiru 'leg -in -joint' (knee).  
                   wa-ni-no 'head -dir -place' (chin).
- n stem 17 = mus-ču-na-?suwa 'oval-projection -in -up  
                   -hair' (axillary hair).
- n stem 18 = wa-ča-kaka-no 'head -up-from -that-which-  
                   is round -place' (forehead).

- n stem 19 = pa-ču-kaka-no 'strength -inside -that-which-is-round -place' (shoulder).
- n stem 20 = ko-mos-čo-ni-no 'surface -oval-projection -inside -dir -place' (heel).
- ka-mu-na-no 'surface -back -up -place' (back of the neck).
- ya-mu-ča-čača-no 'a-short-distance -back -up-from -that-which-is-up-from -place' (lower back).
- n stem 21 = na-pa-mo-?t<sup>y</sup>o 'up -length -amount -quantity' (length).
- či-yamo-?t<sup>y</sup>o 'standing -amount -quantity' (the amount of anything standing or planted).
- kos-so-?t<sup>y</sup>o 'down -amount -quantity' (depth).
- čanas-so-?t<sup>y</sup>o 'thickness -amount -quantity' (thickness).
- k<sup>?</sup>a-no-?t<sup>y</sup>o 'far -price -quantity' (cost).

#### 4.3.3. Citation noun root paradigm

- n r 1 = -t<sup>y</sup>u 'tiger'; -rare 'anteater'; -t<sup>y</sup>e 'rain'; -nela 'cloud'.
- n r 2 = diw<sup>i</sup>- 'south-wind'; rodo- 'mud'; k<sup>?</sup>ala- 'sand'; mara- 'gourd'.
- n r 3 = -buwa 'person'.
- n r 4 = tyili- 'hawk'; kuru?- 'buzzard'; wio- 'mink'.
- n r 5 = kamu- 'door'; wa- 'fence'; muspa- 'hammock'.
- n r 6 = -lo 'stick'; -dara 'talk'; -piki 'drake'.
- n r 7 = tyahka 'moon'.
- n r 8 = t<sup>?</sup>ara 'sticker'.
- n r 9 = pa?i 'priest'; -mu 'man'.
- n r 10 = lepe 'sister-not-consanguineous'.  
sure 'daughter-not-consanguineous'.
- n r 11 = mačot<sup>?</sup>o 'friend'.
- n r 12 = maS- 'arm'. (see 5.2.3)
- kA- 'surface-or-face'. (see 5.2.4)
- Ya- 'head'. (see 5.2.4)
- mV- 'back'. (see 5.1.1)
- mVs- 'oval-projection'. (see 5.1.1)

nis- 'chest'; wanU- 'vital-organ' (see 5.1.1.1);  
 ČAs- 'covering' (see 5.1.4); makA- 'distance'  
 (see 5.1.1); kA<sup>1</sup>- 'liquid' (see 5.1.1); pa-  
 'length'.

n r 13 = nast?o 'blood'; po?roma 'skin'; -ku?yu 'heart';  
 -ta 'liver'; nV- 'place' (see 5.1.1); -t?yo  
 'amount'.

n r 14 = -desname 'uncle-or-nephew-or-aunt-or-niece'.  
 -Yuwe 'grandparent-or-grandchild'. (see 5.1.3)  
 -yama 'parent-or-child-in-law'.

n r 15 = -Ye 'parent-or-child'. (see 5.1.3)

n r 16 = Čayne 'brother-in-law'.

-Yuhwa 'sister-in-law'. (see 5.1.3)

n r 17 = -mapi 'husband-or-wife'.

n r 18 = beti 'Betty'; asunta 'Asunta'; saramo 'San-Ramon'.

#### 4.3.4. The noun affix

##### 4.3.4.1. The inflected noun affix classes 3100-3200

Generation 3110

3111 may- 'parent'.

Descriptive 3120

3121 mudu- 'deceased'.

3122 si- 'of'.

Nominalizer 3130 (see 5.1.2)

3131 wE- Agent

Number 3210

3211 -be Plural

#### 4.4. The pronoun

##### 4.4.1. The inflected pronoun

###### 4.4.1.1. Tagmemic pronoun paradigm

pro 1 = {+Base:pro stem 1-2}

pro 2 = {+Base:pro stem 3 +Quant:1224 +Dir:1212 +Pl:  
1223}

pro 3 = {+Base:pro stem 4 +(+Quant:1224 +Dir:1212 +Pl:  
1223)}

#### 4.4.1.2. Citation pronoun paradigm

pro 1 = o?ni 'you-m' (you); osni?ka 'I-fem' (I).

pro 2 = sihni-t<sup>y</sup>e-?-ke 'we-excl -many -toward -pl' (we).  
sihni-?-ke 'we-excl -toward -pl' (we).

pro 3 = ohni 'he'; ohni-tYe-?-ke 'he -many -toward -pl'  
(they).

#### 4.4.2. The pronoun stem

##### 4.4.2.1. Tagmemic pronoun stem paradigm

pro stem 1 = {+Person:1121 +Base:pro r (-ni) +Gd:1241}

pro stem 2 = {+Person:1122-1124 +Base:pro r (-ni)}

pro stem 3 = {+Person:1126-1127 +Base:pro r (-ni)}

pro stem 4 = {+Person:1125 +Base:pro r (-ni)}

##### 4.4.2.2. Citation pronoun stem paradigm

pro stem 1 = os-ni I -pro' (I).

os-ni-?ka 'I -pro -fem' (I).

pro stem 2 = ko?-ni 'you-fem -pro' (you).

pi-ni 'she -pro' (she).

pro stem 3 = sih-ni 'we-excl -pro' (we);

dih-ni 'we-incl-or-you-pl -pro' (we or you).

pro stem 4 = oh-ni 'he -pro' (he).

#### 4.4.3. Pronoun root citation

pro r 1 = -ni Pronoun

#### 4.5. The adjective

##### 4.5.1. The inflected adjective

#### 4.5.1.1. Tagmemic inflected adjective paradigm

##### Inflected adjective 10

- adj 11 = {+Base:adj stem 11 +Dir:1212 +Rhythm:1212  
           (-ne)}
- adj 12 = {+Base:adj stem 12}

##### Inflected adjective 20

- adj 21 = {+Base:adj stem 21}
- adj 22 = {+Base:adj stem 22-23 +Dir:1212 +Rhythm:1221}
- adj 23 = {+Base:adj stem 24 +Dir:1212 +Rhythm:1224}
- adj 24 = {+Base:adj stem 25 +Dir:1211 +Rhythm:1221}
- adj 25 = {+Base:adj stem 26 +Indir:vb affix 2210}
- adj 26 = {+Base:adj stem 27 +Dir:1210 +Rhythm:1223-  
           1224}

##### Inflected adjective 30

- adj 31 = {+Base:adj stem 31-37}
- adj 32 = {+Base:adj stem 38 +( +Dir:1211 +Rhythm:1232) /  
           (+Dir:1212 +Rhythm:1221)}
- adj 33 = {+Base:adj stem 39 +Dir:1211 +Rhythm:1221}

#### 4.5.1.2. Citation inflected adjective paradigm

##### Inflected adjective 10

- adj 11 = Vk?a-?-ne 'one -toward -indef' (one person).  
           mas-k?a-?-ne 'flat -one -toward -indef' (one flat  
           thing).
- adj 12 = Vcupa 'two' (two people).  
           mascupa 'flat-two' (two flat things).

##### Inflected adjective 20

- adj 21 = karomaya 'black'.
- adj 22 = kawolo-?-na 'black -toward -indef' (black).
- adj 23 = čuka-?-te 'other -toward -cont' (other).
- adj 24 = rapi-h-na 'white -away -indef' (white).
- adj 25 = Vda-hk?e 'red -indir' (red).
- adj 26 = Vso-h-ke 'all -away -multiplex' (all).  
           soso-?-te 'all -toward -continual' (all).

Inflected adjective 30

adj 31 = *kapi?i* 'little-water' (a small amount, referring to water).

*uhmala* 'good-thing' (good, referring to things).

*kak?elala* 'bad-face' (homely).

*Vsaba* 'new'.

adj 32 = *kabi-s-ča* 'water-big -away -multiplex' (a large amount, referring to water).

*kosbi-s-ča* 'down-big -away -multiplex' (deep).

*wamabi-?-na* 'big-amount -toward -indef' (various).

adj 33 = *kapala-h-na* 'more-than-small-water -away -indef' (a little more, referring to water).

*makabiy-a-h-na* 'more-than-big-distance -away -indef' (a still greater distance).

#### 4.5.2. The adjective stem

##### 4.5.2.1. Tagmemic adjective stem paradigm

adj stem 11 = {+Shape:4110 +Base:adj r 11}

adj stem 12 = {+Shape:4111-4115 +Base:adj r 12}

adj stem 21 = {+Cpd:n r 12 (kA-) +Base:adj r 21}

adj stem 22 = {+Cpd:n r 12 (kA-) +Base:adj r 22 +Aug:  
redup 1}

adj stem 23 = {+Base:adj r 23 +Aug:redup 1}

adj stem 24 = {+Cpd:n r 12 (pa-)/(yapi) +Base:adj r 24}

adj stem 25 = {+Base:adj r 25}

adj stem 26 = {+Base:adj r 26}

adj stem 27 = {+Base:adj r 27 +Aug:redup 1}

adj stem 31 = {+Cpd:n r 12 AS/L:vb affix 2522/{+Cpd:n r  
12 [čAs-] +Cpd:n r 12 [pa-]}/Shape:4110 +Base:  
adj r 31}

adj stem 32 = {+Cpd:n r AS +Base:adj r 31 (-mat?o)}

adj stem 33 = {+Cpd:n r 12 AS +Cpd:n r 12 (ma-) +Base:  
adj r 32}

adj stem 34 = {+Cpd:n r 12 AS +Cpd:n r 12 (-k?e) +Base:  
adj r 32 +Aug:redup 1}

- adj stem 35 = {+Cpd:n r 12 (pa-)/(+Cpd:n r 12 [čus-] +L:  
vb affix 2521) +Base:adj r 33}
- adj stem 36 = {+Base:adj r 34}
- adj stem 37 = {+Base:adj r 35 +Aug:redup 1}
- adj stem 38 = {+Cpd:n r 12 AS/L:vb affix 2522 (kVs-)/  
(+Cpd:n r 12 [čAs-] +Cpd:n r 12 [pa-])/Shape:  
4110 +Base:adj r 36}
- adj stem 39 = {+Cpd:n r 12 AS/L:vb affix 2522 (kVs-)/  
(+Cpd:n r 12 [čAs-] +Cpd:n r 12 [pa-])/Shape:  
4110 +Cpd:adj r 31 (PA)/32 +Base:adj r 37}

#### 4.5.2.2. Citation adjective stem paradigm

- adj stem 11 = mas-k?a 'flat -one' (one flat thing).  
čas-k?a 'oval -one' (one oval thing).
- adj stem 12 = mas-čupa 'flat -two' (two flat things).  
čupa 'two' (two people).
- adj stem 21 = ka-romaya 'surface -black' (black).
- adj stem 22 = ka-wolo 'surface -black' (black).  
ka-wolo-lo 'surface -black -black' (black).
- adj stem 23 = were 'green'.  
were-re 'green -green' (green).
- adj stem 24 = pa-čuk?a 'strength -other' (another).  
čuk?a 'other'.
- adj stem 25 = rapi 'white'.
- adj stem 26 = da 'red'.
- adj stem 27 = čera-ra 'red -red' (red).
- adj stem 31 = maka-pi?i 'distance -little' (short distance).  
kos-pi?i 'down -little' (shallow).  
čas-pa-mat?o 'covering -length -large-amount'  
(large, referring to covering).
- adj stem 32 = pasi-mat?o 'inan -large-amount' (many).
- adj stem 33 = ka-ma-la 'face -good -quality' (pretty).  
uh-ma-la 'thing -good -quality' (good).
- adj stem 34 = pas-k?e-la 'path -bad -quality' (bad,  
referring to path).
- k?e-la-la 'bad -quality -very' (very bad).
- adj stem 35 = Včaya 'strong'.

čus-na-k?aya 'people -up -strong' (courageous, valient).

adj stem 36 = Vsaba 'new'. mi?t?ia 'young-or-tender'.

adj stem 37 = da?le-le 'fat -very' (very fat).

adj stem 38 = ka-bi 'water -big' (much, referring to water).

či-bi 'planted -big' (many of something planted, projecting, standing).

adj stem 39 = maka-pa-la 'distance -little -more' (a little greater distance).

kos-bi-ya 'down -big -more' (a greater distance down).

#### 4.5.3. Adjective root citation

adj r 11 = k?a- 'one'.

adj r 12 = čupa 'two'.

adj r 21 = -maya 'black'.

adj r 22 = -wolo- 'black'.

adj r 23 = were- 'green'.

adj r 24 = čuk?a- 'other'.

adj r 25 = rapi 'white'; čera- 'red'.

adj r 26 = da- 'red'.

adj r 27 = so- 'all'.

adj r 31 = PA 'little'. (see 5.1.4)

-mat?o 'abnormal-amount'.

-mama 'other'.

adj r 32 = -la 'quality'.

adj r 33 = k?aya 'strong-or-fierce'.

adj r 34 = saba 'new'; mi?t?ia 'young-or-tender'.

adj r 35 = da?le- 'fat'.

adj r 36 = -bi- 'big'.

adj r 37 = -LA- 'more'. (see 5.1.4)

#### 4.5.4. The adjective affix

Shape 4110

4111 mas- 'flat'.

- 4112 či- 'planted-projected-standing' (planted, projected, standing).  
 4113 ni- 'long-winding' (long, winding).  
 4114 čas- 'oval-deep' (oval, deep).  
 4115 na- 'hanging'.  
 4116 pa- 'only-completely' (only, completely).

#### 4.6. The adverb

##### 4.6.1. The inflected adverb

###### 4.6.1.1. Tagmemic inflected adverb paradigm

- adv 1 = {+Asp 2;vb affix 2510 +Base:adv stem 1 +Gd:1241}  
 adv 2 = {+Base:adv r 2/adv stem 3}  
 adv 3 = {+Base:adv r 3 +Rhythm:1221}  
 adv 4 = {+(+Modal:vb affix 1240 +Rep Inc:vb affix 2130)  
           +Base:adv stem 2}  
 adv 5 = {+Base:adv r 5 +Indir:vb affix 2210}  
 adv 6 = {+Base:adv r 6 +Dir:1212 +Rhythm:1221}  
 adv 7 = {+Base:adv r 7 +(+Dir:1212 +Rhythm:1223)/+Rep:  
           vb affix 2230}  
 adv 8 = {+Ig:vb affix 1241 +Base:adv 6-7}

###### 4.6.1.2. Citation inflected adverb paradigm

- adv 1 = Vs-t?i?di 'just-begun-again -nearly' (nearly).  
           Vs-t?i?di-?ka 'just-begun-again -nearly -she'  
                          (nearly).  
 adv 2 = sate 'always'; čaka 'nearly-maybe'.  
           minapat?i 'like-it-was'.  
 adv 3 = be-ne 'of-course -indef' (of course).  
 adv 4 = kid?i-h-pah?i 'they-say -later-very' (they say it  
           will be very...).  
           Vh-pawi 'later -very' (very).  
 adv 5 = čiwine-hk?e 'is-the-purpose -indir' (is the pur-  
           pose).  
 adv 6 = dahwo-?-ne 'only -toward -indef' (only, but).

- doho-?-ne 'only -toward -indef' (only, but).  
 adv 7 = počone 'like-that'.  
 počone-?-te 'like-that -toward -cont' (like that).  
 počone-?o 'like-that -again' (also).  
 adv 8 = do-počone 'ig -like-that' (is it like that?).

#### 4.6.2. The adverb stem

##### 4.6.2.1. Tagmemic adverb stem paradigm

- adv stem 1 = {+Base:adv r 1 +( +Cont:vb affix 2610 +Aug:  
 redup 1)}
- adv stem 2 = {+Cpd:n r 12 (pa-) +Base:adv r 4}
- adv stem 3 = {+L 1:vb affix 2321 +L 2:vb affix 2521 +Cpd:  
 n r 12 (pa-) +Base:vb r tr (-t<sup>24</sup>-)}

##### 4.6.2.2. Citation adverb stem paradigm

- adv stem 1 = t<sup>2</sup>i<sup>2</sup>di-hi-di 'nearly -cont -very' (nearly).  
 adv stem 2 = pa-hi 'strength -very' (very).  
 adv stem 3 = mi-na-pa-t<sup>24</sup> 'in-another-place -up -strength  
 -like' (like it was).

#### 4.6.3. Adverb root citation

- adv r 1 = -t<sup>2</sup>i<sup>2</sup>di 'nearly'.  
 adv r 2 = sate 'always'; čaka 'nearly-maybe'.  
 adv r 3 = be- 'of-course'.  
 adv r 4 = -Hi 'very'. (see 5.1.2)  
 adv r 5 = čiwine- 'is-the-purpose'.  
 adv r 6 = dahwo- 'only-but'; doho- 'only-but'.  
 adv r 7 = počone 'like-that'.

#### 4.7. The locative

##### 4.7.1. The inflected locative

###### 4.7.1.1. Tagmemic inflected locative paradigm

loc 1 = {+Base:loc stem 1-4}

loc 2 = {+Base:loc stem 5 +Dir:1211 +Rhythm:1232}

#### 4.7.1.2. Citation inflected locative paradigm

loc 1 = na?abi 'near-place' (here).

yononi 'a-short-distance-place-dir' (there).

no?na 'place-there' (there).

loc 2 = na?abi-s-ča 'near-big -away -multiplex' (there).

#### 4.7.2. The locative stem

##### 4.7.2.1. Tagmemic locative stem paradigm

loc stem 1 = {+L:vb affix 2524 (ni-) +Dir:vb affix 2526-  
2527 +Base:loc r 1}

loc stem 2 = {+Dir:vb affix 2528 +Base:loc r 1/adj r 31}

loc stem 3 = {+L:5111 +Base:loc r 2}

loc stem 4 = {+Dir:vb affix 2526 +L:5111 +Base:loc r 3}

loc stem 5 = {+Dir:vb affix 2528 +Base:adj r 36}

##### 4.7.2.2. Citation locative stem paradigm

loc stem 1 = ni-k?a-bi 'dir -far -place' (there).  
k?a-bi 'far -place' (there).

loc stem 2 = na?a-bi 'near -place' (here).  
na?a-pi?i 'near -little' (here).

loc stem 3 = no?-na 'place -there' (there).

loc stem 4 = yo-no-ni 'a-short-distance -place -dir'  
(there).

loc stem 5 = na?a-bi 'near -big' (here).

#### 4.7.3. Locative root citation

loc r 1 = -bi 'place'.

loc r 2 = -na 'there'.

loc r 3 = -ni- Direction

#### 4.7.4. The locative affix

Locative 5110 (see 5.1.4)

5111 NO- 'place'.

#### 4.8. The demonstrative

##### 4.8.1. The inflected demonstrative

###### 4.8.1.1. Tagmemic inflected demonstrative paradigm

dem 1 = {+Base:dem stem 1-2 +(Quant:1222 +Dir:1212  
+Pl:1223)}

dem 2 = {+(+Exclam:vb affix 2141 +Ig:vb affix 2141) +Asp  
1:vb affix 2120 +Base:dem stem 3}

###### 4.8.1.2. Citation inflected demonstrative paradigm

dem 1 = nuča?u 'seated-near' (this one who is seated).

k?ota?na 'animate-standing-far' (that one who is standing).

k?otv'o-he-?ke 'water-far -much -toward -pl'  
(that large body of water).

dem 2 = da-di-si-yo-?e 'exclam -ig -not-now-done -a-  
short-distance -these' (is it these?).

##### 4.8.2. The demonstrative stem

###### 4.8.2.1. Tagmemic demonstrative stem paradigm

dem stem 1 = {+Dir:vb affix 2526-2528 +Base:vb r st 2  
(ča?u)/(-ta) +Gd:1240}

dem stem 2 = {+Dir:vb affix 2528/(+L:vb affix 2524 [ni-]  
+Dir:vb affix 2526-2527) +Base:vb r st 2}

dem stem 3 = {+Cpd:n r 12 (ma-) +L:vb affix 2526-2527  
+Base:dem r 1}

###### 4.8.2.2. Citation demonstrative stem paradigm

dem stem 1 = k?o-t?a-hka 'far -animate-standing -she'  
(that girl who is standing).

nu-ča?u-ø 'near -animate-seated -he' (this man  
who is seated).

dem stem 2 = no?o-ba 'near -cloth' (this cloth).

ni-yu-pu 'dir -a-short-distance -flat-sg' (that  
flat thing).

k?o-čobo 'far -projecting-sg' (that projecting  
thing).

dem stem 3 = ma-k?o-?e 'hand -far -this' (this one).

yo-?e 'a-short-distance -these' (these ones).

#### 4.8.3. Demonstrative root citation

dem r 1 = -?e 'this-or-these'.

#### 4.9. The time word

##### 4.9.1. Tagmemic time word paradigm

t 1 = {+Base:t r 1}

t 2 = {{+Intent:vb affix 2142 +Rep Inc:vb affix 2130)  
+Base:t r 2 +Dir:1211 +Rhythm:1281 {Rep:vb  
affix 2230}

t 3 = {+Base:t r 3 +Person:1241}

t 4 = {+Intent:vb affix 2142 +Base:t r 4 +Dir 1:1212  
+Rhythm:1224 {(+Dir 2:1211 +Rhythm:1221)}

t 5 = {{+Nom:1111 +Asp 1:2120 +Base:t r 5 +Dir:1212  
+Dep:vb affix 2710}

t 6 = {+Base:t r 5 +Dir:1212 +Rhythm:1221}

t 7 = {+Intent:vb affix 2141 +Base:t r 6}

t 8 = {+Intent:vb affix 2141/L:vb affix 2526 +Base:tr 7}

t 9 = {+Base:t r 7 +Rhythm:1232}

t 10 = {+Base:t r 8 +Dir:1211 +Rhythm:1231}

t 11 = {+Base:t r 9 +Dir:1212 +Rhythm:1231}

t 12 = {+Base:t r 10 +Rhythm:1221}

t 13 = {+Caus:vb affix 2310 +Base:adv r 7}

##### 4.9.2. Citation time word paradigm

t 1 = ho?naha 'now'.

- t 2 = čapo-h-ko 'tomorrow -away -neg-indef' (tomorrow).  
     ki-s-čapo-h-ko-?o 'going-to -just-begun-again  
     -tomorrow -away -neg-indef -again' (the day  
     after tomorrow).
- t 3 = naха-?ka 'afternoon -fem' (afternoon).
- t 4 = ko-we-?-te 'going-to -before -toward -cont' (be-  
     fore).  
     ko-we-?-te-h-na 'going-to -before -toward -cont  
     -away -indef' (a long time ago).
- t 5 = mi-si-wase-?-wa 'that-which-is -not-now-done -later  
     -toward -when' (the day before yesterday).  
     wase-?-wa 'later -toward -when' (yesterday).
- t 6 = wahse-?-na 'later -toward -indef' (later).
- t 7 = ku-sama 'going-to -morning' (morning).
- t 8 = yu-mani 'a-short-distance -night' (tonight).  
     ku-mani 'going-to -night' (last night).
- t 9 = mani-ča 'night -dep-multiplex' (the other day).
- t 10 = kaya?bo-h-ko 'next-year -away -indef' (next year).
- t 11 = k?ikele-?-ko 'until-then -toward -neg-indef' (until  
     then).
- t 12 = bo?o-ne 'later -indef' (later, not yet).
- t 13 = yu-počone 'caus -like-that' (immediately).

#### 4.9.3. Time root citation

- t r 1 = ho?naha 'now'.
- t r 2 = čapo- 'tomorrow'.
- t r 3 = naха- 'afternoon'.
- t r 4 = we- 'before'.
- t r 5 = wase- 'later'.
- t r 6 = -sama 'morning'.
- t r 7 = mani 'night'.
- t r 8 = kaya?bo- 'next-year'.
- t r 9 = k?ikele- 'until-then'.
- t r 10 = bo?o- 'not-yet-or-later-or-after-awhile'.

#### 4.10. The causal word

#### 4.10.1. The inflected causal word

##### 4.10.1.1. Tagmemic inflected causal word paradigm

causal 1 = {+Base:causal r 1}

causal 2 = {+(+Person:1124 +Ig:vb affix 1241) +Base:  
causal r 2 +Dir:1211 +Rhythm:1224}

##### 4.10.1.2. Citation inflected causal word paradigm

causal 1 = b̄ruma 'because'; k?ič?aka 'because'.

causal 2 = pača-s-te 'so-that -away -cont' (so that, for  
this reason).

pi-di-pača-s-te 'she -ig -so-that -away -cont' (is  
she doing it for this reason?).

#### 4.10.2. Causal root citation

causal r 1 = b̄uma 'because'; k?ič?a?ka 'because'.

causal r 2 = pača- 'so-that-or-for-this-reason'.

#### 4.11. The interrogative

##### 4.11.1. Tagmemic interrogative paradigm

ig 1 = {+Person:1124 +L:vb affix 2526 +Base:ig r 1}

ig 2 = {+Person:1125 +L:vb affix 2527 +Base:ig r 1}

ig 3 = {+Base:ig r 2}

ig 4 = {+Person:1120 +Base:n stem 6 (kadaya)}

ig 5 = {+Base:ig r 3 +Dir:1212 +Rhythm:1231}

ig 6 = {+Base:ig r 4 +Dir:1212' +Rhythm:1232}

ig 7 = {+Person:1125 +Base:vb r intr (-ma) +Cont:2610}

##### 4.11.2. Citation interrogative paradigm

ig 1 = pi-?yo-?t<sup>y</sup>o 'she -a-short-distance -who' (who?).

ig 2 = oh-k?o-?t<sup>y</sup>o 'he -far -who' (who?).

ig 3 = kote 'when-or-go-ahead'.

ig 4 = kadaya 'what' (what?).

pi-kadaya 'she -name' (what is her name?).

u?-kadaya 'you-m -name' (what is your name?).

ig 5 = Vto-?-ko 'where -toward -neg-indef' (where?).

ig 6 = Vwe-?-ča 'why -toward -neg-multiplex' (why?).

ig 7 = ih-ma-?a 'he -go -cont' (where is he?).

#### 4.11.3. Interrogative root citation

ig r 1 = -?tYo 'who'.

ig r 2 = kote 'when'.

ig r 3 = to- 'where'.

ig r 4 = we- 'why'.

#### 4.12. The onomatopoetic word

##### 4.12.1. The onomatopoetic citation

onom = hm Sound of jaguar; bo Sound of boa

#### 4.13. The particle

##### 4.13.1. Tagmemic particle paradigm

part 1 = {+Base:part r 1 +Dir:1211 +Rhythm:1221}

part 2 = {+Cpd:n r 12 (pa-) +Base:vb r intr (Yo-) +Dir:  
1211 +Rhythm:1221}

part 3 = {+Base:part r 2 +Dir 1:1212 +Rhythm:1221  
+(+Dir 2:1212 +Rhythm:1231)}

part 4 = {+Base:part r 3}

part 5 = {+Base:part r 4 +Aug:redup 1 +Dir:1212  
+Rhythm:1224}

part 6 = {+Person:1125 +Base:part r 5 +Dir:1211 (-h)  
+Rhythm:1221}

part 7 = {+Base:part r 6}

part 8 = {+Intent:vb affix 1243 +Rep Inc:vb affix 1230  
+Base:part r 7}

part 9 = {+Cpd:n r 12 (kA-) +Base:vb r intr (-domo)  
+Rhythm:1223}

part 10 = {+Base:part r 8 +Cont:vb affix 2611 +Rhythm:  
1221}  
 part 11 = {+Base:part r 9}  
 part 12 = {+Base:part r 10}  
 part 13 = {+Base:part r 11 +Aug:redup 3}  
 part 14 = {+Base:part r 12 +Aug:redup 1 +Aug:redup 1}  
 part 15 = {+Base:part r 13}

#### 4.13.2. Citation particle paradigm

part 1 = wa?i-h-na 'and -away -indef' (and).  
 part 2 = pa-?o-h-na 'word -went -away -indef' (they say).  
 part 3 = Vwa-?-na 'no -toward -indef' (no).  
       wa-?-na-?-ko 'no -toward -indef -toward -neg-  
       indef' (no).  
 part 4 = aha 'yes'; ya Closure of conversation; solopay  
       'thank-you'.  
 part 5 = da-da-?-t<sup>y</sup>e 'yes -yes -toward -cont' (o.k.).  
 part 6 = uh-we-h-na 'it's -yes -away -indef' (o.k.).  
 part 7 = mahya 'how-goes-it-or-is-that-all?'.  
 part 8 = kodo-?-ho?ni 'they-say -just-begun-again -so-  
       it goes' (so it goes).  
 part 9 = ka-domo-he 'surface -woke-up -polyphase'  
       (good morning!).  
 part 10 = be?ya-ha-na 'I-don't-know -cont -indef' (I  
       don't know).  
 part 11 = peča 'could-it-be'; dahne 'maybe'.  
 part 12 = señorita 'Miss'; señor 'Mr.'; señora  
       'Mrs.'.  
 part 13 = hm-mmmmmmm 'so-that's-the-way-it-is -very'  
       (so that's the way it is).  
 part 14 = t<sup>y</sup>oho-ho-ho 'oh -oh -oh' (oh).  
 part 15 = V?wa Hesitation

#### 4.13.3. Particle root citation

part r 1 = wa?i- 'and'.  
 part r 2 = wa- 'no'.

- part r 3 = aha 'yes'; ya Closure of conversation;  
                   solopay 'thank-you'.
- part r 4 = da- 'o.k.'
- part r 5 = we- 'o.k.'
- part r 6 = mahya 'how-goes-it-or-is-that-all?'
- part r 7 = -ho?ni 'so-it-goes'.
- part r 8 = be?ya- 'I-don't-know'.
- part r 9 = peča 'could-it-be'; dahne 'maybe'.
- part r 10 = señorita 'Miss'; señor 'Mr.'; señora  
                   'Mrs.'
- part r 11 = hm- 'so-that-is-the-way-it-is'.
- part r 12 = t<sup>y</sup>oho- 'oh'.
- part r 13 = -?wa Hesitation

## 5. The morphophonemics

### 5.1. Simple variation

#### 5.1.1. Phonologically determined variation

- čV- vb affix 2525 'in, inside, on' (see 4.2.2.5) = čo-  
      preceding a noncontiguous -i, -e, -o ~ (ču-  
      ~ freely to či-) elsewhere: si-čo-nehna 'I-  
      sleep-inside'; si-ču-pu?na ~ si-či-pu?na 'I-  
      lie-down-inside'. An exception is the word  
      si-ču-bene 'I-pour-it-inside'.
- kVs- vb affix 2522 'down, under' (see 4.2.2.5) = kos-  
      preceding a noncontiguous -i, -e, -o ~ (kus- ~  
      freely to kis-) elsewhere: si-kos-li?na 'I-fell-  
      down'; si-kus-pu?na ~ si-kis-pu?na 'I-lie-  
      down'. An exception is the word si-kes-čaba?na  
      'I-come-up-from-out-of'.
- nV n r 12 'place' (see 4.3.3) = -nu following a non-  
      contiguous -u ~ -no elsewhere: usbu-nu 'my-  
      abdomen'; osnis-no 'my-chest'.
- mV- n r 12 'back' (see 4.3.3) = mo- preceding a non-  
      contiguous -i ~ mu- elsewhere: oh-mo-bi  
      'his-tail'; uska-mu-nano 'the-back-of-my-neck'.

- mVs- n r 12 'oval-projection' (see 5.1.1) = mos- preceding a non-contiguous -o ~ mus- elsewhere: os-mos-t?o?do 'my-ear'; us-mus-čunano 'axilla'.
- kamunA-, wamuska-, pačukA- n r 12 'back-of-the-neck, cheek, shoulder' respectively = kamune-, wamuske-, pačuke- respectively preceding a noncontiguous -e ~ kamuna-, wamuska-, pačuka- respectively elsewhere: pačuke-čebe?te 'he-looks-at-the-shoulder'; kamuna-t'yane 'he-washes-the-back-of-the-neck'.
- ničV- n r 12 'knee' = ničo- preceding a noncontiguous -o ~ niči- elsewhere: ničo-poho?na 'the-knee-is-swollen'; niči-t'yane 'he-washes-the-knee'.
- nikVs- vb affix 2531 'direction-down' (see 4.2.2.5) = nikos- preceding a noncontiguous -i, -e, -o ~ (nikus- ~ freely to nikis-) elsewhere: oh-nikos-no 'down'; nikis-bik?e 'he-clears-it-down-there'.
- Yo- vb r intr 'went' = yo- following a noncontiguous -i ~ ?o- elsewhere: na-?o-hna 'he-went-up'; pini?-yo-hča 'she-did-not-go'.
- yU- vb affix 2550 'with-respect-to' (see 4.2.2.5) = yo- preceding a noncontiguous -e ~ yu- elsewhere: moy-yo-k?ela 'he-does-bad'; may-yu-mala 'he-does-good'.
- pV- n r 12 'evil, bad' = po- preceding a noncontiguous -i ~ pu- elsewhere: si-po-k?iyuhne 'I-deceived'; si-pu-k?ehla?que 'I-made-it-bad'.
- ?V, -hV vb affix 2611-2612 respectively 'continually, going-along-all-the-time; respectively (see 4.2.2.5). The V is phonologically identical with the vowel of the preceding final foot syllable: sikiši-hi-si?te 'he-goes-along-sewing'; ma-ha-ma?te?ka 'she-goes-walking-along'; wasčudu-?u-du?te?ka 'she-cooks-all-the-time'.
- kA<sup>1</sup>- n r 12 'liquid' = ko- preceding a noncontiguous -o

~ ka- elsewhere: oh-ko-?tYo 'liquid-amount'  
(amount of liquid); ka-pi?i 'liquid-little' (a  
small amount, referring to water).

makA- n r 12 'distance' = mako- preceding a noncontiguous  
-o ~ maka- elsewhere: uh-mako-?tYo 'dis-  
tance-amount' (distance); maka-pi?i 'distance-  
little' (small, referring to distance).

wanU- n r 12 'vital-organ' (see 4.3.3) = wan-i- preceding  
a noncontiguous -a ~ wanu- elsewhere:  
us-wani-?ta 'my-liver'; us-wanu-ku?yu 'my-  
heart'.

V1 =  $\emptyset$  preceding V1 ~ V1 elsewhere: d- $\emptyset$ -uhmala  
ig-good' (is it good?); misiča?- $\emptyset$ -uwayo 'that-  
which-is-seated-day' (some day).

SI<sup>2</sup>- vb affix 2121 Action-not-done-at-time-of-speaking  
(see 4.2.2.5) =  $\emptyset$ - following word affix 1121  
(SI-) 'I' when followed immediately by a glottal  
stop ~ si- elsewhere: si?puyu?ne 'I-began-  
to-smoke-again'; sih-si-kasi?na 'I-began-to-  
drink-again'.

### 5.1.2. Free variation

The following allomorphs alternate freely:

-hi adv r 4 'much, very' = -hi ~ -wi (see 4.6.3):  
pa-hi ~ pa-wi 'much'.

wE- n affix 3131 Agent = we- ~ way- (see 4.3.4.1):  
way-kisihne ~ we-kisihne 'sewer'.

čAno vb r tr 'help' = čano ~ čačano: sima-čano-be ~  
sima-čačano-be 'I-help-you'.

pU- vb affix 2351 'to-benefit' (see 4.2.2.5) = pu- ~ pi-:  
si-pu-mačano ~ si-pimačano 'I-help-another'.

mU- vb affix 2321 'away-or-in-another-place' (see  
4.2.2.5) = mu- ~ mi-: si-mu-yupa?na ~  
si-mi-yupa?na 'I-go-to-another-place-to-plant'.

### 5.1.3. Grammatically determined variation

-ME vb affix 2221 Reflexive, reciprocal (see 4.2.2.5) = -me in affirmative verbs ~ -?a in negative verbs:  
 sibuhna-me 'I-inject-myself'; si?buhna-?a 'I-did-not-inject-myself'.

kO??Oni n r 1 'canoe' = ko?oni when filling the Base slot of an intransitive dependent verb ~ koni elsewhere: ahme-ko?oni-?ča?ča 'when-they-go-by-canoe'; o-koni 'canoe'.

wa??E n r 1 'cotton' = wa?ay when filling the Base slot of the intransitive verb ~ wa?e elsewhere:  
 asmi-wa?e 'my-cotton'; si-wa?ay-hna 'I-spin'.

-Yuwe, -Ye, -Yuhwa n r 14-16 'grandchild, child-or-parent, sister-in-law' respectively (see 4.3.3) = -uwe, -e, -uhwa respectively following word affix 1111A MI- Genitive except when the word affix 1223 -NA??KE Multiplex/Plural occurs ~ -yuwe, -ye, -yuhwa respectively elsewhere:  
 asm-e-?ka 'my-daughter'; asmi-yuwe-?ka 'my-granddaughter'.

pay- n r 12 'strength, body' = pay- in noun stem 3 ~ pa- elsewhere: pay-yubuwa 'companion'; pa-t?uwa?te 'he-is-better'.

#### 5.1.4. Lexically determined variation

S- vb affix 2121 'just-begun-again' (see 4.2.2.5) = -? - in verbs whose roots are of Class A ~ s- in verbs whose roots are of Class B except when immediately followed by -s ~ h- in verbs whose roots are of Class B when immediately followed by -s: si-?-nehna 'I-just-began-to-sleep-again'; si-s-mama?na 'I'm-going-again'; si-h-siki?na?o 'I-will-bring-it-again'.

-H word affix 1211 Direction away (see 4.1) = -h in verbs whose roots are of Class 1 ~ -s in verbs whose roots are of Class 2: ka?i-ōiya-s-na 'you-go-in'; laba-h-na 'he-went-away'.

- ?KA word affix 1241 Feminine (see 4.1) = -?t<sup>y</sup>a following noun stem of Class H ~ -?ka elsewhere:  
wabi-?ka 'woman'; t<sup>?iyaya</sup>-?t<sup>y</sup>a 'a-young-girl'.
- nO- loc affix 5111 'place' (see 4.7.4) = no?- preceding loc r 2 (-na) ~ no- elsewhere: no?-na 'there'; yono-ni 'there'.
- YE word affix 1242 Masculine (see 4.1) = -?e following n r 15 (ye-) in n 27 ~ -ø elsewhere: asme-?e 'my-son'; umu-ø 'man'.
- La- adj r 37 'more' (see 4.5.3) = -la- following adj r (PA) 'small' ~ -ya- following adj r 36 (-bi-): makapa-la-hna 'more-than-a-small-distance'; makabi-ya-kna 'more-than-a-long-distance'.
- PA adj r 31 'small' (see 4.5.3) = pa preceding adj r 37 (-La-) ~ pi?i elsewhere: maka-pa-lahna 'more-than-a-small-distance'; maka-pi?i 'a-short-distance'.
- pA<sup>2</sup>- n r 12 'length' = po- preceding n r 13 (-?t<sup>y</sup>o) 'quantity' ~ pa- elsewhere: oh-po-?t<sup>y</sup>o 'its-length'; pa-pi?i 'short-length'.
- nA- vb affix 2521 'up' (see 4.2.2.5) = na?u- preceding vb r tr (-we-) ~ na- elsewhere: de?-na?u-wehe 'we-put-it-up'; si-na-sasna 'I-go-up'.
- čAs- n r 12 'covering' (see 4.3.3) = čes- when filling Cpd slot of vb core 105 ~ čas elsewhere:  
asme-čes-čebe?t<sup>y</sup>o 'I-looked-at-clothes'; si-čas-bahna 'I-got-dressed'.
- ČVČV- n r 12 'that-which-is-inside' = čuču- preceding vb r tr (-bo-) ~ t<sup>y</sup>ut<sup>y</sup>u- preceding vb r tr (-so-) ~ čočo- elsewhere: oh-čočo-no 'inside'; da?i-čuču-bohe 'we-put-them-inside'; sika-t<sup>y</sup>ut<sup>y</sup>u-sohe 'I-put-it-on-the-hide'.
- ČAČU- vb affix 2545 'up-from-and-into' (see 4.2.2.5) = t<sup>y</sup>at<sup>y</sup>u- preceding vb r intr (-solo-) ~ (čaču-freely ~ čači-) elsewhere: ahme-t<sup>y</sup>at<sup>y</sup>u-solohča 'when-there-were-waves'; si-čači-yababa ~ si-čaču-yababa 'when-I-come-up-from-into'.

čUnU- vb affix 2540 'inside-direction' (see 4.2.2.5) =  
 čini- preceding vb r intr (ka-) ~ čunu- elsewhere:  
 si-čunu-labahna 'I-went-inside';  
 k?is-čini-kakačaba 'where-when-they-arrived'.

### 5.1.5. Reduplication

- redup 1 = repetition of the final syllable of the root:  
 sikisihi-si-?te 'I-sew-as-I-go-along'; rodo-do  
 'mud'.  
 redup 2 = repetition of the complete root: tYili?-tYili  
 'hawk'.  
 redup 3 = unlimited repetition of the final phone:  
 hm-mmmmmmm 'so-that's-the-way-it-is'.

When the root ends in a glottal stop, the glottal is not included in the reduplication.

## 5.2. Complex variation

### 5.2.1. Phonological-lexical-grammatical variation

#### 5.2.1.1. Modal verb affixes 2140 (see 4.2.2.5)

- kV-, dV-, kVdV- vb affix 2141-2143 respectively Intentive, interrogative, reportative respectively = kV<sup>1</sup>-, dV<sup>1</sup>-, kVdV<sup>1</sup>- respectively following the O ref tagmeme ~ kV<sup>2</sup>-, dV<sup>2</sup>-, kVdV<sup>2</sup>- respectively following the S ref tagmeme.  
 kV<sup>1</sup>-, dV<sup>1</sup>-, kVdV<sup>1</sup>- = ke-, de-, kede- respectively, following the O ref tagmeme ~ kV<sup>2</sup>-, dV<sup>2</sup>-, kVdV<sup>2</sup>- respectively following the S ref tagmeme: as-ke-pasihne 'he's-going-to-accompany-me'; as-kede-čačano?ka 'they-say-she's-going-to-help-me'.  
 kV<sup>2</sup>-, dV<sup>2</sup>-, kVdV<sup>2</sup>- = ki-, di-, kidi- respectively in all verbs when the Rep Inc tagmeme occurs and in verbs of roots of morphophonemic Class A (see 5.2.3.1) when the Rep Inc tagmeme does not occur ~ (ko-, do-, kodo- respectively preceding

a noncontiguous -o, -i, -e ~ ki-, di-, kidi- respectively preceding a noncontiguous -a followed by a non-contiguous -t ~ ka-, da-, kada- respectively preceding a non-contiguous t ~ ku-, du-, kudu- respectively elsewhere) in verbs with roots of morphophonemic Class B when the Rep Inc tagmeme does not occur: ki-t<sup>y</sup>ane 'he's-going-to-wash'; do-počone 'did-he-forget' (did he forget?); kidi-mačih<sup>i</sup>?ke 'they-say-he-works'; du-yupa?na 'did-he-plant' (did he plant?); dačiyasna 'did-he-enter' (did he enter?).

#### 5.2.1.2. Affirmative and negative rhythm affixes of Class 1220-1230 (see 4.1)

Charts V and VI show the allomorphs of affixes of rhythm Class 1220-1230 and the distribution of these allomorphs. The allomorph distribution is determined by (1) verb Classes I-IV shown in the row at the top of the charts, (2) cooccurrence with particular affixes shown in the next-to-the-top row of the charts, and (3) cooccurrence with particular subject affixes shown in the column at the left of the charts.

##### Examples of the allomorphs of Class 1220

sičudu?-ne-be 'I-hit-you'; uba?-t<sup>y</sup>e 'they-died'; siyupa-he 'I-plant-one-thing-then-another-then-another'; sičuduhudu?-te-be 'I-hit-you-all-the-time'; se?časdo?-t<sup>y</sup>a?ke 'we-pound-rice-often'.

##### Secondary variation of the allomorphs of Class 1220

-ČA vb affix 1225 = -ča freely ~ -ča?ča: sičudu?-ča-me ~ sičudu?-ča?ča-me 'I-hit-myself-often'. -T<sup>y</sup>A??ČA vb affix 1225 = -t<sup>y</sup>a freely ~ -t<sup>y</sup>a?ča: siburu?-t<sup>y</sup>a-me ~ siburu?-t<sup>y</sup>a?ča-me 'I-scratch-myself-often'.

##### Examples of the allomorphs of Class 1230

ahmi?neh-ko 'he-did-not-sleep'; sihni?ba?-t<sup>y</sup>o 'we-did-not-die'; sahnet<sup>y</sup>a?-na?ča 'when-we-

	I	II	OBJECT/REFLEXIVE VERB AFFIX AND WORD AFFIX	III	IV
Subject	1 Affix- and verb word affix	2 2221/ 1251/ 1252/ 1121G	3 2221/ 1253/ 1121G	1 2221/ 1252/ 1123G	2 2221/ 1253/ 1121G
1. NEG/p1	-NA	-na	-na	-na	-na
1121/-1221	-NAHE	-nahe	-nahe	-nahe	-nahe
1125/-1227	-NAHE/K	-nahe	-nahe	-nahe	-nahe
1223	-na	-nahe	-nahe	-nahe	-nahe
-TE	-	-	-	-	-
1224	-	-	-	-	-
2. YAKE	-	-	-	-	-
1225	-	-	-	-	-
-MA	-na	-na	-na	-na	-na
1221	-na	-na	-na	-na	-na
1122/-1223/-1227	-NAHE	-nahe	-nahe	-nahe	-nahe
1223	-nahe	-nahe	-nahe	-nahe	-nahe
TE	-	-	-	-	-
1224	-	-	-	-	-
-NAHE/K	-	-	-	-	-
1225	-	-	-	-	-
3. NEG/p1	-NA	-na	-na	-na	-na
1124/-1228/-1122/-1222	-NAHE	-nahe	-nahe	-nahe	-nahe
1141/-1242/-1128	-NAHE	-nahe	-nahe	-nahe	-nahe
1223	-nahe	-nahe	-nahe	-nahe	-nahe
-TE	-	-	-	-	-
1224	-	-	-	-	-
-NAHE	-	-	-	-	-
1225	-	-	-	-	-

Chart V. Allomorphs of negative affix class 1.20

Chart VI. Allomorphs of rhythm class 1230

wash-often'; asmečebe<sup>-tYo</sup> 'when-I-looked'. Secondary variation of the allomorphs of Class 1230 -tYo vb affix 1231 = (-tYo freely ~ tYahko) with affixes of second-person object: siburu<sup>-tYo-be</sup> ~ siburu<sup>-tYahko-be</sup> 'I-scratch-you'.

### 5.2.1.3. Verb affixes 2526-2528 (see 4.2.2.5)

YV-, k<sup>2</sup>V-, SV- vb affixes 2526-2528 respectively 'a-short-distance, far, near' respectively = Yo-, k<sup>2</sup>o-, so- respectively, preceding a non-contiguous -o ~ Yas-, k<sup>2</sup>as-, sas- respectively in the words us-sas-čočono 'my-spine' and us-sas-no 'my-mouth' ~ Ya-, k<sup>2</sup>a-, sa- respectively, elsewhere in nouns and verbs ~ (Ya-, k<sup>2</sup>a-, N<sup>1</sup>V- respectively, preceding a noncontiguous -i ~ Yo-, k<sup>2</sup>o-, N<sup>1</sup>V- respectively, preceding a non-contiguous -a, -i, -o, -e ~ Yu-, k<sup>2</sup>u-, N<sup>1</sup>V- respectively, elsewhere) in locatives and demonstratives: os-so-mot<sup>?e</sup> 'my-tooth'; ya-ba?na 'he-came-from-a-short-distance'; ni-k<sup>2</sup>a-bi 'there'; no<sup>2</sup>o-so 'those-flat-things'; ni-yu-pu 'that-flat-thing'.

YV- vb affix 2526 'a-short-distance' = yV- following a noncontiguous -i- ~ wV- elsewhere: pi-yo-mot<sup>?e</sup> 'her-tooth'; oh-wo-mot<sup>?e</sup> 'his-tooth'.

N<sup>1</sup>V- vb affix 2528 'near' = nV- in polysyllabic words ~ nV?V- in monosyllabic words: na?a-pu 'this-flat-thing'; no-čobo 'this-planted-or-projecting-thing'.

### 5.2.2. Phonological-grammatical-free variation

#### 5.2.2.1. Allomorphs of word affix classes 1120 and 1111 (see 4.1)

In charts VII and VIII the tagmemes manifested by each allomorph class are listed at the head of the column. The

subject and person affixes which determine the distribution of the allomorphs are indicated by person and number in the column at the extreme left.

Examples of allomorphs of affix Class 1120

si-t<sup>y</sup>ane 'I-wash'; ka?-niču?du?ko 'you-did-not-hit'; u?-sabano 'your-leg'; ah-mayWana 'he-didn't-wash'; pi-nu 'her-nose'; sihk?i-čačano 'he-helps-us'; dih-nu 'our-or-your-neses'; pih-niču?du?ča 'they-did-not-hit'.

Secondary variation of allomorphs of Class 1120

Us-, kU?- , U?- , Uh- word affixes 1121E, 1122E, 1123E, 1125E respectively 'my, your-fem, your-m, his' respectively = os-, ko?- , o?- , oh- respectively, preceding a noncontiguous -i, -o ~ as-, ka?- , a?- , ah- respectively, preceding a non-contiguous -i ~ us-, ku?- , u?- , uh- respectively, elsewhere: oh-mobi 'his-tail'; as-pime 'my-breast'; ku?-kasno 'your-side'.

sVh-, dVh-, word affixes 1126E, 1127E respectively 'we-excl, you-pl-or-we-incl' respectively. The V is phonologically identical to the first non-contiguous vowel following it: (see 5.2.1.1) duh-dudabi?<sup>t</sup>?e 'are-you-all-tired' (are you all tired?); soh-dot?one?čame 'we-ourselves-have-colds'.

AH- word affix 1125C-D 'he' = ah- freely ~ φ-:  
ah-miču?du?namo ~ miču?du?namo 'he-didn't-hit-me'

As- word affix 1121C-D 'I' = as- freely ~ s-:  
as-konehna ~ s-konehna 'I'm-going-to-sleep'.

pA<sup>1</sup>- word affix 1124C 'she' = pa- freely ~ pe-:  
pa-nenehko ~ pe-nenehko 'when-she-sleeps'.

sAh- word affix 1126C 'we-excl' = sah- freely ~ seh-:  
sah-nenehko ~ seh-nenehko 'when-we-sleep'.

dAh- word affix 1127C 'we-incl-or-you-pl' = dah- freely ~ deh-:  
dah-nenehko ~ deh-nenehko 'when-we-sleep'.

pAh- word affix 1128C 'they' = pah- freely ~ peh:

Word affix class		S ref of vb 01 and 102	S ref of vb 02	S ref of vb 101 and O ref of vb 03-07/vb 101D-F	S ref of vb 103	Gen of n22 and S ref of vb 102	S ref of vb 03-07	O ref of vb 01D-F and S ref of vb 104
1120		A	B	C	D	E	F	G
SI-		si-	si-	As-	As-	Us-	As-	se-
1 sg	1121							
KE?-		ke?-	ka?-	ka?-	ka?-	kU?-	ka?-	ka?k'i-
2 fem sg	1122							
E?-		e?-	a?-	a?-	a?-	U?-	a?-	a?k'i-
2 m sg	1123							
PI-		-	pi-	pA <sup>1</sup> -	pi-	pi-	-	AH-
3 fem sg	1124							
AH-		-	AH-	AH-	AH-	Uh-	-	PI-
3 m sg/pl	1125							
SE?-		se?-	sih-	sAh-	sih-	sih-	sVh-	sihk'i-
1 excl pi	1126							
DE?-		de?-	dih-	dAh-	dih-	dih-	dVh-	dihk'i-
1 incl pl								
2 pl	1127							
PIH-		-	pih-	pAh-	pih-	-	-	-
3 fem pl	1128							

Chart VII. Allomorphs of word affix class 1120

pah-nenehko ~ peh-nenehko 'when-they-sleep'.

Word affix class 1111 MV-	Gen of n 21/ Nom of vb 103	Neg of vb 02	Neg of vb 04/ 06	Dep of vb 101
	A	B	C	D
1 sg	MI-	-	mV-	mE-
2 fem sg	NI-	ni-	nV-	nE-
2 m sg	MI-	mi-	mV-	mE-
3 fem sg/pl	NI-	ni-	nV-	nE-
3 m sg/pl	MI-	mi-	mV-	mE-
1 excl pl	NI-	ni-	nV-	nE-
2 pl	NI-	ni-	nV-	nE-
1 incl pl				

Chart VIII. Allomorphs of word affix 1111

#### Examples of allomorphs of affix 1111

ah-mi-ku 'his-house'; mi-čačano 'he-who-helps';  
 a?-mi-ču?du?ko 'you-did-not-hit';  
 a?-mo-konehko 'don't-go-to-sleep';  
 a?-may-nehko 'when-you-sleep'.

#### Secondary variation of allomorphs of affix 1111

mE- word affix 1111D 'when' = me- freely ~ may-:  
 as-me-pa?ali?ča ~ as-may-pa?ali?ča 'when-I-swim'.

nE- word affix 1111D 'when' = ne- freely ~ nay-:  
 ka?-ne-pa?ali?ča ~ ka?-nay-pa?ali?ča 'when-you-swim'.

MI-, NI- word affix 1111A Genitive = m-, n- respectively preceding noun roots -Yuwe 'grandchild', -Ye 'child-or-parent', and -Yuhwa 'sister-in-law', except when the word affix 1223 Multiplex/Plural occurs ~ φ preceding n r 17 (-mapi) 'husband-or-wife' when the word affix 1241 (-?KA) Feminine occurs and the word affix 1223

Multiplex/Plural does not occur ~ mi-, ni- respectively elsewhere: as-m-uwe 'my-grandson'; a?mapi?ka 'your-wife'; pi-ni-ku 'her-house'

mV-, nV- word affix 1111C Negative. The V is phonologically identical with the first noncontiguous vowel following it. (see 5.2.1.1.)  
 ka?-ni-kibu?ru?tYa 'don't-scratch';  
 ah-mu-kudala-hwahna 'they-say-he's-going-to-go'.

#### 5.2.3. Phonological-grammatical variation

k?edE, -čE vb r ditr, vb r tr, respectively 'advise, rob' respectively' (see 4.2.2.4) = k?ede, -če respectively, word final or preceding word affix 1252 (-be) ~ k?eda, -ča respectively, elsewhere: sipa-k?ede 'I-advise'; sipa-k?eda-tebe 'I-advise-you'.

maS- n r 12 'arm' (see 4.3.3) = (me- preceding a non-contiguous -e ~ ma- elsewhere) when filling the Cpd slot in nouns ~ ma?u- preceding vb r tr (pači ~ mas- elsewhere when filling the Cpd slot in verbs: us-ma-bano 'my-arm'; me-čebe?te 'he-looks-at-the-arm'; si-mas-t?ane 'I-wash-the-arm'; si-ma?u-pači 'I-finished-the-work'.

#### 5.2.4. Phonological-lexical variation

##### V- and V<sup>1</sup> -

A vowel V is obligatorily added word initial in words with roots consisting of one or two syllables and preceding vb affix 2121 S- 'just-begun-again' when no other affixation occurs preceding verb affix 2121. It is added optionally to any word with a stem of three or more syllables. The timbre of the vowel is determined as follows: Roots are divided into morphophonemic Classes A and B.

- V = i- preceding roots of Class A ~ V<sup>1</sup> - preceding roots of Class B: i-kolis 'gourd'; i-lu 'broom'; i-spa?ali?te 'he-began-to-swim-again'.
- V<sup>1</sup> - = o- preceding a noncontiguous -i, -e, -o ~ i- preceding a noncontiguous -a which precedes a non-contiguous -i ~ a- preceding a noncontiguous -i ~ u- elsewhere: o-pi 'fish'; i-yak?i 'gourd'; a-mispa 'alligator'; u-mu 'man'. An exception is the word a-no?ka 'mama'.
- ??- = ?- preceding an accented syllable beginning with y or p and preceding Class E words ~ ø- elsewhere: usma-?-para 'my-hand'; usmapapano 'my-wrist'.
- Ya- n r 12 'head, body' (see 4.3.3) = ya- in morphophonemic Class C words following contiguous -i ~ wa- elsewhere: si-ya-?pehe 'I-eat'; wa-?pehe 'he-eats'.
- kA- n r 12 'surface, face' (see 4.3.3) = (ko- preceding a noncontiguous -o ~ ke- freely ~ kay- preceding a noncontiguous -e) not preceding vb r tr (-pu-, -pači-) ~ ka?u- preceding vb r tr (-pu-) 'lay-it' and vb r tr (pači) 'do, finish': us-ka?i 'my-face'; si-ke-čebe?tebe ~ si-kay-čebe?tebe 'I-look-at-your-face'; di?-ka?u-puhe 'we-lay-it-on-the-surface'. An exception is se-ku-hterehne?ka 'she-makes-me-happy'.

#### 5.2.5. Grammatical-free variation

saS- n r 12 'leg' = sa- when filling the Cpd slot in nouns ~ (sas- freely ~ ses-) when filling the Cpd slot in verbs: us-sa-bano 'my-leg'; si-ses-čebe?na ~ si-sas-čebe?na 'I-look-at-a-leg'.

#### 5.2.6. Lexical-free variation

ča- vb affix 2331 Agent (see 4.2.2.5) = ča- freely ~ t'y'a- preceding vb r tr (kisi) ~ ča- elsewhere:

si-t<sup>y</sup>a-kisihe ~ si-ča-kisihe 'I-sew-for-another'; si-ča-yupa?na 'I-plant-for-another'.

### 5.2.7. Grammatical-lexical variation

-NAHK?E vb affix 2211 Indirective (see 4.2.2.5) = (-nahk?e in an affirmative verb ~ -nahk?a in a negative verb) whose roots are of Class I ~ (-hk?e in an affirmative verb ~ hk?a in a negative or dependent verb) whose roots are of Class II-IV: siyaka-nahk?e-be 'I-sing-it-for-you'; siya?ka-nahk?a 'I-didn't-sing-it-for-him'; siyut?uwa-hk?e-be 'I-made-it-for-you'; siyut?u?-wa-hk?a-?a 'I-didn't-make-it-for-myself'.

WAMO- n r 13 'amount' = (wamo- immediately following word affixes 1120 ~ yamo- immediately following adjective affixes 4114-4115 ~ samo- immediately following adjective affixes 4113/4116 ~ mo- noncontiguously following word affixes 1120 ~ so- immediately following vb affix 2522) immediately preceding n r 13 (-?t<sup>y</sup>o) ~ wama- immediately preceding adj r 21-23: uh-wamo-?t<sup>y</sup>o 'the-amount-of-people'; uhči-yamo-?t<sup>y</sup>o 'the-amount-of-anything-planted'; uhča-samo-?t<sup>y</sup>o 'the-amount-of-anything-oval'; uhkos-so-?t<sup>y</sup>o 'its-depth'; oh-mo-?t<sup>y</sup>o 'the-amount'; wama-pi?i 'a-few'.

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