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## CHATINO SYNTAX

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# CHATINO SYNTAX

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# *Author's Preface*

Data for this work have been gathered during field work under the auspices of the Summer Institute of Linguistics from 1960 to 1962. The tagmemic model of Kenneth L. Pike<sup>1</sup> in conjunction with the practical guide to string constituent analysis developed by Robert E. Longacre<sup>2</sup> have been adopted to describe the syntax of Yaitepec Chatino. I am indebted to Robert E. Longacre for his counsel and direction during a linguistic workshop held at Itzmiquilpan, Hidalgo, in the spring of 1962 when most of this work was undertaken. I also profited from discussing various problems with Viola Waterhouse and Barbara Erickson at that time, and from all the practical help given by my husband Leslie Pride.

Kitty Pride

Mexico City  
December, 1963

<sup>1</sup>Pike, 1954, 1955, 1960.

<sup>2</sup>Longacre, 1960.

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# 0. Introduction

Chatino is spoken by an Indian tribe of more than 20,000 people living in the southwest of the state of Oaxaca, Mexico. There are at least three distinct and mutually unintelligible dialects with centres in the towns of Yaitepec, Taltaltepec, and Zenzontepec. This work deals with the Yaitepec dialect, and the phonemes have been analysed as follows:

## Consonants

Stops	p b	t d	k g
Fricatives	w	s š	h
Nasals	m	n	
Liquids		r l y	

## Vowels

Oral	i	e	a	o	u
Nasal	ĩ	ẽ		õ	ũ

## Tones

Registers	1	2	3	4
Glides	12	23	34	
	21	32	43	

Tone is only significant on word-final syllables and thus only the final syllable of a word has tone marked in this work.<sup>3</sup>

While five distinct grammatical levels are posited in Chatino—the word, the phrase, the clause, the colon, and the sentence levels—only the last four fall within the scope

<sup>3</sup>Pride L., 1963, p. 19. Further investigation of the suprasegmental features has been undertaken recently which will probably present an alternative solution involving the relationship between stress, tone, and vowel length. Further investigation of the tone perturbation system is being undertaken.

of this description; the internal structure of the word is not described in this work, but only the word classification. Words may manifest the tagmemes of types in any higher level, but primarily are constituent parts of phrases. There are both major and minor words; major words may occur in isolation, but minor words are monosyllabic and occur only in expanded phrases, clauses, or sentences, where they never carry the phrase or sentence stress, but only minor word stress. A phrase consists of one or more major words which may be potentially expandable by the addition of major and/or minor words. The Chatino phrase may be defined as the sum of the phrase types described in 2. The clause is a unit of speech with predication and may be defined as the sum of the clause types described in 4. The colon is an independent unit of speech consisting of two or more clauses which are combined without employing conjunctions. The colon may be defined as the sum of the colon types described in 6. The sentence is an independent unit of speech with or without predication which in its minimum form may consist of one major word, and may be defined as the sum of the sentence types described in 8.

The major versus minor distinction occurs at the word, phrase, clause, and sentence levels. At each of these levels constituent tagmemes may be classed as either nuclear or peripheral. Nuclear tagmemes characterise a particular type, whereas peripheral tagmemes are common to more than one type on any level. The symbols and names of construction types and classes are listed in Appendix A.

The chapter describing the types on a given level is followed by a chapter describing each tagmeme at that level in detail. Linear order of tagmemes is significant in the formulae below since change in the order is meaningful.

In the formulaic presentation of construction types nuclear tagmemes are in parentheses and peripheral tagmemes are not. In the noun and predicate phrases (class  $P_0$  and  $P_{20}$ ) peripheral tagmemes occur both preceding and

following the nucleus; they are referred to as the pre-periphery and the post-periphery. Tagmemes manifested by major words have symbols beginning with capital letters and tagmemes manifested by minor words have symbols beginning with letters in the lower case. Tagmeme symbols and names are listed alphabetically in Appendix B. Subscript numbers on tagmeme symbols indicate allotagmas in subtypes. Subscript numbers on construction types, however, refer to contrastive types within a class, and subtypes are shown by decimals on the subscript. Superscript numbers on tagmeme symbols indicate the number of times the tagmeme may be repeated in a given example of that construction type. The symbols  $\pm$ ,  $+$ ,  $-$ , and  $/$  have also been used in the formulae;  $\pm$  signifies optional,  $+$  signifies obligatory,  $-$  signifies absence,  $/$  signifies either/or. These symbols are used mathematically to refer to the tagmeme following.

The formula for each type is preceded by a description of the characteristics of that particular type and followed by a description in words of the formula. After the initial description a nuclear tagmeme is just referred to by name if it occurs in another type and peripheral tagmemes are referred to in general as periphery.

Examples of types used in this work are presented with the appropriate formula for the type being illustrated; the Chatino words are given with the literal translation immediately below each word and the appropriate tagmeme symbol below the expression to which it refers, with a free translation below that. Where a tagmeme is manifested by an included type, this manifestation of the tagmeme is enclosed within brackets and its constituent tagmemes are indicated. Examples of specific tagmemes are presented with the appropriate tagmeme symbol followed by a colon and the symbol for the specific type illustrated as manifesting that tagmeme; the Chatino words are followed by the literal translation which, if necessary, is followed by a free translation in parentheses.

# 1. Word Classification

Grammatical words are coterminus with phonological words in most situations.<sup>4</sup> Two criteria have been employed in classification:<sup>5</sup> external distribution and internal structure. The former is considered primary and gives rise to classes and subclasses, the latter to types within these classes or subclasses where the two divisions do not coincide. There are four word hyperclasses of which three comprise major words: noun hyperclass  $W_0$ , particle hyperclass  $W_{10}$ , verb hyperclass  $W_{20}$ , and minor word hyperclass  $W_{00}$ .

1.1. There are four classes of nouns in the noun word hyperclass  $W_0$ .

1.1.1.  $W_1$ , the common noun class, has five subclasses:  $W_{1.1}$  general subclass,  $W_{1.2}$  possessed subclass,  $W_{1.3}$  unpossessed subclass,  $W_{1.4}$  locative subclass,  $W_{1.5}$  classified common subclass.

$W_{1.1}$  comprises common nouns which may or may not be possessed and has two types:  $W_{1.1.1}$  simple general type,  $W_{1.1.2}$  multiple general type. Nouns of subclass  $W_{1.1}$  may manifest the head tagmeme of the attributive noun phrase ( $P_1$ ), of the quality noun phrase ( $P_2$ ), or of the possessive noun phrase II ( $P_4$ ); or the owner tagmeme of the possessive noun phrase I ( $P_3$ ), or the possessor tagmeme of the possessive noun phrase II ( $P_4$ ). Certain members of this subclass may manifest the quality tagmeme of the quality noun phrase

<sup>4</sup>See Appendix C.

<sup>5</sup>A minute description of sub-subclasses demanded by the classificatory criteria employed has not been attempted, but rather the main word class divisions are cited. This note particularly applies to the noun and verb hyperclasses  $W_0$  and  $W_{20}$  respectively.

(P<sub>2</sub>) or the specifier tagmeme of the addressee noun phrase (P<sub>5</sub>).

W<sub>1.1.1</sub> includes nouns comprising a single morpheme which is a single phonological word such as hu<sup>2</sup>wa<sup>34</sup> 'banana', wta<sup>34</sup> 'cow', hyo<sup>12</sup> 'cornfield'.

W<sub>1.1.2</sub> includes common nouns which are grammatical words but phonological phrases derived from polysyllabic loan words such as siye<sup>4</sup>tu 'hundred' from Spanish ciento, lapi<sup>3</sup> 'pencil' from Spanish lápiz, kaswela<sup>4</sup> 'casserole dish' from Spanish cazuela.

W<sub>1.2</sub> comprises possessed nouns and has two types: W<sub>1.2.1</sub> obligatorily possessed type, W<sub>1.2.2</sub> innately possessed type. Nouns of subclass W<sub>1.2</sub> may manifest the head tagmemes of the attributive noun phrase (P<sub>1</sub>) or the possessive noun phrase I (P<sub>3</sub>). Certain members of this subclass also manifest the quality tagmeme of the quality noun phrase (P<sub>2</sub>).

W<sub>1.2.1</sub> includes obligatorily possessed nouns marked by the morpheme s- possessed, such as ško<sup>2</sup> 'blouse-of, shirt-of' from yko<sup>2</sup> 'blouse, shirt'; ste<sup>32</sup> 'clothes-of' from te<sup>34</sup> 'cloth'; ška<sup>3</sup> 'wood-of' from yka<sup>3</sup> 'wood, tree'; sno<sup>3</sup> 'sandal-of' from kino<sup>3</sup> 'sandal'; sty<sup>2</sup> 'feather-of' from kity<sup>2</sup> 'feather'; sto<sup>2</sup> 'fingernail-of, branch-of' from kit<sup>2</sup> 'fingernail, claw'.

W<sub>1.2.2</sub> includes innately possessed nouns such as body parts, meals, and relatives other than those designated by terms borrowed from Spanish: yo<sup>32</sup> 'hand-my', kye<sup>32</sup> 'head-your/his/her/its', tlya<sup>32</sup> 'dinner-your/his/her/its', sti<sup>1</sup> 'father-my', ta<sup>a23</sup> 'relative-your/his/her', sku<sup>23</sup> 'upper arm-your/his/her'.

W<sub>1.3</sub> is a limited subclass of nouns which may not be possessed, such as kutsa<sup>2</sup> 'sun', kwi<sup>2</sup>i<sup>3</sup> 'wind, spirit'. Nouns of subclass W<sub>1.3</sub> may manifest the head tagmeme of the attributive noun phrase (P<sub>1</sub>), the quality head or quality tagmemes of the quality noun phrase (P<sub>2</sub>), or the owner tagmeme of the possessive noun phrase I (P<sub>3</sub>).

$W_{1.4}$  is a limited subclass of nouns which may be marked by the infix *-y-* 'inside', such as  $nyo_2^1$  'inside-house' from  $no_2^3$  'house';  $lyo_2^{32}$  'inside-corrall' from  $lo_2^2$  'corrall';  $lya^3$  'inside-church' from  $la^2$  'church'. Nouns of subclass  $W_{1.4}$  may manifest the location clause level tagmeme, or the head tagmemes of the attributive noun phrase ( $P_1$ ), the quality noun phrase ( $P_2$ ), and the possessive noun phrase II ( $P_4$ ). When marked by the infix *-y-* 'inside',  $W_{1.4}$  manifests the concomitant tagmeme of the relational phrase ( $P_{11}$ ).

$W_{1.5}$  includes common nouns denoting certain fauna such as  $nts_i^{32}$  'praying mantis',  $kinyi^2$  'little-bird',  $tya^1$  'squirrel'. Nouns of subclass  $W_{1.5}$  manifest the nominal head<sub>2</sub> allotagma in the classifier minor phrase ( $p_02$ ).

1.1.2.  $W_2$ , the proper noun class, has four subclasses:  $W_{2.1}$  personal name subclass,  $W_{2.2}$  vocative term subclass,  $W_{2.3}$  expandable vocatives subclass, and  $W_{2.4}$  place name subclass.

$W_{2.1}$  includes all names of people, such as  $\mathring{s}uwa^4$  'Juan',  $ndiyu^{32}$  'Antonio',  $mo_2^3$  'Máximo',  $sali^2$  'Marcelina',  $hwele^3$  'Félix'. Nouns of subclass  $W_{2.1}$  may manifest the head tagmeme of the attributive noun phrase ( $P_1$ ) or the quality phrase ( $P_2$ ), the subject addressed tagmeme, the vocative address tagmeme of the address sentence ( $S_{31}$ ), the owner tagmeme of the possessive noun phrase I ( $P_3$ ), or the possessor tagmeme of the possessive noun phrase II ( $P_4$ ).

$W_{2.2}$  is a limited subclass of vocative terms used only in conversation such as  $ti^{32}$  'small-boy' used by members of the consanguineal group,  $nyu^{32}$  'Dear' used within the consanguineal group and with small children,  $bi^3$  'You-emphatic' with no restrictions regarding the one addressed. Nouns of subclass  $W_{2.2}$  may manifest the subject addressed tagmeme and the vocative address tagmeme of the address sentence ( $S_{31}$ ).

$W_{2.3}$  is a limited class of expandable vocative terms

such as tše<sup>32</sup> 'Friend', used between men, škwe<sup>2</sup> 'Friend', used between men reciprocally with tše<sup>32</sup>, ta<sup>32</sup> 'Daddy'. Nouns of the subclass W<sub>2.3</sub> may manifest the addressee tagmeme in the addressee noun phrase (P<sub>5</sub>).

W<sub>2.4</sub> includes all names of places such as skuʔwe<sup>2</sup> 'Juquila', tšehyaʔ<sup>1</sup> 'Mexico City', la<sup>3</sup> kwiyuʔ<sup>4</sup> 'Puebla', lo<sup>3</sup> ndaʔa<sup>4</sup> 'Oaxaca City'. Nouns of subclass W<sub>2.4</sub> may manifest the location tagmeme in the clause periphery, or the goal or reference nuclear clause-level tagmemes.

1.1.3. W<sub>3</sub>, the temporal noun class, has two subclasses: W<sub>3.1</sub> general temporal subclass, W<sub>3.2</sub> subordinator temporal subclass, and any temporal noun may manifest the time tagmeme in the periphery of the clause types, or the head tagmeme of the limited minor phrase (P<sub>03</sub>). The nouns in this class may not be possessed.

W<sub>3.1</sub> comprises general temporal nouns and has two types: W<sub>3.1.1</sub> simple temporal type, W<sub>3.1.2</sub> multiple temporal type. Nouns of subclass W<sub>3.1</sub> may manifest the head tagmeme of the attributive noun phrase (P<sub>1</sub>), the quality tagmeme of the quality noun phrase (P<sub>2</sub>), the completor tagmeme of the prepositionally directed phrase (P<sub>12</sub>), the specification or head tagmemes of the temporal phrase (P<sub>31</sub>), or the adverbial peripheral tagmeme of the predicate phrase (P<sub>20</sub>). Two members only of W<sub>3.1</sub> may manifest the determinator tagmeme of the calendar phrase (P<sub>32</sub>).

W<sub>3.1.1</sub> includes temporal nouns comprising single phonological words such as tso<sup>23</sup> 'day', ni<sup>2</sup> 'now', koʔ<sup>12</sup> 'month', kya<sup>43</sup> 'tomorrow'.

W<sub>3.1.2</sub> includes temporal nouns which are syntactic words but phonological phrases such as ndisiyembre<sup>4</sup> 'December' from Spanish diciembre, tomiku<sup>4</sup> 'Sunday' from Spanish domingo.

W<sub>3.2</sub> is a limited subclass of temporal nouns which includes bra<sup>34</sup> 'hour' and ša<sup>2</sup> 'light/brightness'. Nouns of subclass W<sub>3.2</sub> may manifest the subordinator tagmeme in the

temporal subordinate clause ( $C_{31}$ ), the head tagmeme of the attributive noun phrase ( $P_1$ ), the completor tagmeme of the prepositionally directed phrase ( $P_{12}$ ), or the specification tagmeme of the temporal phrase ( $P_{31}$ ).

1.1.4.  $W_4$ , the pronoun class, has three subclasses:  $W_{4.1}$  subject subclass,  $W_{4.2}$  goal subclass,  $W_{4.3}$  demonstrative subclass.

$W_{4.1}$  includes all independent subject pronouns such as  $nu\gamma w_i^{32}$  'you-singular-familiar' and  $no\gamma^2$  'I'. Nouns of subclass  $W_{4.1}$  may manifest the subject, complement, equational subject, and speaker clause-level tagmemes, or the owner tagmeme of the possessive noun phrase I ( $P_3$ ).

$W_{4.2}$  includes all pronouns indicating goal such as  $\gamma y\gamma^2$  'to-me',  $\gamma w\gamma^3$  'to-you-pl./respectful',  $\gamma_i^3$  'to-you/him/her/it/them' (hereafter translated 'pronoun').<sup>6</sup> Nouns of subclass  $W_{4.2}$  may manifest the indirect object, goal, equational goal, and reference clause-level tagmemes, and the possessor tagmeme of noun phrase  $P_4$ .

$W_{4.3}$  is a limited subclass of demonstratives which includes  $nde^3$  'here',  $kwa^3$  'there',  $k\gamma^2$  'that-particular-emphatic'. Nouns of subclass  $W_{4.3}$  may manifest the head or demonstration tagmemes of attributive noun phrase ( $P_1$ ), or the head tagmemes of the stative predicate phrase ( $P_{25}$ ), the qualifier minor phrase ( $p_{01}$ ), and the limited minor phrase ( $P_{03}$ ).

1.2. There are four classes of particles in the particle word hyperclass  $W_{10}$ .

1.2.1.  $W_{11}$ , the descriptive particle class, has nine subclasses:  $W_{11.1}$  quantifier subclass,  $W_{11.2}$  attributive

<sup>6</sup>Since the tone perturbation system is as yet unsolved, this poses the problem of whether there are just two morphemes  $\gamma_i^1$  'to' and  $\gamma_i^2 \sim \gamma_i^3$  'pronoun' or three separate morphemes including two pronouns.



subclass,  $W_{11.3}$  characteristic subclass,  $W_{11.4}$  state subclass,  $W_{11.5}$  colour subclass,  $W_{11.6}$  adjective subclass,  $W_{11.7}$  modifier subclass,  $W_{11.8}$  adverb subclass, and  $W_{11.9}$  manner subclass. Any descriptive particle may manifest the head tagmeme in the comparison minor phrase ( $p_{01}$ ).

$W_{11.1}$  is a limited subclass of quantifiers which includes  $nd\check{s}ga^3$  'all, every',  $\check{s}kwi^1$  'all, the whole, altogether',  $l^2we^2$  'half'. Particles of subclass  $W_{11.1}$  may manifest the quantity tagmeme in the pre-periphery of the noun phrase class ( $P_0$ ).

$W_{11.2}$  is a limited subclass of attributives which includes  $\check{s}tlya^3$  'Spanish',  $t^2n\check{o}^2$  'poor',  $kuliya^3$  'rich'. Particles of subclass  $W_{11.2}$  may manifest the attribution tagmeme in the post-periphery of the attributive noun phrase ( $P_1$ ), the adverbial tagmeme in the pre-periphery of the predicate phrase class ( $P_{20}$ ), or the head tagmemes in the stative predicate phrase ( $P_{25}$ ) and the limited minor phrase ( $p_{03}$ ).

$W_{11.3}$  is a limited subclass of descriptives to do with character which includes  $tsu^2we^3$  'good',  $\check{s}e^2\check{o}^3$  'wicked'. Particles of subclass  $W_{11.3}$  may manifest the character tagmeme of the post-periphery of the attributive noun phrase ( $P_1$ ), the adverbial tagmeme in the pre-periphery of the predicate phrase class ( $P_{20}$ ), or the head tagmemes in the stative predicate phrase ( $P_{25}$ ) and the limited minor phrase ( $p_{03}$ ).

$W_{11.4}$  is a limited subclass of descriptives to do with status, which includes  $kune^1$  'young',  $kula^3$  'old'. Particles of subclass  $W_{11.4}$  may manifest the status tagmeme in the post-periphery of the attributive noun phrase ( $P_1$ ), or the head tagmemes in the stative predicate phrase ( $P_{25}$ ) and the limited minor phrase ( $p_{03}$ ).

$W_{11.5}$  is a limited class of descriptives including all colours such as  $nga^2a^1$  'red',  $nga^2a^{23}$  'green',  $kwa^2$  'mauve'. Particles of the  $W_{11.5}$  subclass may manifest the colouration tagmeme in the post-periphery of the attributive

noun phrase (P<sub>1</sub>), or the head tagmemes in the stative predicate phrase (P<sub>25</sub>) and the limited minor phrase (p<sub>03</sub>).

W<sub>11.6</sub> is a limited class of adjectives which includes lyu<sup>1</sup> 'lesser', tnu<sup>3</sup> 'huge/great', tlyu<sup>3</sup> 'big'. Particles of subclass W<sub>11.6</sub> may manifest the adjectival tagmeme in the post-periphery of the attributive noun phrase (P<sub>1</sub>), the adverbial tagmeme in the pre-periphery of the predicate phrase class (P<sub>20</sub>), or the head tagmemes in the stative predicate phrase (P<sub>25</sub>) and the limited minor phrase (p<sub>03</sub>).

W<sub>11.7</sub> is a limited class of modifiers which includes tšĩ<sup>1</sup> 'a-little', lya<sup>1</sup> 'immediately/hurrying'. Particles of subclass W<sub>11.7</sub> may manifest the manner clause-level tagmeme, or the modification tagmeme in the post-periphery of the predicate phrase class (P<sub>20</sub>), or the head tagmeme of the limited minor phrase (p<sub>03</sub>).

W<sub>11.8</sub> is a limited class of adverbs which includes lye<sup>32</sup> 'much', kwe<sup>2</sup> 'loudly', kwinyi<sup>3</sup> 'fertile'. Particles of subclass W<sub>11.8</sub> may manifest the manner clause-level tagmeme, or both the adverbial and modification tagmemes in the periphery of the predicate phrase class (P<sub>20</sub>), or the head tagmeme in the stative predicate phrase (P<sub>25</sub>).

W<sub>11.9</sub> is a limited class of descriptives which includes ngutsu<sup>34</sup> 'muddy', tlyi<sup>32</sup> 'slippery', tlya<sup>2</sup> 'cold'. Particles of subclass W<sub>11.9</sub> may manifest the manner clause-level tagmeme, or the adverbial tagmeme in the pre-periphery of the predicate phrase class (P<sub>20</sub>), or the head tagmemes in the stative predicate phrase (P<sub>25</sub>) and the limited minor phrase (p<sub>03</sub>).

1.2.2. W<sub>12</sub>, the numerical particle class, has five subclasses: W<sub>12.1</sub> base numeral subclass, W<sub>12.2</sub> empiric prime subclass, W<sub>12.3</sub> addition numeral subclass, W<sub>12.4</sub> allotive numeral subclass, W<sub>12.5</sub> derived numeral subclass. All numerical particles except W<sub>12.5</sub> may manifest the number tagmeme in the pre-periphery of the noun phrase class (P<sub>0</sub>).

W<sub>12.1</sub> is a limited subclass of base numerals which com-

prises  $ti^1$  'ten',  $ti^?yu^1$  'fifteen',  $kala^4$  'twenty',  $tu^?wa^1$  'forty'. Particles of subclass  $W_{12.1}$  may manifest the specifying number tagmeme of the calendar phrase ( $P_{32}$ ), the numeric tagmeme in the numerical phrase ( $P_{33}$ ), the head tagmeme of the limited minor phrase ( $P_{03}$ ), or the reference number<sub>1</sub> allotagma and the subject number<sub>2</sub> allotagma in the number referential minor clause ( $C_{04}$ ).

$W_{12.2}$  is a limited subclass of primes which comprises the numerals  $ska^3$  'one',  $tukwa^1$  'two',  $sno^2$  'three',  $hakwa^3$  'four',  $ka^?yu^1$  'five',  $skwa^1$  'six',  $kati^1$  'seven',  $snu^?2$  'eight',  $ka^{32}$  'nine'. Particles of this subclass manifest the specifying number tagmeme of the calendar phrase ( $P_{32}$ ), head tagmeme of the limited minor phrase ( $P_{03}$ ), or the subject number tagmeme in the number referential minor clause ( $C_{04}$ ).

$W_{12.3}$ , the addition numeral subclass, is parallel to certain numerals from subclasses  $W_{12.1}$  and  $W_{12.2}$ , but each word is composed of two morphemes, i. e., the numeral with an infix of palatalisation meaning 'another'. This subclass comprises  $\check{s}ka^1$  'another-one',  $tyukwa^1$  'another-two',  $\check{s}no^1$  'another-three',  $tyhakwa^1$  'another-four',<sup>7</sup> and  $tyi^1$  'another-ten'. Particles of subclass  $W_{12.3}$  may manifest the addition tagmeme in the numerical phrase ( $P_{33}$ ), or the subject tagmeme in the basic clause types ( $C_0$ ).

$W_{12.4}$ , the allotive numeral subclass, consists of numerals which are parallel to all numerals in subclasses  $W_{12.1}$  and  $W_{12.2}$  which are not parallel to those of subclass  $W_{12.3}$  and comprises  $ti^?yu^1$  'another-five',  $\check{s}kwa^1$  'another-six',  $kiti^1$  'another-seven',  $\check{s}nu^?1$  'another-eight',  $tyka^1$  'another-nine',  $kila^1$  'another-twenty',  $tyu^?wa^1$  'another-forty'. Particles of subclass  $W_{12.4}$  may manifest only the subject tagmeme in the basic clause types ( $C_0$ ).

$W_{12.5}$  is a limited subclass of nouns derived from verbs of class  $W_{23}$  and includes  $kulo^{23}$  'first, beginning' and  $tyi$

<sup>7</sup>An alternative form  $lkwa^1$  'another-four' occurs as the addition tagmeme in  $P_{33}$ .

'ending'. Numerals of subclass  $W_{12.5}$  manifest the specifying number tagmeme in the calendar phrase ( $P_{32}$ ).

1.2.3.  $W_{13}$ , the temporal particle class, has no subclasses, but two types:  $W_{13.0.1}$  monomorphemic type,  $W_{13.0.2}$  complex type. Temporal particles may manifest the time tagmeme in the periphery of the clause types, the head tagmemes of the temporal phrase ( $P_{31}$ ), the comparison minor phrase ( $P_{01}$ ), or the adverbial tagmeme in the pre-periphery of the predicate phrase class ( $P_{20}$ ). Certain particles of class  $W_{13}$  may also manifest the head tagmemes of the stative predicate phrase ( $P_{25}$ ) and the limited minor phrase ( $P_{03}$ ), or the completor tagmeme of the prepositionally directed phrase ( $P_{12}$ ).

$W_{13.0.1}$  is a type of simple temporal particle including  $ndse^3$  'quickly',  $ya^?1$  'time/yet',  $\check{s}i^?i^2$  'little-while'.

$W_{13.0.2}$  is a type of complex temporal particle which may be marked by the infix  $-y-$  'another', and includes  $\check{s}^?ni^1$  'another-long-time' from  $s^?ni^2$  'long-time/distance',  $\check{s}iya^?1$  'another-once' (again) from  $siya^?1$  'once'.

1.2.4.  $W_{14}$ , the relator particle class, has four subclasses:  $W_{14.1}$  independent preposition subclass,  $W_{14.2}$  conjunction subclass,  $W_{14.3}$  referent subclass,  $W_{14.4}$  relative-interrogative subclass.

$W_{14.1}$  is a limited subclass of prepositions which includes  $ni^?2$  'inside',  $^?i^1$  'to',  $lo^3$  'on, in',  $lo^?o^1$  'with'. Particles from subclass  $W_{14.1}$  may manifest the relator tagmeme of the relational phrase  $P_{11}$ . One member ( $^?i^1$  'to') may manifest the possession indicator tagmeme of possessive noun phrase II ( $P_4$ ), another ( $lo^3$  'on, in') may manifest the calendar relational tagmeme of the calendar phrase ( $P_{32}$ ), and another ( $lo^?o^1$  'with') may manifest the balance hinge sentence-level tagmeme.

$W_{14.2}$  is a limited subclass of conjunctions which includes  $lo^2$  'and',  $si^1$  'if',  $si^?ya^1$  'because/since',  $t\check{s}a^?2$

'in-order-that/to-the-effect-that'. Particles of subclass  $W_{14.2}$  manifest the hinge tagmemes of the hinge sentence class ( $S_{10}$ ).

$W_{14.3}$  is a limited subclass of referents which includes  $ta^3$  'or-interrogative',  $ko^2$  'that's-the-one'.<sup>8</sup> Particles of subclass  $W_{14.3}$  manifest the referent tagmemes of the symbiotic sentence class ( $S_{20}$ ).

$W_{14.4}$  is a limited subclass of relative-interrogatives which includes  $ni^3$  'what',  $ti^3$  'who',  $la^3$  'where (direction)',  $lo^3$  'where?'. Relators of subclass  $W_{14.4}$  manifest the head tagmeme of the interrogative phrase ( $P_{34}$ ) and the introducer tagmeme of the relative minor sentence ( $s_{01}$ ), while  $ni^3$  'what' and  $ti^3$  'who' may manifest also the interrogation sentence-level tagmeme.

1.3. There are eight classes in the verb word hyperclass  $W_{20}$ . Any verb from hyperclass  $W_{20}$  except those in subclass  $W_{22.3}$  or classes  $W_{26}$ ,  $W_{27}$ , or  $W_{28}$  may manifest the predicate head tagmeme of the simple predicate phrase ( $P_{21}$ ). Of these eight classes  $W_{21}$ ,  $W_{22}$ , and  $W_{23}$  all comprise verbs which have both basic and directed forms.<sup>9</sup> The directed form (dir.) may take an infix -y- 'attention-directed-towards-following-goal' which occurs in the root of the verb and may or may not be accompanied by other changes in the verb stem. Examples in hyperclass  $W_{20}$  are cited without indication of tone—the verb stem tones indicate person.

#### 1.3.1. $W_{21}$ , the referential verb class, has a limited

<sup>8</sup> The word  $ko^2$  'that-particular-emphatic' occurs in  $W_{4.3}$  where it functions like the other demonstrative pronouns in that subclass. Such dual classification appears to give the simplest solution. See also footnote 10.

<sup>9</sup> Further investigation may show a third form of many verbs parallel to the basic and directed forms, i.e., the same root but with a separate set of aspect prefixes as *kusta* 'will-break, basic', *šta* 'will-be-broken/will-be-caused-to-break, dtr.', *kita* 'will-break, parallel form — perhaps to do with locations of the speaker and actor'.

membership with no subclasses, but two types:  $W_{21.0.1}$  differentiated referential type,  $W_{21.0.2}$  undifferentiated referential type. All verbs in class  $W_{21}$  have the general meaning of 'to-be' and manifest the head tagmemes of the simple predicate phrase ( $P_{21}$ ) and the affirmation predicate phrase ( $P_{23}$ ) in both basic and directed forms, or the qualification<sub>2</sub> allotagma in the qualified predicate phrase ( $P_{22.2}$ ) in the basic form and intensive aspect. Certain members of this class also manifest the head tagmeme of the auxiliary predicate phrase ( $P_{26}$ ).

$W_{21.0.1}$  includes the basic forms ndukwi 'is-up', ndi<sup>?</sup><sub>i</sub> 'is (living)', ndukwa 'is-on', ng<sup>?</sup><sub>o</sub> 'is-on (adjoining)', nde<sup>?</sup><sub>e</sub> 'is (staying)', with parallel directed forms ndyukwi 'is-up, dir.', ndyi<sup>?</sup><sub>i</sub> 'is-living, dir.', ndyukwa 'is-on, dir.', ndi<sup>?</sup><sub>o</sub> 'is-adjoining, dir.', ndye<sup>?</sup><sub>e</sub> 'is-staying, dir.'

$W_{21.0.2}$  includes the form ndiya 'is-there (belonging)' which does not have a parallel directed form.

1.3.2.  $W_{22}$ , the equational verb class, has a very limited membership and three subclasses:  $W_{22.1}$  permanent equational subclass,  $W_{22.2}$  temporary equational subclass,  $W_{22.3}$  quasi-equational subclass.

$W_{22.1}$  consists of the equational verb lka 'actually-is' which manifests the head tagmemes of the simple predicate phrase ( $P_{21}$ ), the qualified predicate phrase ( $P_{22}$ ), the affirmation predicate phrase ( $P_{23}$ ), and the auxiliary predicate phrase ( $P_{26}$ ).

$W_{22.2}$  includes nsu<sup>?</sup>wi 'there-is' and ny<sup>?</sup><sub>o</sub> 'looking, dir.' Verbs of subclass  $W_{22.2}$  manifest the head tagmemes of the simple predicate phrase ( $P_{21}$ ), the affirmation predicate phrase ( $P_{23}$ ), and the auxiliary predicate phrase ( $P_{26}$ ). The form nsu<sup>?</sup>wi 'there-is' manifests also the head tagmeme of the emotional predicate phrase ( $P_{24}$ ).

$W_{22.3}$  consists of n<sub>o</sub> 'name' (is-named) which is not

expandable to form a phrase and manifests only the equation clause-level tagmeme.<sup>10</sup>

1.3.3.  $W_{23}$ , the active verb class, has no subclasses, but three types:  $W_{23.0.1}$  unchanging aspect type,  $W_{23.0.2}$  changing aspect type,  $W_{23.0.3}$  different aspect type. All verbs in class  $W_{23}$  manifest the predicate head tagmeme of the simple predicate phrase ( $P_{21}$ ) in both basic and directed forms. Certain verbs from this class may manifest the affirmed predicate head, head to the auxiliary, and qualified predicate head tagmemes from phrase types of the predicate phrase class ( $P_{20}$ ).

$W_{23.0.1}$  includes active verbs which take the same set of aspect prefixes in both the basic and directed forms. This subclass includes basic forms such as *ndih̄* 'passing/crossing', *ndoʔo* 'emerging', *nd̄u* 'standing', *nskwa* 'lying down', *nsno* 'running', *nstya* 'putting-in-a-place', *nskwe* 'climbing', and their parallel directed forms *ndyih̄* 'crossing-over, dir.', *ndyoʔo* 'emerging, dir.', *ndȳu* 'standing, dir.', *n̄ska* 'lying-down, dir.', *n̄so* 'running, dir.', *n̄stya* 'putting-somewhere, dir.', *n̄skwe* 'climbing, dir.'

$W_{23.0.2}$  includes active verbs which take the same continuative and completive aspect prefixes in both basic and directed forms, but the intensive aspect prefix used with the basic form is omitted with the directed form. This subclass includes basic forms such as *kuta* 'will-give', *kusiʔya* 'will-shout/call', *kusula* 'will-open', *kusuʔwe* 'will-divide', *kusulu* 'will-throw-away', and their parallel directed forms *tya* 'will-give, dir.' (will pay), *šiʔya* 'will-shout, dir.' (caused to shout), *šula* 'will-open, dir.', *šuʔwe* 'will-divide, dir.', *šulu* 'will-throw-away, dir.'

$W_{23.0.3}$  includes active verbs which take a different set

<sup>10</sup> The word *no*<sup>2</sup> 'name, thing' occurs in  $W_{1.1.1}$  where it acts in all respects like any other simple general noun.

of aspect prefixes with the basic form from that used with the directed form. This subclass includes basic forms such as *lati* 'ending', *lahaʔ* 'sleeping', *ntsaʔ* 'getting wet', and their parallel directed forms *ndyi* 'ending, dir.' (finishing), *ndyhaʔ* 'sleeping, dir.' (caused to sleep), *ntšaʔ* 'wetting, dir.' (being wetted).

1.3.4.  $W_{24}$ , the reflexive verb class, has a limited membership with no subclasses, but two types:  $W_{24.0.1}$  undifferentiated type,  $W_{24.0.2}$  differentiated type. All verbs in class  $W_{24}$  may manifest the head tagmemes of the simple predicate phrase ( $P_{21}$ ) and the affirmation predicate phrase ( $P_{23}$ ). Certain members of this class also manifest the head of the auxiliary predicate phrase ( $P_{26}$ ).

$W_{24.0.1}$  includes reflexive verbs which are undifferentiated as to basic and directed forms such as *ngite* 'washing/cleaning', *ndyʔo* 'laundering/washing', *ndšku* 'eating'.

$W_{24.0.2}$  includes reflexive verbs which have both basic and directed forms such as *nsiʔi* 'buying', *nduku* 'closing, shutting' and their parallel directed forms *nšiʔi* 'buying, dir.', *ndyuku* 'shutting, dir.'

1.3.5.  $W_{25}$ , the auxiliary verb class, overlaps the preceding verb classes  $W_{21}$ ,  $W_{22}$ , and  $W_{23}$  in that all auxiliary verbs occur also in one of those classes. Verbs of class  $W_{25}$  manifest the auxiliary tagmeme of the auxiliary predicate phrase ( $P_{26}$ ) and may occur in any aspect. There are three types in class  $W_{25}$ :  $W_{25.0.1}$  auxiliary referential type,  $W_{25.0.2}$  auxiliary equational type,  $W_{25.0.3}$  auxiliary active type.

$W_{25.0.1}$  includes referential verbs which may occur as auxiliaries such as *ndiya* 'is-there', *ngoʔo* 'is-on/staying', *ndukwa* 'is-on'. As auxiliaries, verbs of subclass  $W_{25.0.1}$  are usually in the basic form.

$W_{25.0.2}$  comprises an equational verb which occurs as



an auxiliary only in the directed form, i.e., *ndška* 'is-being, dir.' (is able, is caused to be).

$W_{25.0.3}$  includes active verbs which may occur as auxiliaries, such as *nsno* 'running', *ndiyō* 'returning', *ngiya* 'going', *nšo?* 'collecting, dir?', *nsula* 'opening', *nsu?wa* 'putting', *ngine* 'sounding', *ndyi* 'finishing, dir.' As auxiliaries, verbs of subclass  $W_{25.0.3}$  occur in either the basic form or the directed form.

1.3.6.  $W_{26}$ , the quotational verb class, is limited to two members only *yhwī* 'said' and *?ni* 'did/made' which occur only in the cited form. Verbs of class  $W_{26}$  manifest only the quotation mark tagmeme in the speech symbiotic clause ( $C_{21}$ ).

1.3.7.  $W_{27}$ , the emotional head verb class, is composed of verbs derived from certain nouns, verbs, and particles from classes  $W_{1.4}$ ,  $W_{1.5}$ ,  $W_{11}$ ,  $W_{21}$ ,  $W_{22}$ , or  $W_{23}$ . They are verbalised by occurrence with the minor word *ti?*<sup>32</sup> 'emotional verbaliser' from subclass  $W_{03.2}$  to form predicate phrases chiefly indicative of feelings and emotions.  $W_{27}$  has no subclasses, but 4 types:  $W_{27.0.1}$  particle head type,  $W_{27.0.2}$  basic type,  $W_{27.0.3}$  directed type,  $W_{27.0.4}$  differentiated type. Words from class  $W_{27}$  all manifest the emotional head tagmeme in the emotional predicate phrase ( $P_{24}$ ).

$W_{27.0.1}$  includes certain particles and stative verbs which do not take the usual verb aspect markers or the infix *-y-* 'action-directed-toward-goal' and include *tsu?we* 'good' (*tsu?we ti?* 'doing-good-to'), *tlyu* 'big' (*tlyu ti?* 'is-brave'), *ti?i* 'hurt' (*ti?i ti?* 'grieve').

$W_{27.0.2}$  includes certain verbs and nouns with aspect markers which occur only in the basic form, such as *nsnyō* 'nausea' (*snyō ti?* 'is-nauseated'), *ndiya* 'is-there' (*ndiya ti?* 'liking'), *nsī* 'meaning uncertain' (*nsī ti?* 'is-angry'), *ša* 'light' (*nša ti?* 'waking-up').

$W_{27.0.3}$  includes certain verbs which occur with aspect

markers but only in the directed form, such as *ndška* 'is, dir.' (*ndška ti?* 'wanting'), *nšuwá* 'putting, dir.' (*nšuwá ti?* 'remembering').

$W_{27.0.4}$  includes certain verbs with aspect markers which may occur in both basic and directed forms, such as *ndikí* 'burning' (*ndikí ti?* 'is-angry'), *ndiʔí* 'is-there/living' (*ndiʔí ti?* 'feeling'), *nskyeʔ* 'meaning uncertain' (*nskyeʔ ti?* 'thinking').

1.3.8.  $W_{28}$ , the stative verb class, has a very limited membership and no subclasses. The verbs in this class do not take aspect markers and include *siʔi* 'is-not', *su* 'lying', *tiʔi* 'hurting'. Verbs of class  $W_{28}$  manifest the head tagmeme of the stative predicate phrase ( $P_{25}$ ).

1.4. There are four classes in the minor word hyperclass  $w_{00}$ , each of which has a limited membership.

1.4.1.  $w_{01}$ , the augmentative class of minor words, has two subclasses:  $w_{01.1}$  intensifier augmentative subclass,  $w_{01.2}$  comparison augmentative subclass.

$w_{01.1}$  is a limited subclass of intensifying augmentative minor words and includes<sup>11</sup> *saʔa<sup>1</sup> ~ ʔa<sup>1</sup>* 'very much' and *la<sup>3</sup> ~ ʔa<sup>3</sup>* 'more'. The minor words of subclass  $w_{01.1}$  manifest the degree tagmeme in the post-periphery of the predicate phrase class ( $P_{20}$ ), or the augmentation tagmeme in the negative minor phrase ( $p_{04}$ ).

$w_{01.2}$  is a limited subclass of augmentatives showing comparison and includes *la<sup>2</sup>* 'comparative' and *ti<sup>3</sup>* 'superlative'. The minor words of subclass  $w_{01.2}$  manifest the comparative and superlative tagmemes respectively of the comparison minor phrase ( $p_{01}$ ).

<sup>11</sup>The fluctuation of the minor words *saʔa<sup>1</sup> ~ ʔa<sup>1</sup>* 'much/very' is free, but the fluctuation of *la<sup>3</sup> ~ ʔa<sup>3</sup>* 'more' is conditioned; *ʔa<sup>3</sup>* 'more' occurs where the predicate phrase is negated and *la<sup>3</sup>* 'more' occurs elsewhere.

1.4.2.  $w_{02}$ , the classifier class of minor words, has two subclasses:  $w_{02.1}$  noun classifier subclass,  $w_{02.2}$  deictic subclass.

$w_{02.1}$  is a limited subclass of minor words classifying certain nouns which includes  $t\check{s}a^3$ ,  $tu^3$ , and  $la^3$  'classifier'. The minor words of subclass  $w_{02.1}$  manifest the classification tagmeme in the classifier minor phrase ( $p_{02}$ ).

$w_{02.2}$ . There is a further classifier minor word which is an exception to subclass  $w_{01}$ , i. e., the deictic  $nu^3$  'the-particular/who/which', which manifests the deictic tagmeme in the pre-periphery of the noun phrase class ( $P_0$ ) and the introducer tagmeme of the relative minor sentence ( $s_{01}$ ).

1.4.3.  $w_{03}$ , the boundary class of minor words, has four subclasses:  $w_{03.1}$  phrase-initial boundary subclass,  $w_{03.2}$  phrase-final boundary subclass,  $w_{03.3}$  directional boundary subclass,  $w_{03.4}$  sentence boundary subclass.

$w_{03.1}$  is a limited subclass of boundary minor words marking the beginning of predicate phrases which includes  $ha^4 \sim ?a^4$  'negation' and  $wa^2$  'completion'. Minor words of subclass  $w_{03.1}$  manifest the negation-completion tagmeme of the pre-periphery of the predicate phrase class ( $P_{20}$ ), and also the negation tagmeme in the negation minor phrase ( $p_{04}$ ), and the completion tagmeme in the temporal phrase ( $P_{31}$ ) respectively.

$w_{03.2}$  is a limited subclass of boundary minor words marking the end of predicate and/or noun phrases, which includes  $ti^3$  'emotional verbaliser',  $tu^3$  'for-sure', and  $ti^3$  'only, just'. The minor words of subclass  $w_{03.2}$  manifest respectively the emotional verbaliser tagmeme of the emotional predicate phrase ( $P_{24}$ ), the certainty tagmeme of the affirmation predicate phrase ( $P_{23}$ ), and the limitation tagmeme which occurs in the post-periphery of both noun and predicate phrases and in the nucleus of the limited minor phrase ( $p_{03}$ ).

$w_{03.3}$  is a limited subclass of prepositions which in-

cludes  $ti^3$  'from' and  $la^3$  'towards'. Minor words of subclass  $w_{03.3}$  may manifest the director preposition tagmeme of the prepositionally directed phrase ( $P_{12}$ ).

$w_{03.4}$  consists of the minor word  $?a^4 \sim a^4$  'question-indicator' which marks the end of an inquiry sentence ( $S_{24}$ ) and manifests the question marker sentence-level tagmeme.

1.4.4.  $w_{04}$ , the pronominal class of minor words includes  $o^2$  'we-inclusive',  $ba^2$  'we-exclusive',  $w_o^3$  'you-pl./respectful'. Minor words of class  $w_{04}$  may manifest the subject, equational subject, pronominal subject, and speaker clause-level tagmemes and the owner tagmeme in the possessive noun phrase I ( $P_3$ ).

## 2. *Phrase Types*

There are both major and minor phrases in Chatino. The major phrases are expanded by both major and minor words, but the minor phrases are expanded only by minor words. The major phrases usually function as manifestations of tagmemes at levels higher than the phrase whereas the minor phrases usually function as manifestations of major phrase-level tagmemes.

There are five classes of phrases, four of which comprise major phrases: noun phrase class ( $P_0$ ), prepositional phrase class ( $P_{10}$ ), predicate phrase class ( $P_{20}$ ), general phrase class ( $P_{30}$ ), minor phrase class ( $p_{00}$ ).

2.1. There are six phrase types in noun phrase class  $P_0$ , including those with and those without peripheral tagmemes. Such peripheral tagmemes are usually common to more than one type and occur in either the pre-periphery or the post-periphery. The peripheral tagmemes are described individually under  $P_1$ .

2.1.1.  $P_1$ , the attributive noun phrase, in its minimum form is manifested by a single noun, and in its maximum form is characterised by greater expansion than any other type in class  $P_0$ . This type has three allotypes:  $P_{1.1}$ ,  $P_{1.2}$ , and  $P_{1.3}$ .<sup>12</sup> They may be graphically represented thus:

$$P_{1.1} = \pm \text{Qua} \quad \pm \text{Num} \quad \pm \text{del} \quad (+ \text{H}) \quad \pm \text{Att} \quad \pm \text{Ch} \quad \pm \text{St} \\ \pm \text{Col} \quad \pm \text{Adj} \quad \pm \text{Dem} \quad \pm \text{li}$$
$$P_{1.2} = \pm \text{pre-periphery} \quad (+ \text{H}) \quad \pm \text{Desg}$$

<sup>12</sup> It may be that further investigation will show that  $P_{1.1}$  should be divided into more subtypes on the basis of co-occurrence.

$P_{1.3} = \pm$  pre-periphery (+ H)  $\pm$  Des

In  $P_1$  the head tagmeme alone is nuclear and obligatory, manifested by a noun from hyperclass  $W_0$ , by  $P_2$ , or  $p_{02}$ , or by a particle from class  $W_{11}$  if the deictic pre-peripheral tagmeme occurs also (see 3.2.1). The pre-periphery consists of an optional quantity tagmeme manifested by a quantifier particle from subclass  $W_{11.1}$  (see 3.1.1), followed by an optional number tagmeme manifested by a numeral from class  $W_{12}$ , or by  $p_{03}$ ,  $P_1$ ,  $P_{33}$ , or the minor clause  $c_{04}$  (see 3.1.2), followed by an optional deictic tagmeme manifested by the minor word  $nu^3$  'the-particular' (see 3.1.3). The post-periphery differs in the three allotypes. In  $P_{1.1}$  it consists of the optional attribution tagmeme manifested by an attributive particle from subclass  $W_{11.2}$  (see 3.1.4), followed by the optional character tagmeme manifested by a characteristic particle from subclass  $W_{11.3}$  (see 3.1.5), followed by the optional status tagmeme manifested by a state particle from subclass  $W_{11.4}$  (see 3.1.6), followed by the optional colouration tagmeme manifested by a colour particle from subclass  $W_{11.5}$  (see 3.1.7), followed by the optional adjectival tagmeme manifested by an adjective particle from subclass  $W_{11.6}$  (see 3.1.8), followed by the optional demonstration tagmeme manifested by a demonstrative pronoun from subclass  $W_{4.3}$  (see 3.1.9), and finally followed by the optional limitation tagmeme manifested by the minor word  $ti^3$  'only, just' (see 3.1.10). The post-periphery of  $P_{1.2}$  consists of the single optional designation tagmeme manifested by a minor clause from class  $c_{00}$  (see 3.1.11). The post-periphery of  $P_{1.3}$  consists of the single optional description tagmeme which may be repeated and is manifested by the relative minor sentence  $s_{01}$  (see 3.1.12). Examples of phrase  $P_1$  follow with constituent tagmemes indicated.

- (a)        ska<sup>3</sup>        tɪ<sup>3</sup>        nu<sup>3</sup>                kwitšɪ<sup>3</sup>  
 P<sub>1.1</sub> = Num:p<sub>03</sub>        dei                H:p<sub>02</sub>  
 one        only the-particular rabbit  
    the rabbit alone
- (b)        ndšga<sup>3</sup> kala<sup>4</sup>        yka<sup>3</sup>        tlyu<sup>2</sup> kwa<sup>3</sup>  
 P<sub>1.1</sub> = Qua        Num:W<sub>12.1</sub>        H:W<sub>1.1</sub>        Adj        Dem  
 every twenty        tree        big there  
    every one of those twenty big trees
- (c)        tukwa<sup>1</sup>        la<sup>2</sup>                kwisu<sup>3</sup>        štlya<sup>34</sup>        nde<sup>3</sup>        ti<sup>3</sup>  
 P<sub>1.1</sub> = Num:W<sub>12.2</sub>        H:p<sub>02</sub>                                Att        Dem li  
 two                classifier turkey Spanish here only  
    just these two peacocks
- (d)        kaʔyu<sup>1</sup>        yka<sup>3</sup>        štlya<sup>34</sup>        tsuʔwe<sup>32</sup>  
 P<sub>1.1</sub> = Num:W<sub>12.2</sub>        H:W<sub>1.2</sub>        Att        Ch  
 five                wood Spanish good  
    five good chairs
- (e)        nu<sup>3</sup>                nte<sup>34</sup>        šeʔo<sup>34</sup>        kuneʔ<sup>1</sup>  
 P<sub>1.1</sub> = dei                H:W<sub>1.1</sub>        Ch        St  
 the-particular people wicked young  
    the wicked young person (man)
- (f)        tukwa<sup>1</sup>        buru<sup>34</sup>        kuneʔ<sup>1</sup>        bayu<sup>34</sup>  
 P<sub>1.1</sub> = Num:W<sub>12.2</sub>        H:W<sub>1.1</sub>        St        Col  
 two                donkey young dun-coloured  
    two young dun-coloured donkeys
- (g)        škwiʔ<sup>1</sup>        kye<sup>32</sup>        ngaʔa<sup>1</sup>        tlyu<sup>3</sup>        ti<sup>3</sup>  
 P<sub>1.1</sub> = Qua        H:W<sub>1.1</sub>        Col        Adj        li  
 all flower red big only  
    just big red flowers all over
- (h)        nu<sup>3</sup>                seʔe<sup>3</sup>  
 P<sub>1.2</sub> = dei                H:W<sub>1.1</sub>  
 the-particular place

ndukwa<sup>1</sup> ska<sup>3</sup> nu<sup>3</sup> tu<sup>3</sup> kye<sup>1</sup> ʔ<sub>1</sub><sup>3</sup>  
 Desg: c<sub>03</sub>  
 is-on one the-particular cave pronoun  
 the place where his cave is

(i) ska<sup>3</sup> nɔ<sub>1</sub><sup>2</sup> ngus<sub>1</sub>ʔ<sub>1</sub><sup>43</sup> ti<sup>2</sup> ka<sup>3</sup>  
 P<sub>1.2</sub> = Num:W<sub>12.2</sub> H:W<sub>1.1</sub> Desg:c<sub>01</sub>  
 one thing bought-I from yesterday  
 a thing that I bought yesterday

(j) ska<sup>3</sup> nte<sub>1</sub><sup>34</sup> nu<sup>3</sup> lka<sup>4</sup> msu<sup>34</sup> ʔ<sub>1</sub><sup>1</sup> yu<sup>3</sup>  
 P<sub>1.3</sub> = Num:W<sub>12.2</sub> H:W<sub>1.1</sub> Des:s<sub>01</sub>  
 one people which is servant to man  
 a person who is the man's servant

(k) kunɔ<sub>1</sub>ʔ<sup>1</sup> wta<sup>34</sup> nu<sup>3</sup> ndlo<sup>32</sup> ti<sup>2</sup> ne<sup>ʔ3</sup> lo<sup>2</sup> šlyu<sup>34</sup>  
 P<sub>1.3</sub> = H:P<sub>2</sub> Des<sup>1</sup>:s<sub>01</sub>  
 meat cow which getting-out just person with knife  
 nu<sup>3</sup> s<sub>1</sub>ʔyu<sup>1</sup> ne<sup>ʔ3</sup> lo<sup>2</sup> šlyu<sup>34</sup>  
 Des<sup>2</sup>:s<sub>01</sub>  
 which cut person with knife  
 beef which they cut out of the animal and slice with a knife

2.1.2. P<sub>2</sub>, the quality noun phrase, consists of two obligatory nuclear tagmemes with no periphery. P<sub>2</sub> may be graphically represented thus:

P<sub>2</sub> = (+ QH + Q)

In P<sub>2</sub> the obligatory quality head tagmeme, manifested by certain nouns from classes W<sub>1</sub> and W<sub>2</sub> (see 3.2.2), is followed by the obligatory quality tagmeme manifested by a specifying noun from classes W<sub>1</sub> and W<sub>3</sub>, or by P<sub>3</sub> or a further P<sub>2</sub> (see 3.2.3). Examples of P<sub>2</sub> follow with constituent tagmemes indicated.

(a) tškwɔ<sub>1</sub><sup>43</sup> yka<sup>2</sup>  
 P<sub>2</sub> = QH:W<sub>1.1</sub> Q:W<sub>1.2</sub>  
 metal wood  
 axe



- (b)     te<sup>34</sup>     kltš<sup>0</sup>q<sup>2</sup>  
 $P_2 = \text{QH:}W_{1.1} \text{ Q:}W_{1.2}$   
           cloth     hair-of  
                   blanket
- (c)     sta<sup>4</sup>     tne<sup>3</sup>     ne<sup>3</sup>  
 $P_2 = \text{QH:}W_{1.3} \text{ Q:}P_3$   
           line     blood-of person  
                   blood vessel
- (d)     kwlya<sup>4</sup>   yka<sup>3</sup>   wtya<sup>2</sup>  
 $P_2 = \text{QH:}W_{1.1} \text{ Q:}P_2$   
           mushroom tree type  
           particular kind of mushroom
- (e)     nda<sup>4</sup>     kwih<sup>2</sup>  
 $P_2 = \text{QH:}W_{1.1} \text{ Q:}W_{1.1}$   
           a-legume skunk  
                   onion
- (f)     š<sup>u</sup>wa<sup>4</sup>   nti<sup>23</sup>  
 $P_2 = \text{QH:}W_{2.1} \text{ Q:}W_{1.3}$   
           Juan     valley  
           John who lives in the valley

2.1.3.  $P_3$ , the possessive noun phrase I, is used to express obligatory possession and consists of two obligatory nuclear tagmemes, the optional pre-periphery, and one optional post-peripheral tagmeme.  $P_3$  may be graphically represented thus:

$$P_3 = \pm \text{pre-periphery} \quad (+ \text{IPH} + \text{Own}) \quad \pm \text{li}$$

The optional noun pre-periphery is followed by the obligatory innately possessed head tagmeme manifested by a noun from class  $W_1$  (see 3.2.4), followed by the obligatory owner tagmeme manifested by words from classes  $W_0$  or  $w_{04}$ , or phrases from  $P_0$  (see 3.2.5), and followed by the optional phrase boundary marker, the limitation tagmeme (see 3.1.10). Examples of  $P_3$  follow with constituent tagmemes indicated.

- (a)       $sn\acute{o}^1$        $snye\gamma^2$        $reyl^4$   
 $P_3 = \text{Num: } W_{12.2}$      $\text{IPH: } W_{1.2}$      $\text{Own: } W_{1.1}$   
           three      child-of    king  
           the king's three daughters
- (b)       $kiya\gamma^{32}$        $msa^{34}$   
 $P_3 = \text{IPH: } W_{1.2}$      $\text{Own: } W_{1.1}$   
           foot-of    table  
           table leg
- (c)       $ska^3$        $nu^3$        $sn\acute{o}^3$        $hwele^4$   
 $P_3 = \text{Num: } W_{12.2}$      $\text{del}$        $\text{IPH: } W_{1.2}$      $\text{Own: } W_{2.1}$   
           one      the-particular    sandal-of Félix  
                   one of Félix's sandals

2.1.4.  $P_4$ , the possessive noun phrase II, is used to express possession of nouns that are not obligatorily possessed, and consists of three obligatory nuclear tagmemes and one optional post-peripheral tagmeme.  $P_4$  may be graphically represented thus:

$$P_4 = (+ PH + PI + Por) \pm li$$

The obligatory possessed head tagmeme, manifested by nouns of class  $W_1$  or by class  $P_0$ , or  $p_{02}$  (see 3.2.6), is followed by the obligatory possession indicator tagmeme manifested by the independent preposition  $\gamma_i^1$  'to' (see 3.2.7), followed by the obligatory possessor tagmeme manifested by a noun from hyperclass  $W_0$ , or by phrases from class  $P_0$  (see 3.2.8), and followed by the optional limitation tagmeme (see 3.1.10). When the possessor tagmeme is manifested by a pronoun from  $W_{4.2}$ , the possession indicator  $\gamma_i^1$  'to' is fused to it in one word. Examples of  $P_4$  follow with constituent tagmemes indicated.

- (a)       $tu^3$   $n\acute{o}\gamma\acute{o}^4$   $\gamma_i^1$   $la^1$        $tnu^3$   
 $P_4 = \text{PH: } p_{02}$        $\text{PI}$      $\text{Por: } P_{1.1}$   
           door      to church    great  
           the great church's door

- (b) ska<sup>3</sup> kin<sub>2</sub><sup>3</sup> ʔ<sub>1</sub><sup>1</sup> ndiyu<sub>2</sub><sup>34</sup>  
 P<sub>4</sub> = PH:P<sub>1</sub> PI Por:W<sub>2.1</sub>  
 one sandal to Antonio  
 one sandal of Anthony's

- (c) te<sup>ʔ34</sup> kitš<sub>2</sub><sup>3</sup> ʔyo<sub>2</sub><sup>21</sup>  
 P<sub>4</sub> = PH:P<sub>2</sub> [PI Por]:W<sub>4.2</sub>  
 cloth hair to-me  
 my blanket

- (d) tikye<sup>ʔ32</sup> ʔ<sub>1</sub><sup>1</sup> y<sup>ʔ1</sup> linda<sup>4</sup>  
 P<sub>4</sub> = PH:W<sub>1.1</sub> PI Por:P<sub>3</sub>  
 heat to mother Linda  
 Linda's mother's fever

2.1.5. P<sub>5</sub>, the addressee noun phrase, consists of two nuclear tagmemes, one obligatory and one optional, with no periphery. P<sub>5</sub> may be graphically represented thus:

$$P_5 = (+ \text{Ad} \quad \pm \text{Sp})$$

The obligatory addressee tagmeme, manifested by noun subclass W<sub>2.3</sub> (see 3.2.9), is followed by the optional specifier tagmeme manifested by certain nouns from subclass W<sub>1.1</sub> or a restricted P<sub>1.1</sub> (see 3.2.10). Examples of P<sub>5</sub> follow with constituent tagmemes indicated.

- (a) tš<sub>2</sub><sup>3</sup>o<sup>ʔ32</sup>  
 P<sub>5</sub> = Ad  
 Friend  
 a vocative term used between women

- (b) tš<sub>2</sub><sup>3</sup>e<sup>32</sup> š<sub>1</sub><sup>3</sup>ni<sup>ʔ3</sup> ndaha<sup>3</sup>  
 P<sub>5</sub> = Ad Sp:P<sub>1.1</sub>  
 friend dog lazy  
 Friend Lazy Dog

- (c) š<sub>1</sub><sup>3</sup>kw<sub>2</sub><sup>2</sup> wo<sup>ʔ1</sup>o<sup>34</sup>  
 P<sub>5</sub> = Ad Sp:W<sub>1.1</sub>  
 friend coyote  
 Friend Coyote

These vocative nouns  $t\check{s}e^{32}$  and  $\check{s}kwe^2$  are the vocative terms used reciprocally between men.

2.1.6.  $P_6$ , the appositive noun phrase, consists of two obligatory nuclear tagmemes with no periphery, and may be more complex than any other type in class  $P_0$  because of the included phrases.  $P_6$  may be graphically represented thus:

$$P_6 = (+ \text{TopH} + \text{App})$$

The obligatory topic head tagmeme, manifested by a noun from class  $W_1$ , or by  $P_1$  or  $P_4$  (see 3.2.11), is followed by the obligatory apposition tagmeme manifested by  $P_1$ ,  $P_3$ , or  $P_4$  (see 3.2.12). Examples of  $P_6$  follow with constituent tagmemes indicated.

- (a)  $t\check{s}kw_0^{43}$   $t\check{s}a^{\gamma 2}$   $nu^3$   $nguda^1$   $nu^3$   $\check{s}^{\gamma}no^2$   
 $P_6 = \text{TopH}:W_{1.1}$   $\text{App}:P_{1.3}$   
 metal thing which gave the-particular boss  
 the metal weapons which the boss gave to us

- (b)  $ska^3$   $t\check{s}a^{\gamma 32}$   $m\check{s}tye^3$   $t\check{s}a^{\gamma 2}$   $nu^3$   $ha^4$   $hlyo^{23}$   $ti^{\gamma 32}$   $o^3$   
 $P_6 = \text{TopH}:P_{1.1}$   $\text{App}:P_{1.3}$   
 one word crazy word which negation know we-inclusive  
 Crazy speech consists of words that we do not understand.

2.2. There are two phrase types in the prepositional phrase class  $P_{10}$ . These are characterised by tagmemes manifested by members of the noun phrase class  $P_0$ . This class is without peripheral tagmemes.

2.2.1.  $P_{11}$ , the relational phrase, consists of two or three nuclear tagmemes, one obligatory and the others optional. There are two subtypes,  $P_{11.1}$  and  $P_{11.2}$ , which may be graphically represented thus:

$$P_{11.1} = (+ \text{Rel}_1 \pm \text{Com})$$

$$P_{11.2} = (\pm n + \text{Rel}_2 \pm \text{Com})$$

In  $P_{11.1}$ , the obligatory relator<sub>1</sub> allotagma, manifested by a particle from subclass  $W_{14.1}$  (see 3.3.2), is followed by the optional concomitant tagmeme manifested by a locative noun of subclass  $W_{1.4}$ , or by any of the noun phrase class  $P_0$  except  $P_5$  or  $P_8$  (see 3.3.3). In  $P_{11.2}$ , the optional negation tagmeme, manifested by the minor word  $ha^4 \sim ?a^4$  'negation' (see 3.3.1), is followed by the obligatory relator<sub>2</sub> allotagma manifested by the independent preposition  $lo?o^1$  'with' (see 3.3.2), followed by the optional concomitant tagmeme (see 3.3.3). Examples of  $P_{11}$  follow with constituent tagmemes indicated.

- (a)  $ni?^2$   
 $P_{11.1} = Rel_1$   
 inside  
 inside it
- (b)  $ni?^2 \quad lyo?o^{32}$   
 $P_{11.1} = Rel_1 \quad Com:W_{1.4}$   
 inside inside-corral  
 inside the corral
- (c)  $tšy?^{23} \quad n?o^3$   
 $P_{11.1} = Rel_1 \quad Com:P_1$   
 behind house  
 behind the house
- (d)  $lo^3 \quad n?o^3 \quad tškw?^{43}$   
 $P_{11.1} = Rel_1 \quad Com:P_2$   
 on house metal  
 at the gaol
- (e)  $lo^2 \quad n?o^2 \quad ?yo^{21}$   
 $P_{11.1} = Rel_1 \quad Com:P_4$   
 on thing to-me  
 on my things

- (f)            ha<sup>4</sup>            loʔo<sup>1</sup>  
 P<sub>11.2</sub> = n            Rel<sub>2</sub>  
                  negation with  
                  I/you/he do not have it/him with me/you/him.

- (g)            loʔo<sup>1</sup>    snye<sup>2</sup>    ne<sup>3</sup>  
 P<sub>11.2</sub> = Rel<sub>2</sub>    Com: P<sub>3</sub>  
                  with child-of person  
                  with his child

2.2.2. P<sub>12</sub>, the prepositionally directed phrase, consists of two obligatory nuclear tagmemes. P<sub>12</sub> may be graphically represented thus:

$$P_{12} = (+ dp + Cpr)$$

The obligatory director preposition tagmeme, manifested by a minor word from the directional boundary subclass w<sub>03.3</sub> (see 3.3.4), is followed by the obligatory completor tagmeme manifested by any of the noun phrase class P<sub>0</sub> except P<sub>5</sub> or P<sub>6</sub>, or by p<sub>03</sub>, or by temporal nouns from class W<sub>3</sub>, temporal particles from class W<sub>13</sub> or by a stative clause (C<sub>5</sub>) (see 3.3.5). Examples of P<sub>12</sub> follow with constituent tagmemes indicated.

- (a)            la<sup>2</sup>            šnyʔ<sup>1</sup>            tso<sup>23</sup>  
 P<sub>12</sub> = dp            Cpr: P<sub>1</sub>  
                  towards another-eight day  
                  in a week's time
- (b)            ti<sup>3</sup>            kwiʔyu<sup>1</sup>  
 P<sub>12</sub> = dp            Cpr: W<sub>3.1</sub>  
                  from day-before-day-before-yesterday  
                  three days ago
- (c)            la<sup>2</sup>            nde<sup>3</sup> la<sup>2</sup> ti<sup>3</sup> tš<sub>1</sub>ʔ<sup>1</sup>  
 P<sub>12</sub> = dp            Cpr: C<sub>5</sub>  
                  towards here most a-little  
                  It's this way a little bit more.

- (d)         $ti^2$      $kwa^3$      $ti^3$   
 $P_{12} = dp$      $Cpr:p_{03}$   
               from there only  
               just from there

2.3. There are six phrase types in the predicate phrase class  $P_{20}$ , all with both nuclear and peripheral tagmemes except  $P_{23}$ . Selections from the same peripheral tagmemes occur with each type forming the pre-periphery and post-periphery. Although rare, it is possible for all the peripheral tagmemes to occur in the same phrase, usually in an example of  $P_{21}$ .

2.3.1.  $P_{21}$ , the simple predicate phrase, consists of a single obligatory nuclear tagmeme with an optional pre-periphery and an optional post-periphery.  $P_{21}$  may be graphically represented thus:

$$P_{21} = \pm ncp \quad \pm Adv \quad (+ PrH) \quad \pm deg \quad \pm Mod \quad \pm li$$

The optional negation-completion tagmeme, manifested by the minor words  $ha^4 \sim ?a^4$  'negation' or  $wa^2$  'completion' (see 3.4.1), is followed by the optional adverbial tagmeme manifested by a descriptive particle from class  $W_{11}$ , or a temporal from classes  $W_{3.1}$  or  $W_{13}$ , or by a minor phrase (see 3.4.2), followed by the obligatory predicate head tagmeme manifested by a verb from hyperclass  $W_{20}$  (see 3.5.1), followed by the optional degree tagmeme manifested by an augmentative minor word (see 3.4.3), followed by the optional modification tagmeme manifested by a descriptive particle of class  $W_{11}$ , or by  $p_{01}$  (see 3.4.4), followed by the optional phrase boundary marker, the limitation tagmeme (see 3.1.10). Subclass  $W_{11.8}$  of descriptive particles, or an expansion of these descriptives to a comparison minor phrase, may manifest either the adverbial or the modification tagmemes with a slight lexical difference according to the tagmeme manifested. Examples of  $P_{21}$  follow with constituent tagmemes indicated.

- (a)      wa<sup>2</sup>            lye<sup>32</sup> la<sup>3</sup>    nguʔni<sup>1</sup>  
 P<sub>21</sub> = ncp            Adv:p<sub>01</sub>        PrH:W<sub>23</sub>  
 completion much more made-he  
 He had done much more.
- (b)      wa<sup>2</sup>            nguʔni<sup>1</sup> lye<sup>32</sup> la<sup>3</sup>  
 P<sub>21</sub> = ncp            PrH:W<sub>23</sub> Mod:p<sub>01</sub>  
 completion made-he much more  
 He had done much more.
- (c)      kuʔni<sup>32</sup>            la<sup>3</sup>    t̃s̃i<sup>1</sup>  
 P<sub>21</sub> = PrH:W<sub>23</sub>        deg    Mod:W<sub>11.7</sub>  
 will-make-you more a-little  
 You are to do a little more.
- (d)      ha<sup>4</sup>            tsuʔwe<sup>32</sup>    ndɔʔɔ<sup>1</sup>        ʔa<sup>2</sup>  
 P<sub>21</sub> = ncp            Adv:W<sub>11.3</sub> PrH:W<sub>23</sub>        deg  
 negation good        walking-she more  
 She no longer walks well now.

2.3.2. P<sub>22</sub>, the qualified predicate phrase, consists of two obligatory nuclear tagmemes with an optional pre-periphery and a limited post-periphery. There are two subtypes, P<sub>22.1</sub> and P<sub>22.2</sub>, which may be graphically represented thus:

$$P_{22.1} = \pm \text{pre-periphery} \quad (+ \text{QPrH}_1 + \text{Qn}_1) \quad \pm \text{li}$$

$$P_{22.2} = \pm \text{pre-periphery} \quad (+ \text{QPrH}_2 + \text{Qn}_2) \quad \pm \text{li}$$

In P<sub>22.1</sub> the optional predicate pre-periphery is followed by the obligatory qualified predicate head<sub>1</sub> allotagma manifested by certain verbs from classes W<sub>22</sub> and W<sub>23</sub> (see 3.5.2), followed by the obligatory qualification<sub>1</sub> allotagma manifested by certain nouns from class W<sub>1</sub> (see 3.5.3), followed by the optional limitation tagmeme (see 3.1.10). In P<sub>22.2</sub> the optional pre-periphery is followed by the obligatory qualified predicate head<sub>2</sub> allotagma manifested by certain verbs from class W<sub>23</sub> (see 3.5.2), followed by the obligatory qualification<sub>2</sub> allotagma manifested by the referential class W<sub>21</sub> of



verbs (see 3.5.3), followed by the optional limitation tag-meme. Examples of  $P_{22}$  follow with constituent tagmemes indicated.

- (a)            wa<sup>2</sup>            nsi<sup>?</sup>yu<sup>1</sup>            ku<sup>?</sup>32            ti<sup>3</sup>  
 $P_{22 \cdot 1} =$  ncp            QPrH<sub>1</sub>:W<sub>23</sub>    Qn<sub>1</sub>:W<sub>1 \cdot 1</sub>    li  
                  completion cutting            end            only  
                  (They) just cut off slices.
- (b)            lye<sup>32</sup>            nš<sup>?</sup>u<sup>43</sup>            ta<sup>?</sup>a<sup>23</sup>  
 $P_{22 \cdot 1} =$  Adv:W<sub>11 \cdot 8</sub>    QPrH<sub>1</sub>:W<sub>23</sub>    Qn<sub>1</sub>:W<sub>1 \cdot 2</sub>  
                  much            fighting            relative-of  
                  (They) are fighting one another.
- (c)            su<sup>?</sup>wa<sup>32</sup>            biya<sup>?</sup>  
 $P_{22 \cdot 1} =$  QPrH<sub>1</sub>:W<sub>23</sub>    Qn<sub>1</sub>:W<sub>1 \cdot 2</sub>  
                  will-put-you    measure-you  
                  You will put your weight (against mine).
- (d)            nš<sup>o</sup>32            ti<sup>?</sup><sub>i</sub><sup>32</sup>  
 $P_{22 \cdot 2} =$  QPrH<sub>2</sub>            Qn<sub>2</sub>  
                  collecting, dir.    will-be-living  
                  (They) are collecting in one place.
- (e)            tsa<sup>3</sup>            nsko<sup>?</sup><sup>1</sup>    ko<sup>?</sup>q<sup>43</sup>  
 $P_{22 \cdot 2} =$  Adv:W<sub>11 \cdot 3</sub>    QPrH<sub>2</sub>    Qn<sub>2</sub>  
                  tight            tying            will-be- adjoining  
                  (They) are tying (it) up securely.

2.3.3.  $P_{23}$ , the affirmation predicate phrase, consists solely of two obligatory nuclear tagmemes, and may be used only with the intensive aspect of the verb.  $P_{23}$  may be graphically represented thus:

$$P_{23} = (+ APrH + cer)$$

The obligatory affirmed predicate head tagmeme, manifested by certain verbs from hyperclass  $W_{20}$  (see 3.5.4), is followed by the obligatory certainty tagmeme manifested by the minor word tu<sup>?</sup>32 'for sure' (see 3.5.5). Examples of  $P_{23}$  follow with constituent tagmemes indicated.

- (a)       $hyo^{32}$                        $tu^{?2}$   
 $P_{23} = APrH:W_{23}$                $cer$   
will-return-you for-sure  
You are certain to return.
- (b)       $ka^4$                        $tu^{?2}$   
 $P_{23} = APrH:W_{22}$                $cer$   
will-be for-sure  
That is good enough.
- (c)       $ku^{32}$                        $tu^{?1}$   
 $P_{23} = APrH:W_{24}$                $cer$   
will-eat-I for-sure-I  
I will certainly eat (it).
- (d)       $tyi^{?1}_{1}{}^{23}$                        $tu^{?2}$   
 $P_{23} = APrH:W_{21}$                $cer$   
will-be-living-it, dir. for-sure  
It is quite all right for it to continue to be here.

2.3.4.  $P_{24}$ , the emotional predicate phrase, has a discontinuous nucleus consisting of two obligatory tagmemes separated by the post-periphery.  $P_{24}$  may be graphically represented thus:

$$P_{24} = \pm \text{pre-periphery} (+ EH) \pm \text{post-periphery} [-li] \\ (+ ev)$$

The optional predicate pre-periphery is followed by the obligatory emotional head tagmeme manifested by verbs from class  $W_{27}$  (see 3.5.6), followed by the optional predicate post-periphery (with the exception of the limitation tagmeme which may not occur in  $P_{24}$ ), followed by the obligatory emotional verbaliser tagmeme manifested by the minor word  $ti^{?32}$  'emotional verbaliser', which also acts as the phrase boundary marker (see 3.5.7). Examples of  $P_{24}$  follow with constituent tagmemes indicated.

(a) ha<sup>4</sup> ndiya<sup>21</sup> ʔa<sup>3</sup> tš̥iʔ<sup>1</sup> tiʔ<sup>43</sup>  
 P<sub>24</sub> = ncp EH:W<sub>27</sub> deg Mod:W<sub>11.7</sub> ev  
 negation is-belonging more a-little em. -verbr. -I  
 I do not like it at all.

(b) ndiya<sup>21</sup> la<sup>3</sup> tš̥iʔ<sup>1</sup> tiʔ<sup>43</sup>  
 P<sub>24</sub> = EH:W<sub>27</sub> deg Mod:W<sub>11.7</sub> ev  
 is-belonging more a-little em. -verbr. -I  
 I like it a little.

(c) wa<sup>2</sup> tiʔi<sup>3</sup> ngwo<sup>2</sup> ʔo<sup>3</sup> tiʔ<sup>1</sup>  
 P<sub>24</sub> = ncp EH:W<sub>27</sub> Mod:W<sub>11.8</sub> ev  
 completion hurt like that em. -verbr. -he  
 That is how grieved he was.

(d) wa<sup>2</sup> ngwo<sup>2</sup> ʔo<sup>3</sup> tiʔi<sup>3</sup> tiʔ<sup>1</sup>  
 P<sub>24</sub> = ncp Adv:W<sub>11.8</sub> EH:W<sub>27</sub> ev  
 completion like that hurt em. -verbr. -he  
 That is how he was grieved.

2.3.5. P<sub>25</sub>, the stative predicate phrase, consists of a single obligatory nuclear tagmeme with the periphery. There are two subtypes, P<sub>25.1</sub> and P<sub>25.2</sub>, which may be graphically represented thus:

P<sub>25.1</sub> = ± pre-periphery (+ SH<sub>1</sub>) ± post-periphery

P<sub>25.2</sub> = ± pre-periphery (+ SH<sub>2</sub>) ± Mod

In P<sub>25.1</sub> the optional predicate pre-periphery is followed by the obligatory stative head<sub>1</sub> allotagma manifested by a pronoun of subclass W<sub>4.3</sub>, a descriptive particle of class W<sub>11</sub>, a temporal particle from class W<sub>13</sub>, or a stative verb from class W<sub>28</sub> (see 3.5.8), followed by the optional predicate post-periphery. In P<sub>25.2</sub> the optional pre-periphery is followed by the obligatory stative head<sub>2</sub> allotagma manifested by p<sub>01</sub> (see 3.5.8), followed by the optional modification tagmeme. Examples of P<sub>25</sub> follow with constituent tagmemes indicated.

- (a)        ha<sup>4</sup>        lye<sup>32</sup>        ngutsu<sup>34</sup>  
 P<sub>25.1</sub> = ncp        Adv: W<sub>11.8</sub>    SH<sub>1</sub>: W<sub>11.9</sub>  
           negation much        muddy  
           It is not very muddy.
- (b)        ha<sup>4</sup>        kula<sup>3</sup>        lye<sup>32</sup>  
 P<sub>25.1</sub> = ncp        SH<sub>1</sub>: W<sub>11.4</sub>    Mod: W<sub>11.8</sub>  
           negation old        much  
           It is not very old.
- (c)        tlya<sup>2</sup>        ʔa<sup>1</sup>  
 P<sub>25.1</sub> = SH<sub>1</sub>: W<sub>11</sub> deg  
           cold        very  
           It is very cold.
- (d)        wa<sup>2</sup>        sʔni<sup>3</sup>        ʔa<sup>1</sup>  
 P<sub>25.1</sub> = ncp        SH<sub>1</sub>: W<sub>13</sub>    deg  
           completion long-ago very  
           It was a very long time ago.
- (e)        ngaʔa<sup>23</sup>    la<sup>2</sup>    ti<sup>3</sup>  
 P<sub>25.2</sub> = SH<sub>2</sub>  
           greenest  
           It is the greenest.
- (f)        wa<sup>2</sup>        kula<sup>3</sup>    la<sup>3</sup>    tš<sub>i</sub>ʔ<sup>1</sup>  
 P<sub>25.2</sub> = ncp        SH<sub>2</sub>        Mod: W<sub>11.7</sub>  
           completion older    a-little  
           It is a little older.

2.3.6. P<sub>26</sub>, the auxiliary predicate phrase,<sup>13</sup> consists of two obligatory nuclear tagmemes with the periphery. P<sub>26</sub> may be graphically represented thus:

P<sub>26</sub> = + pre-periphery (+ Aux + AH) + post-periphery

The optional predicate pre-periphery is followed by the obligatory auxiliary tagmeme manifested by an auxiliary verb

<sup>13</sup>A detailed analysis of co-occurrence subtypes of P<sub>26</sub> has not yet been attempted. Further analysis may establish further contrasting types.

of class  $W_{25}$  (see 3.5.9), followed by the obligatory head to the auxiliary tagmeme manifested by a verb from hyperclass  $W_{20}$ , or by  $P_{24}$  or a further  $P_{26}$  (see 3.5.10), followed by the optional predicate post-periphery. Examples of  $P_{26}$  follow with constituent tagmemes indicated.

- (a)       $ya^{32}$      $ytsa^{32}$   
 $P_{26}$  = Aux    AH:  $W_{23}$   
           went told-he  
           He went and told.
- (b)       $su^2$        $ndi'o^{43}$                        $ti^3$   
 $P_{26}$  = Aux    AH:  $W_{21}$                       li  
           lying is- adjoining, dir.    only  
           just stays lying there
- (c)       $ha^4$            $ka^{43}$        $ku'ni^1$        $\check{s}o'o^{32}$        $lye^{32}$   
 $P_{26}$  = ncp      Aux      AH:  $P_{26}$  [Aux AH]      Mod:  $W_{11.8}$   
           negation will-be will-make will-change much  
           will not be able to learn much
- (d)       $nd\check{s}ka^{32}$      $ndi'o^{43}$   
 $P_{26}$  = Aux      AH:  $W_{23}$   
           is, dir. bringing-he  
           he is able and is bringing

2.4. There are four phrase types in the general phrase class  $P_{30}$ . They occur without peripheral tagmemes, and consist only of nuclei.

2.4.1.  $P_{31}$ , the temporal phrase, consists of three nuclear tagmemes of which two are obligatory and one optional. It is used when calculating elapsed time.  $P_{31}$  may be graphically represented thus:

$$P_{31} = (+ \text{Spe} + \text{cp} + \text{TH})$$

The optional specification tagmeme, manifested by certain temporal nouns from class  $W_3$  or by  $P_2$  (see 3.6.1), is fol-

lowed by the obligatory completion tagmeme manifested by the minor word  $wa^2$  'completion' (see 3.6.2), followed by the obligatory temporal head tagmeme manifested by  $P_1$ ,  $p_{03}$ , a noun from class  $W_3$ , or a particle from class  $W_{13}$  (see 3.6.3). Examples of  $P_{31}$  follow with constituent tagmemes indicated.

- (a)         $kya^{43}$          $wa^2$          $sn\dot{u}^{\gamma 43}$   $ts\dot{o}^{23}$   
 $P_{31} =$  Spe:  $W_3$     cp        TH:  $P_1$   
 tomorrow completion eight day  
                   a week ago tomorrow

- (b)         $wa^2$          $tla^4$   $ti^3$   
 $P_{31} =$  cp        TH:  $p_{03}$   
 completion night only  
                   just during the night

- (c)         $ta^{\gamma a^3}$          $santa^4$   $krsi^4$   $wa^2$          $sn\dot{o}^{43}$   $yho^{\gamma 23}$   
 $P_{31} =$  Spe:  $P_2$         cp        TH:  $P_1$   
 feast Holy Cross completion three year  
 three years ago at the Feast of the Holy Cross

2.4.2.  $P_{32}$ , the calendar phrase, consists of three obligatory nuclear tagmemes, and is used only when specifying an actual calendar date.  $P_{32}$  may be graphically represented thus:

$$P_{32} = (+ SpNm + CR + Det)$$

The obligatory specifying number tagmeme, manifested by a numeral from class  $W_{12}$ , or by  $P_{33}$ , or the minor clause  $c_{04}$  (see 3.6.4), is followed by the obligatory calendar relational tagmeme manifested by the independent preposition  $lo^3$  'in, on' (see 3.6.5), followed by the obligatory determinator tagmeme manifested only by the nouns  $yih\dot{o}^3$  'year', or  $ko^{\gamma 12}$  'month', or by  $P_2$  (see 3.6.6). Examples of  $P_{32}$  follow with constituent tagmemes indicated.

(a)  $ti^{\gamma}yu^1 \quad \check{s}ka^1 \quad lo^3 \quad ko^{\gamma}12 \quad sptiyembre^4$   
 $P_{32} = SpNm: P_{33} \quad CR \quad Det: P_2$   
 fifteen another-one in month September  
 16th of September

(b)  $kulo^{23} \quad lo^3 \quad ko^{\gamma}12 \quad mayu^4$   
 $P_{32} = SpNm: W_{12.5} \quad CR \quad Det: P_2$   
 first in month May  
 the first of May

(c)  $tyl^{43} \quad lo^3 \quad ko^{\gamma}12 \quad ni^2$   
 $P_{32} = SpNm: W_{12.5} \quad CR \quad Det: P_2$   
 ending in month now  
 the last day of this month

2.4.3.  $P_{33}$ , the numerical phrase, consists of two obligatory nuclear tagmemes.  $P_{33}$  may be graphically represented thus:

$$P_{33} = (+ Nc + An)$$

The obligatory numeric tagmeme, manifested by numerals of subclass  $W_{12.1}$  (see 3.6.7), is followed by the obligatory addition tagmeme manifested by the  $W_{12.3}$  subclass of numerals or the numerals  $ka^{\gamma}yu^1$  'five' and  $ti^{\gamma}yu^1$  'fifteen' (see 3.6.8). Examples of  $P_{33}$  follow with constituent tagmemes indicated.

(a)  $ti^{\gamma}yu^1 \quad \check{s}ka^4$   
 $P_{33} = Nc \quad An: W_{12.3}$   
 fifteen another-one  
 sixteen

(b)  $kala^4 \quad nga^{\gamma}yu^1$   
 $P_{33} = Nc \quad An: W_{12.2}$   
 twenty plus-five  
 twenty-five

(c)  $tu^{\gamma}wa^1 \quad tyl^{43}$   
 $P_{33} = Nc \quad An: W_{12.3}$   
 forty another-ten  
 fifty

(d)  $ti^2 \quad ikwa^1$   
 $P_{33} = Nc \quad An: W_{12.3}$   
 ten another-four  
 fourteen

2.4.4.  $P_{34}$ , the interrogative phrase, consists of two obligatory nuclear tagmemes.  $P_{34}$  may be graphically represented thus:

$$P_{34} = (+ \text{ItgH} + \text{ItgC})$$

The obligatory interrogative head tagmeme, manifested by the  $W_{14.4}$  subclass of relators (see 3.6.9), is followed by the obligatory interrogative completor tagmeme manifested by a very limited selection of nouns, verbs, and particles (see 3.6.10). Examples of  $P_{34}$  follow with constituent tagmemes indicated.

(a)         $ni^3$          $t\check{s}a^{32}$   
 $P_{34} = \text{ItgH}$      $\text{ItgC:noun}$   
               what? thing  
                   why?

(b)         $la^3$          $ya^{32}$   
 $P_{34} = \text{ItgH}$          $\text{ItgC:verb}$   
                   direction? went  
                   in which direction?

2.5. There are four minor phrase types in the minor phrase class  $p_{00}$ . They occur without peripheral tagmemes, consisting only of nuclei. One major word only occurs in each minor phrase.

2.5.1.  $p_{01}$ , the comparison minor phrase, consists of three nuclear tagmemes, of which two are obligatory and one optional.  $p_{01}$  may be graphically represented thus:

$$p_{01} = (+ \text{QrH} + \text{cve} \pm \text{sve})$$

The obligatory qualifier head tagmeme, manifested by a particle from classes  $W_{11}$  or  $W_{13}$ , or a noun from subclass  $W_{4.3}$  (see 3.7.1), is followed by the obligatory comparative tagmeme manifested by the minor word  $la^2$  'more' (see 3.7.2), followed by the optional superlative tagmeme manifested by the minor word  $ti^3$  'most' (see 3.7.3). Examples of  $p_{01}$  follow with constituent tagmemes indicated.



(a) kuʔtsi<sup>2</sup> la<sup>2</sup> ti<sup>3</sup>  
 p<sub>01</sub> = QrH:W<sub>11.5</sub> cve sve  
 yellow more most  
 yellowest

(b) kula<sup>3</sup> la<sup>2</sup> ti<sup>3</sup>  
 p<sub>01</sub> = QrH:W<sub>11.4</sub> cve sve  
 old more most  
 oldest

(c) kwa<sup>3</sup> la<sup>2</sup>  
 p<sub>01</sub> = QrH:W<sub>4.3</sub> cve  
 there more  
 that way more

2.5.2. p<sub>02</sub>, the classifier minor phrase, consists of two obligatory nuclear tagmemes and has two subtypes, p<sub>02.1</sub> and p<sub>02.2</sub>, which may be graphically represented thus:

p<sub>02.1</sub> = (+ cl<sub>1</sub> + NoH<sub>1</sub>)

p<sub>02.2</sub> = (± cl<sub>2</sub> + NoH<sub>2</sub>)

In p<sub>02.1</sub>, the obligatory classification<sub>1</sub> allotagma, manifested by the minor words tu<sup>3</sup> and la<sup>3</sup> 'classifier' (see 3.7.4), is followed by the obligatory nominal head<sub>1</sub> allotagma manifested by certain nouns, verbs, or other morphemes of indeterminate meaning (see 3.7.5). In p<sub>02.2</sub>, the optional classification<sub>2</sub> allotagma, manifested by the minor word tša<sup>3</sup> 'classifier' (see 3.7.4), is followed by the obligatory nominal head<sub>2</sub> allotagma manifested by noun subclass W<sub>1.7</sub> (see 3.7.5). Examples of p<sub>02</sub> follow with constituent tagmemes indicated.

(a) tu<sup>3</sup> škula<sup>4</sup>  
 p<sub>02.1</sub> = cl<sub>1</sub> NoH<sub>1</sub>:noun  
 classifier school  
 schoolteacher

(b) tu<sup>3</sup> hoʔo<sup>34</sup>  
 p<sub>02.1</sub> = cl<sub>1</sub> NoH<sub>1</sub>:noun  
 classifier spirit  
 sea

- (c)             $la^3$              $ku^?no^2$   
 $p_{02.1} = cl_1$              $NoH_1:verb$   
                  classifier will-slash  
                  alligator
- (d)             $la^3$              $kwi^?ya^1$   
 $p_{02.1} = cl_1$              $NoH_1:verb$   
                  classifier will-carry  
                  bird of prey
- (e)             $t\check{s}a^?^3$              $kwi^?t\check{s}i^3$   
 $p_{02.2} = cl_2$              $NoH_2$   
                  classifier rabbit  
                  rabbit
- (f)             $t\check{s}a^?^3$              $yu^?^32$   
 $p_{02.2} = cl_2$              $NoH_2$   
                  classifier hummingbird  
                  hummingbird
- (g)             $t\check{s}a^?^3$              $nt\check{s}i^?^32$   
 $p_{02.2} = cl_2$              $NoH_2$   
                  classifier praying mantis  
                  praying mantis

2.5.3.  $p_{03}$ , the limited minor phrase, consists of two obligatory nuclear tagmemes.  $p_{03}$  may be graphically represented thus:

$$p_{03} = (+ LH + li)$$

The obligatory limited head tagmeme, manifested by a noun from classes  $W_3$  or  $W_{4.3}$ , or a particle from class  $W_{10}$  (see 3.7.6), is followed by the obligatory limitation tagmeme manifested by the minor word  $ti^3$  'only, just' (see 3.7.7 and 3.1.10). Examples of  $p_{03}$  follow with constituent tagmemes indicated.



### 3. Phrase-Level Tagmemes

The following description of the phrase-level tagmemes considers the form, function, and distribution of each tagmeme.

3.1. The periphery of noun phrase class  $P_0$  (see 2.1) consists of three pre-peripheral tagmemes and seven post-peripheral tagmemes. The complete post-periphery occurs in  $P_1$ , although no example contains all of the tagmemes. Only the limitation tagmeme, a phrase boundary marker, occurs as post-periphery in other noun phrase types.

3.1.1. Quantity. This tagmeme is always manifested by a major word from the quantifier subclass of particles  $W_{11.1}$ :  $nd\check{s}ga^3$  'all/every',  $\check{s}kw1^1$  'all' (the whole of a thing),  $l^1we^2$  'half'. The quantifier tells only the general amount of a thing, and may be followed by a definite number. The quantity tagmeme occurs in  $P_1$  and  $P_3$  (see 2.1.1, 2.1.3).

3.1.2. Number. This tagmeme is manifested by the numerals of class  $W_{12}$ , or by  $P_{33}$ ,  $P_1$ ,  $p_{03}$ , or a numeral referential minor clause ( $c_{04}$  - see 4.5.4).  $W_{12.1}$ :  $ti^1yu^1$  'fifteen',  $tu^1wa^1$  'forty';  $W_{12.2}$ :  $ska^3$  'one',  $kati^1$  'seven';  $W_{12.3}$ :  $tyukwa^1$  'another-two',  $\check{s}no^1$  'another-three';  $W_{12.4}$ :  $tyka^1$  'another-nine',  $kila^1$  'another-twenty';  $P_{33}$ :  $kala^4$   $ndi^1yu^{32}$  'twenty another-fifteen' (thirty-five);  $P_1$ :  $tukwa^1$   $slye^1tu^4$  'two hundred';  $c_{04}$ :  $sn^1o^1$   $yla^4$   $nsu^1w1^{32}$   $ka^1yu^1$  'three score there-is five' (sixty-five);  $tu^1wa^1$   $ndukwa^{43}$   $hakwa^3$  'forty is-there four' (forty-four);  $p_{03}$ :  $ska^3$   $ti^3$  'one only'. The numeral tells the definite amount of a thing. The number tagmeme occurs in  $P_1$  and  $P_3$  (see 2.1.1, 2.1.3).

3.1.3. Deictic. This tagmeme is manifested only by the

minor word  $nu^3$  'the-particular' from the subclass  $w_{02.2}$ . Its function is to point out the following noun.<sup>14</sup> If what follows is not a noun, this minor word both points it out and nominalises it as follows:  $ti^?i^3$  'hurt',  $nu^3 ti^?i^3$  'the-particular hurt' (one-who-is-poor/hurts);  $luwe^2$  'small',  $nu^3 luwe^2$  'the-particular small' (child);  $nde^3$  'this/here',  $nu^3 nde^3$  'the-particular this' (this one). The deictic tagmeme occurs in  $P_1$  and  $P_3$  (see 2.1.1, 2.1.3).

3.1.4. Attribution. This tagmeme is always manifested by a major word from the attributive subclass of descriptive particles  $W_{11.2}$ :  $\check{s}tlya^{34}$  'Spanish',  $kulya^{?32}$  'rich',  $t^?no^2$  'poor'. The attribution tagmeme occurs only in  $P_{1.1}$  (see 2.1.1) and may have up to three peripheral tagmemes following it in any one phrase, of which three, two are the demonstration and limitation tagmemes.

3.1.5. Character. This tagmeme is always manifested by a major word from the characteristic subclass of descriptive particles  $W_{11.3}$ :  $\check{s}e^?o^{34}$  'wicked/bad',  $tsu^?we^{32}$  'good'. The character tagmeme occurs only in  $P_{1.1}$  (see 2.1.1). It may occur together with up to three other post-peripheral tagmemes, of which three, two are demonstration and limitation.

3.1.6. Status. This tagmeme is always manifested by a major word from the state subclass of descriptive particles  $W_{11.4}$ :  $kune^?1$  'young',  $kula^3$  'old'. The status tagmeme occurs only in  $P_{1.1}$  (see 2.1.1). It may occur together with up to three other post-peripheral tagmemes, of which three, two are demonstration and limitation.

<sup>14</sup>This minor word may have the additional meaning of 'humaniser', e.g., animals do not normally use human speech, but in traditional Chatino stories human speech is attributed to them and the deictic  $nu^3$  is usually used when referring to them. Further investigation is necessary to provide conclusive evidence.

3.1.7. Colouration. This tagmeme is always manifested by a major word from the colour subclass of descriptive particles  $W_{11.5}$ :  $ngat\epsilon^2$  'white',  $ku\dot{s}i^2$  'blue',  $ku\dot{t}si^2$  'yellow'. The colouration tagmeme occurs only in  $P_{1.1}$  (see 2.1.1). It may occur together with up to three other post-peripheral tagmemes, of which three, two are demonstration and limitation.

3.1.8. Adjectival. This tagmeme is always manifested by a major word from the adjective subclass of descriptive particles  $W_{11.6}$ :  $tlyu^3$  'big',  $luwe^2$  'small',  $tnu^3$  'huge/great'. The adjectival tagmeme occurs only in  $P_{1.1}$  (see 2.1.1). It may occur together with up to three other post-peripheral tagmemes, of which three, two are demonstration and limitation.

3.1.9. Demonstration. This tagmeme is always manifested by a major word from the demonstrative subclass of pronouns  $W_{4.3}$ :  $nde^3$  'here',  $kwa^3$  'there',  $k\epsilon^2$  'that-emphatic'. The demonstration tagmeme occurs only in  $P_{1.1}$  (see 2.1.1). It may occur preceded by only two other post-peripheral tagmemes in any one phrase, and followed by the limitation tagmeme.

3.1.10. Limitation. This tagmeme is manifested only by the minor word  $ti^3$  'only/just' from the phrase-final boundary subclass  $w_{03.2}$ . The limitation tagmeme occurs in  $P_{1.1}$  (see 2.1.1) where it may be preceded by up to three other post-peripheral tagmemes in any one phrase, of which three, one is demonstration. It occurs as the only peripheral tagmeme in  $P_4$  (see 2.1.4) and the only post-peripheral tagmeme in  $P_3$  (see 2.1.3). It also occurs in the periphery of the predicate phrase class ( $P_{20}$  - see 2.3) and is nuclear to the minor phrase  $p_{03}$  (see 2.5.3).

3.1.11. Designation. This tagmeme is manifested by a

descriptive minor clause from class  $c_{00}$  (see 4.5). Examples of phrase  $P_{1.2}$  follow demonstrating the function of this tagmeme.

- (a)            ska<sup>3</sup> nu<sup>3</sup>                      kuša<sup>34</sup> ngusiʔi<sup>32</sup>    ba<sup>2</sup>                      sʔni<sup>3</sup>  
 $P_{1.2}$  = Num dei                      H                      Desg:  $c_{01}$   
 one the-particular needle bought we-exclusive long-ago  
 a particular injection that we bought a long time ago

- (b)            rantšu<sup>34</sup> wta<sup>34</sup> ndiya<sup>21</sup>                      ʔi<sup>1</sup> nte<sup>34</sup>  
 $P_{1.2}$  = H                      Desg:  $c_{03}$   
 ranch cow is-belonging to people  
 the cattle ranches people have

The designation tagmeme occurs only in  $P_{1.2}$  as the unique tagmeme in the post-periphery of such a phrase (see 2.1.1).

3.1.12. Description. This tagmeme is manifested by a relative minor sentence ( $s_{01}$  - see 8.5.1) and may be repeated. Examples of phrase  $P_{1.3}$  follow demonstrating the function of this tagmeme.

- (a)            yka<sup>3</sup> nu<sup>3</sup>    lka<sup>4</sup> kuneʔ<sup>1</sup> la<sup>2</sup>  
 $P_{1.3}$  = H                      Des:  $s_{01}$   
 tree which is young more  
 the younger tree

- (b)            ska<sup>3</sup> yu<sup>3</sup> kiʔyu<sup>1</sup> nu<sup>3</sup>    ha<sup>4</sup>                      šlyā<sup>43</sup>                      kuʔni<sup>32</sup>                      tnyo<sup>32</sup>  
 $P_{1.3}$  = Num H                      Des<sup>1</sup>:  $s_{01}$   
 one man male which negative will-want will-make work  
  
 nu<sup>3</sup>    ha<sup>4</sup>                      šlyā<sup>43</sup>                      tsa<sup>32</sup>                      hyo<sup>12</sup>  
 Des<sup>2</sup>:  $s_{01}$   
 which negative will-want go-out-to field-his  
 a man who isn't willing to do any work or to go out to  
 his field

The description tagmeme occurs only in  $P_{1.3}$  as the unique tagmeme in the post-periphery of such a phrase (see 2.1.1).

3.2. The nuclei of the noun phrases demonstrate most of the characteristics which differentiate the various types.  $P_1$  is also differentiated from the rest of the  $P_0$  class (see 2.1) by the presence of all the peripheral tagmemes, and  $P_3$  by the presence of the pre-periphery.

3.2.1. Head. This tagmeme is manifested by any noun from subclasses  $W_{1.1}$ ,  $W_{1.3}$ ,  $W_{2.1}$ ,  $W_{3.1}$ ,  $W_{4.3}$ , or by  $P_2$  or  $p_{02}$ , or by any descriptive particle from class  $W_{11}$  except subclasses  $W_{11.1}$  or  $W_{11.7}$ . With a descriptive particle the occurrence of the deictic peripheral tagmeme is obligatory, as in such a phrase its deictic function is extended to that of nominaliser also.<sup>15</sup> H: $W_{1.1.1}$   $no\text{?}o^3$  'house',  $\text{š}ni\text{?}^3$  'dog'; H: $W_{1.1.2}$   $kaswela^4$  'casserole'; H: $W_{1.3}$   $kwi\text{?}i^3$  'wind'; H: $W_{2.1}$   $se^3$  'José'; H: $W_{3.1}$   $ts\text{?}o^{23}$  'day'; H: $W_{4.3}$   $(nu^3)$   $nde^3$  '(the) this (one)'; H: $W_{11.2}$   $(nu^3)$   $kuliya\text{?}^{32}$  '(the) rich (one)'; H: $W_{11.3}$   $(nu^3)$   $\text{še}\text{?}o^{34}$  '(the) wicked (one)'; H: $W_{11.4}$   $(nu^3)$   $kune\text{?}^1$  '(the) young (one)'; H: $W_{11.5}$   $(nu^3)$   $ngata^{32}$  '(the) black (one)'; H: $W_{11.6}$   $(nu^3)$   $tlyu^3$  '(the) big (one)'; H: $W_{11.8}$   $(nu^3)$   $kwinyi^3$  '(the) fertile (one)'; H: $W_{11.9}$   $(nu^3)$   $tlya\text{?}^2$  '(the) cold (one)'; H: $P_2$   $yka^3$   $ndla^{34}$  'tree peach' (peach tree),  $sne\text{?}^{23}$   $kihi^2$  'instrument skin' (drum); H: $p_{02}$   $t\text{š}a\text{?}^3$   $tya^1$  'squirrel',  $tu^3$   $ndsko^2$  'earhole'. The head tagmeme occurs in  $P_1$  (see 2.1.1).

3.2.2. Quality Head. This tagmeme is manifested by certain nouns from subclasses  $W_{1.1}$ ,  $W_{1.3}$ ,  $W_{1.4}$ , or  $W_{2.1}$ . QH: $W_{1.1}$   $t\text{š}kw\text{?}o^{43}$  'metal',  $nda\text{?}^4$  'a particular legume',  $kwiya\text{?}^4$  'mushroom',  $tnyi^{34}$  'money'; QH: $W_{1.3}$   $ko\text{?}^2$  'moon, month'; QH: $W_{1.4}$   $no\text{?}o^3$  'house'; QH: $W_{2.1}$   $rodi^2$  'Rodrigo'. The quality head tagmeme occurs only in  $P_2$  (see 2.1.2).

3.2.3. Quality. This tagmeme is manifested by nouns from subclasses  $W_{1.1}$ ,  $W_{1.2}$ ,  $W_{1.3}$ ,  $W_{3.1}$ , or by  $P_3$  or a further  $P_2$ . Q: $W_{1.1}$   $kwihi^{32}$  'skunk' following QH  $nda\text{?}^4$  'a

<sup>15</sup> See footnote 12.



particular legume' > nda<sup>4</sup> kwih<sup>32</sup> 'onion', nsuw<sup>34</sup> 'guava' following QH yka<sup>3</sup> 'tree' > yka<sup>3</sup> nsuw<sup>34</sup> 'guava-tree', tškw<sup>43</sup> 'metal' following QH n<sup>3</sup>o<sup>3</sup> 'house' > n<sup>3</sup>o<sup>3</sup> tškw<sup>43</sup> 'gaol', nte<sup>23</sup> 'hill' following QH rodi<sup>2</sup> 'Rodrigo' > rodi<sup>2</sup> nte<sup>23</sup> 'Rodrigo-who-lives-on-the-hill' (where 'hill' is the Chatino equivalent of a surname); Q:W<sub>1.2</sub> yka<sup>3</sup> 'wood' following QH tškw<sup>43</sup> 'metal' > tškw<sup>43</sup> yka<sup>3</sup> 'axe', kitš<sup>2</sup>o<sup>2</sup> 'hair-of' following QH te<sup>34</sup> 'cloth' > te<sup>34</sup> kitš<sup>2</sup>o<sup>2</sup> 'blanket'; Q:W<sub>1.3</sub> ko<sup>2</sup> 'moon, month' following QH tny<sup>34</sup> 'money' > tny<sup>34</sup> ko<sup>2</sup> 'a head tax paid monthly'; Q:W<sub>3.1</sub> ni<sup>2</sup> 'now' following QH yih<sup>3</sup> 'year' > yih<sup>3</sup> ni<sup>2</sup> 'year now' (this year), ndisiyembre<sup>4</sup> 'December' following QH ko<sup>2</sup> 'month' > ko<sup>2</sup> ndisiyembre<sup>4</sup> 'month December'; Q:P<sub>2</sub> yka<sup>3</sup> wtya<sup>2</sup> 'particular kind of tree' following QH kwiya<sup>4</sup> 'mushroom' > kwiya<sup>4</sup> yka<sup>3</sup> wtya<sup>2</sup> 'a particular kind of mushroom'. The quality tagmeme occurs only in P<sub>2</sub> (see 2.1.2).

3.2.4. Innately Possessed Head. This tagmeme is manifested by a noun from subclass W<sub>1.2</sub>. IPH:W<sub>1.2.1</sub> ško<sup>32</sup> 'blouse/shirt-of'; IPH:W<sub>1.2.2</sub> ya<sup>32</sup> 'hand-of', sti<sup>2</sup> 'father-of'. The innately possessed head tagmeme occurs only in P<sub>3</sub> (see 2.1.3).

3.2.5. Owner. This tagmeme is manifested by a noun from subclasses W<sub>1.1</sub>, W<sub>1.3</sub>, W<sub>2.1</sub>, W<sub>4.1</sub>, w<sub>04</sub>, or by P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub>, or P<sub>4</sub>. Own:W<sub>1.1</sub> nte<sup>34</sup> 'people', siyera<sup>34</sup> 'saw'; Own:W<sub>1.3</sub> kutša<sup>2</sup> 'sun'; Own:W<sub>2.1</sub> sali<sup>2</sup> 'Marcelina'; Own:W<sub>4.1</sub> nu<sup>2</sup>wi<sup>2</sup> 'you-familiar'; Own:w<sub>04</sub> wo<sup>3</sup> 'you-pl./respectful'; Own:P<sub>1</sub> ne<sup>3</sup> ša<sup>3</sup> 'person different' (Mexican); Own:P<sub>2</sub> yka<sup>3</sup> to<sup>2</sup> 'wood lard' (oak); Own:P<sub>3</sub> kye<sup>2</sup> ne<sup>3</sup> 'head-of person' (his head); Own:P<sub>4</sub> kwiyu<sup>34</sup> ʔ<sup>1</sup> ne<sup>3</sup> 'mule to person' (his mule). The owner tagmeme occurs only in P<sub>3</sub> (see 2.1.3).

3.2.6. Possessed Head. This tagmeme is manifested by

nouns from subclasses  $W_{1.1}$ ,  $W_{1.2}$ ,  $W_{1.4}$ , or by  $P_{1.1}$ , or  $P_2$  when the head tagmemes of these phrases are manifested by nouns which are not obligatorily possessed, or by  $P_3$  or  $P_{02}$ . PH: $W_{1.1}$   $br\acute{e}ngan\acute{o}^4$  'oregano'; PH: $W_{1.2}$   $yko\gamma^2$  'blouse/shirt'; PH: $W_{1.4}$   $lo\gamma^2$  'corral'; PH: $P_{1.1}$   $ska^3$   $no\gamma^2$  'a house',  $nu^3$   $kwiyu^{34}$   $kula^3$  'the-particular mule old' (the old mule); PH: $P_2$   $no\gamma^2$   $t\check{s}kw\acute{o}^{43}$  'house metal' (gaol); PH: $P_3$   $kiya\gamma^{32}$   $msa^{34}$  'foot table' (table leg); PH: $p_{02}$   $t\check{s}a\gamma^3$   $kwit\check{s}i^3$  'classifier rabbit'. The possessed head tagmeme occurs only in  $P_4$  (see 2.1.4).

3.2.7. Possession Indicator. This tagmeme is manifested only by the independent preposition  $\gamma_i^1$  'to' from subclass  $W_{14.1}$ .  $msu^{34}$   $\gamma_i^1$   $yu^3$  'servant to man' (the man's servant),  $t\check{s}kw\acute{o}^{43}$   $\gamma_i^1$   $nu^3$   $kw\acute{o}\gamma^2$  'metal to the-particular female' (the woman's bucket). When the possessor tagmeme is manifested by a pronominal minor word of class  $w_{04}$ , the preposition  $\gamma_i^1$  'to' is fused to it to form one major word from subclass  $W_{4.2}$ :  $o^2$  'we-inclusive' following  $\gamma_i^1$  'to' >  $\gamma^2$  'to-we-inclusive' (of ours),  $ba^2$  'we-exclusive' following  $\gamma_i^1$  'to' >  $\gamma ba^3$  'to-we-exclusive' (of ours),  $wo^3$  'you-pl./respectful' following  $\gamma_i^1$  'to' >  $\gamma wo^3$  'to-you-pl./respectful',  $\gamma_i^2$  '2nd/3rd pers-sing' following  $\gamma_i^1$  'to' >  $\gamma_i^3$  'to-you/he'.<sup>16</sup> The 1st person singular form  $\gamma yo^2$  'to-me' has no parallel subject or object pronoun.  $mslu^{34}$   $\gamma wo^3$  'hats to-you-pl./respectful',  $kityi^3$   $\gamma ba^3$  'paper to-we-exclusive',  $kwitu^{23}$   $\gamma yo^2$  'chicken to-me',  $t\check{s}u\gamma^3$   $\gamma_i^2$  'pineapple to-you/he',  $\check{s}ni\gamma^3$   $\gamma_i^2$  'dog to-you/he'. The possession indicator tagmeme occurs only in  $P_4$  (see 2.1.4).

3.2.8. Possessor. This tagmeme is manifested by nouns from subclasses  $W_{1.1}$ ,  $W_{2.1}$ , or  $W_{4.2}$ , or by  $P_1$ ,  $P_2$ ,  $P_3$ , or  $P_4$ . Por: $W_{1.1}$  ( $no^3$   $\gamma_i^1$ )  $nte^{34}$  '(thing to) people'

<sup>16</sup>See footnote 6.

(people's things), (šū<sup>4</sup> ʔ<sub>i</sub><sup>1</sup>) breŋanu<sup>4</sup> '(taste to) oregano'; Por:W<sub>2.1</sub> (wta<sup>34</sup> ʔ<sub>i</sub><sup>1</sup>) šuwa '(ox to) Juan' (John's ox); Por:W<sub>4.2</sub> (šni<sup>3</sup>) ʔyo<sup>21</sup> '(dog) to-me'; Por:P<sub>1.1</sub> (wta<sup>34</sup> ʔ<sub>i</sub><sup>1</sup>) nu<sup>3</sup> kiʔyu<sup>1</sup> nde<sup>3</sup> '(cow to) the-particular man this' (this man's cow); Por:P<sub>1.2</sub> (no<sup>2</sup> ʔ<sub>i</sub><sup>1</sup>) ne<sup>3</sup> ndu<sup>32</sup> kwa<sup>3</sup> '(thing to) person standing there' (that person over there's thing); Por:P<sub>2</sub> (tu<sup>4</sup> no<sup>2</sup> ʔ<sub>i</sub><sup>1</sup>) no<sup>2</sup> ʔ<sub>i</sub><sup>1</sup> tškw<sup>43</sup> '(door to) house metal' (gaol door); Por:P<sub>3</sub> (tkye<sup>3</sup> ʔ<sub>i</sub><sup>1</sup>) y<sup>2</sup> ʔ<sub>i</sub><sup>1</sup> rodi<sup>2</sup> '(heat to) mother Rodrigo' (Roderick's mother's fever); Por:P<sub>4</sub> (kwiyu<sup>34</sup> ʔ<sub>i</sub><sup>1</sup>) msu<sup>34</sup> ʔ<sub>i</sub><sup>1</sup> ne<sup>3</sup> '(mule to) servant to person' (his servant's mule). The possessor tagmeme occurs only in P<sub>4</sub> (see 2.1.4).

3.2.9. Addressee. This tagmeme is manifested by nouns from subclass W<sub>2.3</sub>: tše<sup>32</sup> 'Friend' (used between men), škwe<sup>2</sup> 'Friend' (used reciprocally between men in reply to tše<sup>32</sup>), tšo<sup>32</sup> 'Friend' (used between women), no<sup>32</sup> 'Mother', ta<sup>32</sup> 'Father'. The addressee tagmeme occurs only in P<sub>5</sub> (see 2.1.5).

3.2.10. Specifier. This tagmeme is manifested by certain nouns from subclass W<sub>1.1</sub> or a restricted P<sub>1.1</sub> consisting of the head tagmeme followed by one post-peripheral tagmeme. Examples of phrase P<sub>5</sub> follow to demonstrate the function of this tagmeme.

- |   |   |
|---|---|
| <p>(a) tše<sup>32</sup> buru<sup>2</sup><br/>P<sub>5</sub> = Ad Sp:W<sub>1.1</sub><br/>friend Donkey</p>            | <p>(b) škwe<sup>2</sup> wo<sup>2</sup> ʔ<sub>i</sub><sup>34</sup><br/>P<sub>5</sub> = Ad Sp:W<sub>1.1</sub><br/>friend Coyote</p> |
| <p>(c) no<sup>32</sup> šu<sup>2</sup><br/>P<sub>5</sub> = Ad Sp:W<sub>1.1</sub><br/>Mother aged<br/>Grandmother</p> | <p>(d) tše<sup>32</sup> šni<sup>3</sup> ndaha<sup>3</sup><br/>P<sub>5</sub> = Ad Sp:P<sub>1.1</sub><br/>friend Dog Lazy</p>       |

The specifier tagmeme occurs only in P<sub>5</sub> (see 2.1.5). It is often found in Chatino folk stories where animals are the central characters.

3.2.11. Topic Head. This tagmeme is manifested by nouns from subclasses  $W_{1.1}$ ,  $W_{1.3}$ ,  $W_{1.5}$ , or  $P_{1.1}$  or  $P_4$ . TopH: $W_{1.1}$  tškwɔ<sup>43</sup> 'metal', kulantru<sup>4</sup> 'coriander'; TopH: $W_{1.3}$  ko<sup>2</sup> 'cloud'; TopH: $W_{1.5}$  tya<sup>2</sup> 'squirrel'; TopH: $P_{1.1}$  ska<sup>3</sup> tša<sup>32</sup> mštye<sup>3</sup> 'one word crazy'; TopH: $P_4$  tyi<sup>2</sup> škwa<sup>3</sup> ʔi<sup>1</sup> ne<sup>3</sup> 'cook of person' (his cook). The topic head tagmeme occurs only in  $P_6$  (see 2.1.6).

3.2.12. Apposition. This tagmeme is manifested by  $P_1$ ,  $P_3$ , or  $P_4$ . App: $P_{1.3}$  ʔni<sup>3</sup> nu<sup>3</sup> ndoʔo<sup>1</sup> lo<sup>3</sup> yka<sup>3</sup> 'animal which walks on tree', App: $P_3$  snye<sup>32</sup> se<sup>4</sup> 'child-of José', App: $P_4$  nu kwiyu<sup>34</sup> kila<sup>3</sup> ʔi<sup>1</sup> ne<sup>3</sup> 'the-particular mule male to person' (his horse). The apposition tagmeme occurs only in  $P_6$  (see 2.1.6).

3.3. The phrase types in the prepositional class  $P_{10}$  (see 2.2) are without a periphery, so that all differentiating characteristics are found within the nuclei.

3.3.1. Negation. This tagmeme is manifested by the minor word ʔa<sup>4</sup> ~ ha<sup>4</sup> 'negation' from subclass  $w_{03.1}$  and occurs in  $P_{11.2}$  (see 2.2.1) and  $p_{04}$  (see 2.5.4).

3.3.2. Relator. This tagmeme has two allotagmas, and the relator<sub>1</sub> allotagma is manifested by an independent preposition from subclass  $W_{14.1}$  whereas the relator<sub>2</sub> allotagma is manifested only by the independent preposition loʔo<sup>1</sup> 'with' from  $W_{14.1}$ , which may not occur manifesting the relator<sub>1</sub> allotagma. Rel<sub>1</sub>: $W_{14.1}$  ʔi<sup>1</sup> 'to', lo<sup>3</sup> 'on/in', tšū<sup>23</sup> 'behind'. The relator tagmeme occurs only in  $P_{11}$  (see 2.2.1).

3.3.3. Concomitant. This tagmeme is manifested by a locative noun from subclass  $W_{1.4}$ , or  $P_1$ ,  $P_2$ ,  $P_3$ , or  $P_4$ . Com: $W_{1.4}$  (ni<sup>2</sup>) lya<sup>32</sup> '(inside) inside-church' (inside the church), Com: $P_{1.2}$  (loʔo<sup>1</sup>) nu<sup>3</sup> kiʔyu<sup>1</sup> ndiya<sup>21</sup> tnyi<sup>34</sup> ʔi<sup>2</sup> '(with) the-particular male is-there money to-him' (with the

man who has the money), Com:P<sub>2</sub> (lo<sup>3</sup>) nɔʔo<sup>3</sup> tškwɔ<sup>43</sup> '(in) house metal' (at the gaol), Com:P<sub>3</sub> (ʔi<sup>1</sup>) sti<sup>2</sup> ndre<sup>4</sup> '(to) father André' (to Andrew's father), Com:P<sub>4</sub> (lo<sup>3</sup>) tškwɔ<sup>43</sup> ʔi<sup>1</sup> neʔ<sup>3</sup> '(in) metal to person' (in his tin can). The concomitant tagmeme occurs only in P<sub>11</sub> (see 2.2.1).

3.3.4. Director Preposition. This tagmeme is manifested by a minor word from subclass w<sub>03.3</sub>: la<sup>3</sup> 'towards', ti<sup>3</sup> 'from'. The director preposition tagmeme occurs only in P<sub>12</sub> (see 2.2.2).

3.3.5. Completor. This tagmeme is manifested by temporal nouns from class W<sub>3.1</sub>, temporal particles from class W<sub>13</sub>, or P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub>, P<sub>4</sub>, or p<sub>03</sub>, or by a stative clause (C<sub>5</sub>). Cpr:W<sub>3.1</sub> (ti<sup>2</sup>) kwiʔyu<sup>1</sup> '(from) day-before-the-day-before-yesterday' (three days ago), (la<sup>3</sup>) tomiku<sup>4</sup> '(towards) Sunday' (next Sunday); Cpr:W<sub>13</sub> (la<sup>3</sup>) šiyaʔ<sup>5</sup> '(towards) another-once' (next time); Cpr:P<sub>1.2</sub> (ti<sup>2</sup>) kwa<sup>3</sup> ndiʔi<sup>43</sup> ruwe<sup>4</sup> '(from) there living Rafael' (this way from the place where Ralph lives); Cpr:P<sub>2</sub> (la<sup>3</sup>) koʔ<sup>12</sup> marsu<sup>4</sup> '(towards) month March' (next March); Cpr:P<sub>3</sub> (la<sup>3</sup>) tiye<sup>32</sup> buru<sup>2</sup> '(towards) stomach donkey' (up to the donkey's stomach); Cpr:P<sub>4</sub> (la<sup>3</sup>) hyo<sup>12</sup> ʔno<sup>3</sup> '(towards) cornfield to-we-inclusive' (over in our cornfield); Cpr:p<sub>03</sub> (ti<sup>3</sup>) lti<sup>3</sup> ti<sup>3</sup> '(from) day-before-yesterday only' (just from the day before yesterday); Cpr:C<sub>5</sub> (ti<sup>3</sup>) kwa<sup>3</sup> la<sup>3</sup> tši<sup>1</sup>ʔ<sup>1</sup> '(from) there more a-little' (It's away from there a little). The completor tagmeme occurs only in P<sub>12</sub> (see 2.2.2).

3.4. The periphery of the predicate phrase consists of two pre-peripheral tagmemes and three post-peripheral tagmemes. The pre-periphery occurs with all of class P<sub>20</sub> except P<sub>23</sub> (see 2.3). All the peripheral tagmemes may occur simultaneously in a phrase, but this is unusual as the adverbial and modification tagmemes rarely occur together.

3.4.1. Negation-Completion. This tagmeme is manifested only by the minor words  $ha^4 \sim ?a^4$  'negation' or  $wa^2$  'completion', from subclass  $w_{03.1}$ , which act as predicate phrase-initial markers. The negation-completion tagmeme occurs in  $P_{21}$ ,  $P_{22}$ ,  $P_{24}$ ,  $P_{25}$ , and  $P_{26}$  (see 2.3).

3.4.2. Adverbial. This tagmeme is manifested by descriptive particles from subclasses  $W_{11.2}$ ,  $W_{11.3}$ ,  $W_{11.6}$ ,  $W_{11.8}$ , or  $W_{11.9}$ , or by a temporal noun from subclass  $W_{3.1}$  or a temporal particle from class  $W_{13}$ , or by minor phrases  $p_{01}$  or  $p_{03}$ . Adv: $W_{11.2}$   $t?no^2$  'poor', Adv: $W_{11.3}$   $t?a^3$  'tight', Adv: $W_{11.6}$   $luwe^2$  'small', Adv: $W_{11.8}$   $lye^{32}$  'much', Adv: $W_{11.9}$   $tlya^?2$  'cold', Adv: $W_{3.1}$   $tsq^{23}$  'day', Adv: $W_{13}$   $ndse^3$  'quickly', Adv: $p_{01}$   $ndi?ya^{34}$   $la^2$  'pretty more', Adv: $p_{03}$   $kunu^2$   $ti^3$  'slight only'. Certain of the descriptive particles and  $p_{01}$  which manifest this tagmeme also manifest the modification post-peripheral tagmeme, though with a slight difference in meaning. Notice the following contrasting distributions and meanings in  $P_{24}$ .

(a)	$wa^2$	$ngwo^2$	$?o^3$	$ndiya^{21}$	$ti^?43$
$P_{24} =$	nep	Adv		EH	ev
	completion	like	that	is-belonging	em. - verbr. - I
				I like (it) like that.	

(b)	$wa^2$	$ndiya^{21}$	$ngwo^2$	$?o^3$	$ti^?43$
$P_{24} =$	nep	EH	Mod		ev
	completion	is-belonging	like	that	em. - verbr. - I
				I like (it) that much.	

Again, in  $P_{21}$ ,

(a)	$mnq^3$	$ti^3$	$ndškw!^?1$
$P_{21} =$	Adv		PrH
	secretly	only	speaking-he
			He is speaking softly.

- (b)        ndškw1<sup>32</sup>        mnq<sup>3</sup>  
           P<sub>21</sub> = PrH            Mod  
               speaking-he    secretly  
               He is speaking in secret.

The adverbial tagmeme occurs in P<sub>21</sub>, P<sub>22</sub>, P<sub>24</sub>, P<sub>25</sub>, and P<sub>26</sub> (see 2.3).

3.4.3. Degree. This tagmeme is manifested by subclass W<sub>01.1</sub> of augmentative minor words: saʔa<sup>1</sup> ~ ʔa<sup>1</sup> 'very/much' and la<sup>2</sup> ~ ʔa<sup>3</sup> 'more'. The degree tagmeme occurs in P<sub>21</sub>, P<sub>24</sub>, P<sub>25.1</sub>, and P<sub>26</sub> (see 2.3).

3.4.4. Modification. This tagmeme is manifested by descriptive particles from subclasses W<sub>11.7</sub> and W<sub>11.8</sub>, or by p<sub>01</sub>. Mod:W<sub>11.7</sub> tšī<sup>1</sup> 'a-little', lya<sup>1</sup> 'hurrying'; Mod:W<sub>11.8</sub> kwe<sup>2</sup> 'loudly'; Mod:p<sub>01</sub> lye<sup>32</sup> la<sup>2</sup> 'much more'. As mentioned in the adverbial tagmeme description, there are certain descriptive particles which may manifest both the modification and the adverbial tagmemes, although not in the same phrase, such as: lye<sup>32</sup> 'much', kwe<sup>2</sup> 'loudly', kwinyl<sup>3</sup> 'fertile'. The modification tagmeme occurs in P<sub>21</sub>, P<sub>24</sub>, P<sub>25</sub>, and P<sub>26</sub> (see 2.3).

3.4.5. Limitation — see 3.1.10. The limitation tagmeme occurs in P<sub>21</sub>, P<sub>22</sub>, P<sub>25.1</sub>, and P<sub>26</sub>.

3.5. Most of the characteristics differentiating the various phrase types in class P<sub>20</sub> (see 2.3) are to be found in the nuclei. However, P<sub>23</sub> is unique in occurring with no periphery, and P<sub>22</sub> in occurring with the pre-periphery and one post-peripheral tagmeme only. Both P<sub>21</sub> and P<sub>25</sub> have only one nuclear tagmeme respectively, and P<sub>24</sub> is distinguished by a discontinuous nucleus.

3.5.1. Predicate Head. This tagmeme is manifested by a major word from the hyperclass of verbs W<sub>20</sub> excluding

classes  $W_{26}$ ,  $W_{27}$ , and  $W_{28}$ , and subclass  $W_{22.3}$ . PrH: $W_{21}$   $ndi?i^{32}$  'is-living-he'; PrH: $W_{22.1}$   $lka^{43}$  'is-being-he'; PrH: $W_{23}$   $ndo?o^1$  'walking-he',  $ndyo?o^{32}$  'walking-he, dir.',  $nda^{32}$  'giving-he',  $ndya^1$  'giving-he, dir.' (he is paying),  $ngiy_o^{32}$  'coming-he'; PrH: $W_{24}$   $ngite^1$  'is-washing...'; PrH: $W_{25}$   $ku?ni^1$  'will-make...'. The predicate head tagmeme occurs only in  $P_{21}$  (see 2.3.1).

3.5.2. Qualified Predicate Head. This tagmeme has two allotagmas, and the qualified predicate head<sub>1</sub> allotagma is manifested by certain verbs from classes  $W_{22.1}$  or  $W_{23}$ , whereas the qualified predicate head<sub>2</sub> allotagma is manifested by certain other verbs from class  $W_{23}$ . QPrH<sub>1</sub>: $W_{22.1}$   $lka^{43}$  'is-being-he'; QPrH<sub>1</sub>: $W_{23}$   $ngi?ni^1$  'doing-he',  $nsu?wa^1$  'putting/sending-he',  $nsi?yu^{32}$  'cutting-he'; QPrH<sub>2</sub>: $W_{23}$   $ngiya^{23}$  'going-he',  $nsulu^{23}$  'throwing-out-liquids-he',  $nšnyi^{32}$  'taking-he, dir.',  $nšo^1$  'collecting-he (dir?)'. The qualified predicate head tagmeme occurs only in  $P_{22}$  (see 2.3.2).

3.5.3. Qualification. This tagmeme has two allotagmas, and the qualification<sub>1</sub> allotagma is manifested by certain nouns from subclasses  $W_{1.1}$  and  $W_{1.2}$ , whereas the qualification<sub>2</sub> allotagma is manifested by certain verbs from class  $W_{21}$ . When manifesting this tagmeme referential verbs may occur only in the intensive aspect and the basic, i.e., non-directed, form. Qn<sub>1</sub>: $W_{1.1}$   $ku?^{32}$  'end/piece'; Qn<sub>1</sub>: $W_{1.2}$   $lkw_i^2$  'picture-of',  $biya?^2$  'measure-of/weight-of'; Qn<sub>2</sub>: $W_{21}$  ( $nsk_o?^1$ )  $ko?o^{32}$  '(tying-up) will-be-adjoining' (securely tied), ( $nšo^1$ )  $ti?i^{32}$  '(collecting, dir.) will-be-living' (collecting up in one place), ( $ya^{43}$ )  $te?e^{32}$  '(went) will-be-staying' (went and fetched). The qualification tagmeme occurs only in  $P_{22}$  (see 2.3.2).

3.5.4. Affirmed Predicate Head. This tagmeme is manifested by certain verbs from classes  $W_{21}$ ,  $W_{22}$ ,  $W_{23}$ , or



W<sub>24</sub>. When manifesting this tagmeme verbs may occur only in the intentive aspect and directed form, if the verb has such in the intentive aspect: kya<sup>32</sup> 'will-go-he, dir.', šnyi<sup>32</sup> 'will-take-he, dir.', škwa<sup>32</sup> 'will-lay-down-he, dir.', ka<sup>32</sup> 'will-be-he'. The affirmed predicate head tagmeme occurs only in P<sub>23</sub> (see 2.3.3).

3.5.5. Certainty. This tagmeme is manifested only by the minor word tu<sup>32</sup> 'for-sure' from subclass w<sub>03.2</sub>. Both the verb manifesting the affirmed predicate head tagmeme and this word tu<sup>32</sup> take the fused person-markers of first person singular and second/third person singular: (škwō<sup>1</sup>) tu<sup>48</sup> '(I-will-lie-down, dir.) I-for-sure' (I will certainly lie down), (kya<sup>32</sup>) tu<sup>32</sup> '(he/you-will-go, dir.) he/you-for-sure' (He/you are going for certain), (tyu<sup>wi</sup><sup>1</sup>) tu<sup>32</sup> '(there-will-be-it, dir.) it-for-sure' (It's all right to put it there). The certainty tagmeme occurs only in P<sub>23</sub> (see 2.3.3).

3.5.6. Emotional Head. This tagmeme is manifested by verbs from class W<sub>27</sub>. Words from type W<sub>27.0.1</sub> remain uninflected in this position but words from both W<sub>27.0.2</sub> and W<sub>27.0.3</sub> take the usual aspect prefixes occurring on verbs. EH:W<sub>27.0.1</sub> tlyu<sup>3</sup> (ti<sup>32</sup>) 'big (em.-verbr.-he)' (he is proud); EH:W<sub>27.0.2</sub> ša<sup>2</sup> (ti<sup>32</sup>) 'light/brightness (em.-verbr.-he)' (he will wake up), ndška<sup>43</sup> (ti<sup>32</sup>) 'being, dir. (em.-verbr.-he)' (he is wanting); EH:W<sub>27.0.3</sub> ndi<sup>1</sup><sub>2</sub><sup>43</sup> (ti<sup>32</sup>) 'is-living (em.-verbr.-he)' (he is feeling); EH:W<sub>27.0.4</sub> ndiki<sup>1</sup> (ti<sup>32</sup>) 'burning-with-flame (em.-verbr.-he)' (he is angry). The emotional head tagmeme occurs only in P<sub>24</sub> (see 2.3.4).

3.5.7. Emotional Verbaliser. This tagmeme is manifested only by the minor word ti<sup>32</sup> 'emotional verbaliser' from the subclass w<sub>03.2</sub>. In a phrase it is this word ti<sup>32</sup> which takes the fused person markers, while the word mani-

festing the emotional head tagmeme takes the verb aspect markers.<sup>17</sup> (nša<sup>2</sup>) tɪ<sup>?</sup>43 '(continuative-light) em.-verbr.-I' (I am waking up), (tiki<sup>32</sup>) tɪ<sup>?</sup>32 '(intensive-burning) em.-verbr.-he/you' (he/you will be angry), (mdi<sup>?</sup>i<sup>43</sup>) tɪ<sup>?</sup>32 '(completive was-living) em.-verbr.-I' (I felt). The emotional verbaliser tagmeme occurs only in P<sub>24</sub> (see 2.3.4).

3.5.8. Stative Head. This tagmeme has two allotagmas, and the stative head<sub>1</sub> allotagma is manifested by all descriptive particles of class W<sub>11</sub> except W<sub>11.1</sub> or W<sub>11.7</sub>, by temporal particles of class W<sub>13</sub>, by verbs of class W<sub>28</sub>, or demonstrative pronouns of subclass W<sub>4.3</sub>, whereas the stative head<sub>2</sub> allotagma is manifested by p<sub>01</sub>. Although acting as predicates these words do not take verb aspect prefixes. SH<sub>1</sub>: W<sub>11.2</sub> tʔnɔ<sup>2</sup> 'poor'; SH<sub>1</sub>:W<sub>11.3</sub> šeʔɔ<sup>34</sup> 'wicked/bad'; SH<sub>1</sub>: W<sub>11.4</sub> kula<sup>3</sup> 'old'; SH<sub>1</sub>:W<sub>11.5</sub> kwa<sup>2</sup> 'mauve/purple'; SH<sub>1</sub>: W<sub>11.6</sub> tnu<sup>3</sup> 'huge'; SH<sub>1</sub>:W<sub>11.8</sub> kwinyi<sup>3</sup> 'fertile'; SH<sub>1</sub>:W<sub>11.9</sub> tlya<sup>?</sup>2 'cold'; SH<sub>1</sub>:W<sub>13</sub> šʔni<sup>1</sup> 'another-long-time', šiʔi<sup>4</sup> 'little-while'; SH<sub>1</sub>:W<sub>28</sub> su<sup>2</sup> 'lying'; SH<sub>1</sub>:W<sub>4.3</sub> nde<sup>3</sup> 'here'; SH<sub>2</sub>:p<sub>01</sub> kuʔtsi<sup>2</sup> la<sup>2</sup> ti<sup>3</sup> 'yellowest', lyu<sup>?</sup>1 la<sup>3</sup> 'lesser'. The stative head tagmeme occurs only in P<sub>25</sub> (see 2.3.5).

3.5.9. Auxiliar. This tagmeme is manifested by the auxiliary class of verbs W<sub>25</sub> which do not take the fused person markers: tsa<sup>43</sup> 'will-go', ndška<sup>43</sup> 'being, dir.', kuʔni<sup>32</sup> 'will-make'. The auxiliar tagmeme occurs only in P<sub>26</sub> (see 2.3.6).

3.5.10. Head to the Auxiliar. This tagmeme is manifested by limited lists of each of the verb classes W<sub>21</sub>, W<sub>22</sub>, W<sub>23</sub>, and W<sub>24</sub>, or by P<sub>24</sub>, or by a further P<sub>26</sub>. AH:W<sub>21</sub> (kya<sup>43</sup>) ndiʔɔ<sup>1</sup> '(will-go, dir.) is- adjoining-he, dir.' (he follows); AH:W<sub>23</sub> (ndška<sup>43</sup>) nsiʔyu<sup>32</sup> '(being, dir.) cutting-he' (he can

<sup>17</sup>From comparison with the related Otomangian languages Trique and Mixtec it appears that historically the word tɪ<sup>?</sup>32 comes from the word meaning 'seat of the emotions', but now occurs only in P<sub>24</sub>.

cut); AH:P<sub>24</sub> (tsa<sup>43</sup>) ndiʔ<sub>0</sub><sup>1</sup> tiʔ<sup>32</sup> '(will-go) is-adjointing, dir. em. -verbr. -he' (he will believe); AH:P<sub>26</sub> (ka<sup>43</sup>) kuʔni<sup>32</sup> š<sub>0</sub>ʔ<sub>0</sub><sup>1</sup> '(will-be) will-make will-change' (he will be able to learn). The head to the auxiliary tagmeme occurs only in P<sub>26</sub> (see 2.3.6).

3.6. As in class P<sub>10</sub>, the general phrase types of class P<sub>30</sub> (see 2.4) are without a periphery so that all differentiating characteristics are found within the nuclei.

3.6.1. Specification. This tagmeme is manifested by a temporal noun of subclass W<sub>3.1</sub> or by P<sub>2</sub>. Sp:W<sub>3.1</sub> kya<sup>43</sup> 'tomorrow', ka<sup>3</sup> 'yesterday', ni<sup>2</sup> 'today/now', luni<sup>3</sup> 'Monday', tomiku<sup>4</sup> 'Sunday'; Sp:P<sub>2</sub> taʔa<sup>3</sup> šʔno<sup>2</sup> 'feast master' (feast of the Chief, 16th of September). This tagmeme gives a reference point in time. The specification tagmeme occurs only in P<sub>31</sub> (see 2.4.1).

3.6.2. Completion. This tagmeme is manifested only by the minor word wa<sup>2</sup> 'completion' from subclass w<sub>03.1</sub>. This minor word also occurs in the pre-periphery of the predicate phrase. The completion tagmeme occurs only in P<sub>31</sub> (see 2.4.1).

3.6.3. Temporal Head. This tagmeme is manifested by a temporal noun from subclass W<sub>3.1</sub> or a temporal particle from class W<sub>13</sub>, or by P<sub>1</sub> or p<sub>03</sub>. TH:W<sub>3.1</sub> ts<sub>0</sub><sup>23</sup> 'day', sadu<sup>4</sup> 'Saturday'; TH:W<sub>13</sub> sʔni<sup>2</sup> 'long ago'; TH:P<sub>1</sub> snu<sub>0</sub><sup>2</sup> ts<sub>0</sub><sup>23</sup> 'eight days'; TH:p<sub>03</sub> tla<sup>4</sup> ti<sup>3</sup> 'night only'. The temporal head tagmeme occurs only in P<sub>31</sub> (see 2.4.1).

3.6.4. Specifying Number. This tagmeme is manifested by the numerals of subclasses W<sub>12.1</sub> and W<sub>12.2</sub>, or by P<sub>33</sub>, or the numeral referential minor clause (c<sub>04</sub>) which go to make up the numerals 'one' to 'thirty-one', or by two verb derivatives: kulo<sup>32</sup> 'first', tyi<sup>1</sup> 'end, last' from subclass

$W_{12.5}$ . The specifying number tagmeme occurs only in  $P_{32}$  (see 2.4.2).

3.6.5. Calendar Relational. This tagmeme is manifested only by the independent preposition  $lo^3$  'in/on' from subclass  $W_{14.1}$ . The calendar relational tagmeme occurs only in  $P_{32}$  (see 2.4.2).

3.6.6. Determinator. This tagmeme is manifested either by the nouns  $ko^?^{12}$  'month' or  $yih_2^3$  'year' from subclass  $W_{3.1}$ , or by  $P_2$ , of which the nouns  $ko^?^{12}$  or  $yih_2^3$  manifest the quality head tagmeme. Det: $P_2$   $ko^?^{12}$   $mayu^4$  'month May',  $ko^?^{12}$   $?abri^4$  'month April',  $yih_2^3$   $kwi^3$  'year new'. The determinator tagmeme occurs only in  $P_{32}$  (see 2.4.2).

3.6.7. Numeric. This tagmeme is manifested by the base subclass of numerals  $W_{12.1}$ , i.e., 10, 15, 20, 40. The numeric tagmeme occurs only in  $P_{33}$  (see 2.4.3).

3.6.8. Addition. This tagmeme is manifested by the numeral subclass  $W_{12.3}$  or the numerals  $ti^?yu^1$  'fifteen' and  $ka^?yu^1$  'five' from subclasses  $W_{12.1}$  and  $W_{12.2}$  respectively and marked by prefix n- 'plus'. Examples of phrase  $P_{33}$  follow to demonstrate the function of this tagmeme.

(a)  $ti^2$   $tyukwa^1$   
 $P_{33} =$  Nc An  
 ten another-two  
 twelve

(b)  $tu^?wa^1$   $nga^?yu^{32}$   
 $P_{33} =$  Nc An  
 forty plus-five  
 forty-five

(c)  $kala^4$   $ndi^?yu^{32}$   
 $P_{33} =$  Nc An  
 twenty plus-fifteen  
 thirty-five

The addition tagmeme occurs only in  $P_{33}$  (see 2.4.3).

3.6.9. Interrogative Head. This tagmeme is manifested by the relative-interrogative subclass of relator particles  $W_{14.4}$ :  $ni^3$  'what?',  $la^3$  'direction?',  $lo^3$  'where?'. The interrogative head tagmeme occurs only in  $P_{34}$  (see 2.4.4).

3.6.10. Interrogative Completor. This tagmeme is manifested by certain nouns, verbs, or particles<sup>18</sup> which, by modifying the basic interrogative words manifesting the interrogative head tagmeme, derive all the question forms necessary for communication. ItgC ( $ni^3$ )  $nyo^?o^4$  '(what?) kind-of', ( $lo^3$ )  $ya^{32}$  '(where?) went' (whereabouts?), ( $ni^3$ )  $ngwa^?4$  '(what?) meaning-uncertain' (when?). The interrogative completer tagmeme occurs only in  $P_{34}$  (see 2.4.4).

3.7. Like the major phrase classes  $P_{10}$  and  $P_{30}$ , the minor phrase class  $p_{00}$  has no periphery (see 2.5). Each minor phrase consists of one major word which may be modified by one or more minor words. The single phrase stress always occurs on the major word in the expression.

3.7.1. Qualifier Head. This tagmeme is manifested by all descriptive particles in class  $W_{11}$ , or by temporal particles of class  $W_{13}$ , or demonstrative pronouns of subclass  $W_{4.3}$ . QrH: $W_{11}$   $ngate^{23}$  'white',  $l^?we^3$  'half',  $tiya^?32$  'clever',  $lyu^?1$  'small'; QrH: $W_{13}$   $ši^?i^4$  'little-while'; QrH: $W_{4.3}$   $kwa^3$  'there'. The qualifier head tagmeme occurs only in  $p_{01}$  (see 2.5.1).

3.7.2. Comparative. This tagmeme is manifested only by the minor word  $la^2$  'more' from subclass  $w_{01.2}$ . cve: ( $ngate^{23}$ )  $la^2$  'whiter', ( $l^?we^3$ )  $la^2$  '(half) more' (middle),

<sup>18</sup>A new word class of interrogative modifiers could be posited to cover the words manifesting the interrogative completer tagmeme, which would be  $W_{15}$ . Most of these words occur in other classes except those of uncertain meaning, and it is felt that further investigation is necessary to form a final conclusion.

(tiya<sup>32</sup>) la<sup>2</sup> 'cleverer', (lyu<sup>1</sup>) la<sup>2</sup> 'lesser', (š*i*?i<sup>4</sup>) la<sup>2</sup> 'shorter-while' (sooner), (tla<sup>4</sup>) la<sup>2</sup> 'darker', (kwa<sup>3</sup>) la<sup>2</sup> '(that-way) more'. The comparative tagmeme occurs only in p<sub>01</sub> (see 2.5.1).

3.7.3. Superlative. This tagmeme is manifested only by the minor word ti<sup>3</sup> 'most' from subclass w<sub>01.2</sub>, which must be preceded by the minor word la<sup>2</sup> 'more' manifesting the comparative tagmeme. sve: (ngate<sup>23</sup> la<sup>2</sup>) ti<sup>3</sup> 'whitest', (l*ʷ*we<sup>3</sup> la<sup>2</sup>) ti<sup>3</sup> '(half) most' (exactly-in-the-middle), (tiya<sup>32</sup> la<sup>2</sup>) ti<sup>3</sup> 'cleverest', (lyu<sup>1</sup> la<sup>2</sup>) ti<sup>3</sup> 'least', (š*i*?i<sup>4</sup> la<sup>2</sup>) ti<sup>3</sup> 'shortest-while' (soonest), (tla<sup>4</sup> la<sup>2</sup>) ti<sup>3</sup> 'darkest', (kwa<sup>3</sup> la<sup>2</sup>) ti<sup>3</sup> '(that-way) more still'. The superlative tagmeme occurs only in p<sub>01</sub> (see 2.5.1).

3.7.4. Classification. This tagmeme has two allotagmas, and the classification<sub>1</sub> allotagma is manifested by the minor words tu<sup>3</sup> and la<sup>3</sup> 'classifier' from subclass w<sub>02.1</sub>, which together with the major word manifestation of the nominal head<sub>1</sub> allotagma have a meaning quite different from, although related to, the meaning of the major word alone; the classification<sub>2</sub> allotagma is manifested by the minor word tša<sup>3</sup> 'classifier, thing' from subclass w<sub>02.1</sub>. The minor word tu<sup>3</sup> has a meaning on the order of 'into'. It has been impossible to assign a plausible meaning to la<sup>3</sup>. The minor word tša<sup>3</sup> 'thing' does not modify the meaning of the major word following, but perhaps designates it as a living animal. The classification tagmeme occurs only in p<sub>02</sub> (see 2.5.2).

3.7.5. Nominal Head. This tagmeme has two allotagmas, and the nominal head<sub>1</sub> allotagma is manifested by limited classes of nouns and verbs or by other morphemes of indeterminate class, whereas the nominal head<sub>2</sub> allotagma is manifested by a subclass of animate common nouns, W<sub>1.5</sub>. NoH<sub>1</sub>: (tu<sup>3</sup>) yu<sup>2</sup> '(classifier) ground' (hole in the ground),

(tu<sup>3</sup>) ku<sup>ʔ32</sup> '(classifier) end' (tip, point - as of a tree or stick), (la<sup>3</sup>) kwi<sup>ʔya</sup><sup>1</sup> '(classifier) will-carry' (bird of prey - as eagle), (la<sup>3</sup>) lya<sup>2</sup> '(classifier) meaning-uncertain' (opossum), (la<sup>3</sup>) šu<sup>2</sup> '(classifier) meaning-uncertain' (buzzard); NoH<sub>2</sub>:W<sub>1.5</sub> (tša<sup>ʔ3</sup>) kwitš<sup>i</sup><sup>3</sup> '(classifier) rabbit' (differentiated from kwitš<sup>i</sup><sup>3</sup> 'witch'), (tša<sup>ʔ3</sup>) tya<sup>1</sup> '(classifier) squirrel', (tša<sup>ʔ3</sup>) kute<sup>34</sup> '(classifier) pigeon' (differentiated from kute<sup>34</sup> 'rocket'), (tša<sup>ʔ3</sup>) ntš<sup>i</sup><sup>32</sup> '(classifier) praying-mantis'. The nominal head tagmeme occurs only in p<sub>02</sub> (see 2.5.2).

3.7.6. Limited Head. This tagmeme is manifested by a noun of classes W<sub>3</sub> and W<sub>4.3</sub>, or certain particles from classes W<sub>11</sub>, W<sub>12</sub>, or W<sub>13</sub>. LH:W<sub>3</sub> tla<sup>4</sup> (ti<sup>3</sup>) 'night (only)' (just at night), LH:W<sub>4.3</sub> nde<sup>3</sup> (ti<sup>3</sup>) 'here (only)' (just here), LH:W<sub>11</sub> mno<sup>3</sup> (ti<sup>3</sup>) 'secretly (only)' (softly), LH:W<sub>12</sub> tukwa<sup>1</sup> (ti<sup>3</sup>) 'two (only)' (just two), LH:W<sub>13</sub> š<sup>i</sup><sup>ʔi</sup><sup>4</sup> (ti<sup>3</sup>) 'little-while (only)' (quickly). The limited head tagmeme occurs only in p<sub>03</sub> (see 2.5.3).

3.7.7. Limitation. This is the same tagmeme that also occurs as phrase-termination boundary marker in the noun and predicate phrases (see 3.1.10). The limitation tagmeme is nuclear to p<sub>03</sub> but peripheral elsewhere (see 2.5.3).

3.7.8. Negation — see 3.3.1.

3.7.9. Negated Head. This tagmeme is manifested by the noun tukwi<sup>2</sup> 'meaning-uncertain' or the numeral ska<sup>3</sup> 'one' from subclass W<sub>12.2</sub>. Examples of p<sub>04</sub> follow demonstrating the function of this tagmeme.

(a)	ʔa <sup>4</sup>	ska <sup>2</sup>	(b)	ʔa <sup>4</sup>	tukwi <sup>2</sup>
p <sub>04</sub> = n		NegH	p <sub>04</sub> = n		NegH
	negation	one		negation	meaning-uncertain
	no one, nothing				nobody

The negated head tagmeme occurs only in  $p_{04}$  (see 2.5.4).

3.7.10. Augmentation. This tagmeme is manifested only by the minor word  $ʔa^3$  'more' from subclass  $w_{01.1}$ . This minor word also occurs in the post-periphery of the predicate phrase. The augmentation tagmeme occurs only in  $p_{04}$  (see 2.5.4).



## 4. Clause Types

There are both major and minor clauses. The major clauses are independent, symbiotic, or subordinate. There are four major classes, two of which are independent, and one minor class: basic clause class ( $C_0$ ), directed clause class ( $C_{10}$ ), symbiotic clause class ( $C_{20}$ ), subordinate clause class ( $C_{30}$ ) and minor clause class ( $c_{00}$ ). Any independent clause may manifest a primary sentence ( $S_1$ ) or a complete discourse. A symbiotic clause may also manifest  $S_1$ , but never as the initiating clause in a complex discourse, and only as a single sentence utterance in reiteration or agreement with the preceding linguistic context. A subordinate clause is formally rendered dependent by a subordinator, and manifests only a clause- or colon-level tagmeme. A minor clause is defective in one nuclear tagmeme and/or certain peripheral tagmemes, and manifests only a phrase-level tagmeme.

In Chatino the tagmeme order is fixed and any change in order has definite meaning. In clauses the predicate tagmeme occurs first except when some other tagmeme is to be emphasised. For emphasis a tagmeme precedes the predicate, and occasionally two tagmemes may precede the predicate simultaneously in which case they retain their relative orbit regarding the predicate as the core and the other tagmemes as its satellites. A tagmeme may also precede the predicate if it is manifested by a relatively long expression, but this expansion is usually also for emphasis.

There are three sets of contrastive criteria which apply to clauses within what might be termed a three-dimensional matrix. The primary distinction is between the action, referential, equational, stative, speech, affirmation, and reflexive types. A second distinction is between major and minor types, but this applies only to action and referential.

There are two action minor types and two referential minor types. A third distinction is between basic types and directed types, which applies to all but the reflexive and affirmation which are undifferentiated in this respect. The action, referential, and equational types have both basic and directed forms in contrast, but the stative and speech types occur only in the basic form. In the directed form of the verb an infix *-y-* occurs, and the set of aspect prefixes may also change. The infix *-y-* has a meaning on the order of 'attention focus on the following goal'. Thus a basic action clause like

ndoʔo <sup>1</sup>	buru <sup>34</sup>	la <sup>3</sup>	lyu <sup>21</sup>	wtyi <sup>3</sup>	bra <sup>3</sup>	kɔʔ <sup>2</sup>
A	S	L			B	
emerging	donkey	towards	ground	dry	hour	that
The donkey came out onto dry land then.						

may be compared with a directed action clause such as

tihyu <sup>3</sup>	saʔa <sup>1</sup>	ndyoʔo <sup>1</sup>	ʃkoʔ <sup>2</sup>	kata <sup>4</sup>
L	[DA PnS]		G	
far	very	emerging-2nd/3rd person, dir.	blouse-of	Cata
Cata's blouse came from far away.				

The verb *ndoʔo* 'coming-out' is a verb of action, and presumably a blouse cannot move of its own volition; there must be an agent to move it. The *-y-* infix in that instance appears to have a causitive function as well as indicating that the expression following immediately after this marked verb is not the specified subject but the goal, i.e., the attention focus is directed to the goal. Again, compare the basic action clause

tyu <sup>3</sup>	ne <sup>3</sup>	kwa <sup>3</sup>	ndɔʔo <sup>1</sup>	yu <sup>3</sup>	ʔ <sub>1</sub> <sup>1</sup>	ne <sup>3</sup>
S			A	L		
several	person	there	are-walking	ground	to	person
Several people are walking over their land over there.						

with the directed action clause

loʔo <sup>1</sup>	sti <sup>2</sup>	ndyoʔo <sup>32</sup>	tnyo <sup>32</sup>
Acc		[DA PnS]	G
with	father-his	walking-he, dfr.	work
He went to work with his father.			

The verb *ndoʔo* 'walking' is also a verb of motion but in this instance of the directed form the subject is not caused to walk but again the attention focus is directed to the following goal, i.e., *tnyo<sup>32</sup>* 'work'.

The subordinate type is extra-systemic to this matrix since a subordinator may precede any basic or directed type resulting in a subordinate clause in which no structural change has occurred within the independent clause, but the subordinator has been added.

4.1. There are five clause types in class  $C_0$ , each having both nuclear and peripheral tagmemes. Four are clearly basic types but  $C_4$ , which is undifferentiated as to basic-directed, is grouped here as well. Most of the differentiating characteristics occur in the nuclei of these clauses as there is a common inventory of peripheral tagmemes, although there are some restrictions concerning these six peripheral tagmemes.

4.1.1.  $C_1$ , the basic action clause, consists of four nuclear tagmemes and the periphery. Of these only two of the nuclear tagmemes are obligatory and all other tagmemes are optional.  $C_1$  may be graphically represented thus:

$$C_1 = (+ A + S + O + IO) + L + Acc + Ins + T^2$$

$$+ M + B$$

The nucleus consists of the obligatory action tagmeme manifested by phrases from class  $P_{20}$ , in which the verb is in the basic form (see 5.2.1); followed by the obligatory subject tagmeme manifested by a phrase of class  $P_0$  or  $P_{33}$ , and/or

by a pronominal tone marker<sup>19</sup> on the predicate, or words of classes  $W_4$ ,  $W_{12}$ , and  $w_{04}$ , or by a minor clause  $c_{04}$  (see 5.2.2); followed by the optional object tagmeme manifested by a phrase of class  $P_0$ , or  $P_{33}$ ,  $p_{03}$ , or by the minor clause  $c_{04}$  (see 5.2.3); followed by the optional indirect object tagmeme manifested by  $P_{11.1}$  or the  $W_{4.2}$  subclass of pronouns (see 5.3.4). The periphery consists of the optional location tagmeme manifested by phrases of classes  $P_0$  and  $P_{10}$ , or by minor phrases  $p_{01}$  or  $p_{03}$ , or by nouns from subclasses  $W_{1.8}$  and  $W_{2.4}$  (see 5.1.1); followed by the optional accompaniment tagmeme manifested by  $P_{11.2}$  (see 5.1.2); followed by the optional instrument tagmeme manifested by  $P_{11.2}$  or a phrase from class  $P_0$  (see 5.1.3); followed by the optional time tagmeme (which may occur twice in one clause) manifested by  $P_1$ ,  $P_2$ ,  $P_{12}$ ,  $P_{31}$ ,  $P_{32}$ ,  $C_5$ , or  $C_{31}$ ; or by temporal words from classes  $W_3$  or  $W_{13}$  (see 5.1.4); followed by the optional manner tagmeme manifested by  $p_{03}$  or a particle from class  $W_{11}$  (see 5.1.5); followed by the optional boundary tagmeme manifested by the phrase  $bra^3 ko^?2$  'hour that-particular' (then) (see 5.1.6). Examples of  $C_1$  follow with constituent tagmemes indicated.

- (a)       $wa^2$                $ndih_i^{32}$      $ska^3$   $yu^3$      $ki^?yu^1$      $hyo_i^{12}$        $?i_i^1$   $ne^?3$   
 $C_1 = A:P_{21}$                        $S:P_{1.1}$                                        $L:P_4$   
 completion passing one man male cornfield to person

$lo^?o^1$   $\check{s}ni^?3$   $?i_i^1$   $ne^?3$      $ka^3$                $si_i^2$                $bra^3$   $ko^?2$   
 Acc                                      T:P<sub>2</sub>                                      B  
 with dog to person yesterday evening then

The man was passing through his cornfield last evening  
 with his dog then.

- (b)       $nda^{43}$      $nu^2$                        $\check{s}ni^?3$      $nda^3$      $ska^3$      $ha^3$                $\check{s}tlya^{34}$   
 $C_1 = A:P_{21}$      $S:P_1$      $O:P_1$   
 giving the-particular dog lazy one tortilla Spanish

<sup>19</sup>When the subject tagmeme is manifested only by the pronominal tone marker on the verb, both the action and subject tagmemes are together manifested by the one word.

ʔ <sub>1</sub> <sup>1</sup>	nu <sup>3</sup>	ʔo <sup>34</sup>	bra <sup>3</sup>	ko <sup>2</sup>
IO: P <sub>11.1</sub>			B	
to	the-particular	coyote	then	

The lazy dog gave a sweetbread to the coyote then.

(c)	ni <sup>2</sup>	ha <sup>4</sup>	skwe <sup>43</sup>	ne <sup>2</sup>	kwa <sup>3</sup>	lo <sup>3</sup>	yka <sup>3</sup>	šiya <sup>2</sup>
C <sub>1</sub> =	T: W <sub>3.1</sub>	A: P <sub>21</sub>		S: P <sub>1.1</sub>		L: P <sub>11</sub>		T: W <sub>13.2</sub>
	now	negation	will-climb	person	there	in	tree	again

They will not climb up the tree again now.

While no two peripheral tagmemes are mutually exclusive and it is theoretically possible for all to occur in the same clause, it is usual to have no more than three optional tagmemes occurring with the two obligatory ones.

4.1.2. C<sub>2</sub>, the basic referential clause, consists of three nuclear tagmemes and a restricted periphery. Of these only two nuclear tagmemes are obligatory and all other tagmemes are optional.<sup>20</sup> C<sub>2</sub> may be graphically represented thus:

$$C_2 = (+ RA + S + R) + \text{periphery} [-L -\text{Ins}]$$

The obligatory referred action tagmeme manifested by a phrase from class P<sub>20</sub>, in which the verb is from the referential class and in the basic form (see 5.2.5), is followed by the obligatory subject tagmeme (see 5.2.2); followed by an optional reference tagmeme<sup>21</sup> manifested by P<sub>11</sub> or a phrase

<sup>20</sup>In analysing this clause type two difficulties are encountered, (i) that of distinguishing between the subject tagmeme manifested by the possessive noun phrase II (P<sub>4</sub>) and the subject tagmeme followed by the reference tagmeme when the latter is manifested by the relational phrase (P<sub>11</sub>), (ii) that of distinguishing between the reference and location tagmemes.

<sup>21</sup>The particular referential verb occurring as head of the phrase manifesting the referred action tagmeme determines the kind of referent occurring as the reference tagmeme, so that ndiya<sup>21</sup> 'is-belonging' has an animate, usually human, referent. Further investigation is necessary to determine the extent of these lexical co-occurrence restrictions.

from class  $P_0$ , or a pronoun from subclass  $W_{4.2}$  (see 5.2.6); followed by the optional restricted periphery which excludes the location and instrument tagmemes. Usually no more than two peripheral tagmemes occur in a given example<sup>22</sup> of  $C_2$ . Examples of  $C_2$  follow with constituent tagmemes indicated.

- (a)       $ndi_1^?i_1^{43}$        $nte_2^{34}$        $kune_1^{?1}$        $ti^2$        $tyi^2$   
 $C_2 = RA:P_{21}$        $S:P_{1.1}$        $R:P_2$   
 is-living    people    young    rope    own  
 Very young people live attached to their umbilical cords.
- (b)       $ndiya^1$        $ska^2$        $kaha^4$        $?yo_2^{21}$        $nde^3$   
 $C_2 = RA:P_{21}$        $S:P_1$        $R:W_{4.2}$        $L:W_{4.3}$   
 is-belonging    one    box    to-me    here  
 I have a box here.
- (c)       $nsu?wi^{32}$        $ki^2$        $tlo^{32}$        $wa^2$        $ka?yu^{43}$        $tso_2^{23}$        $bra^3$        $ko_2^{?2}$   
 $C_2 = RA:P_{21}$        $S:P_1$        $R:P_1$        $T:P_{31}$        $B$   
 there-is    swelling    face-her    completion    five    day      then  
 Her face has been swollen for five days.

4.1.3.  $C_3$ , the basic equational clause, consists of three nuclear tagmemes and a restricted periphery. Of these, only two nuclear tagmemes are obligatory and all other tagmemes are optional. The order of the nuclear tagmemes in  $C_3$  is fixed so that the equational subject tagmeme never precedes the equation tagmeme as the subject tagmeme may precede the action tagmeme in  $C_1$  or the referred action tagmeme in  $C_2$  for emphasis.  $C_3$  may be graphically represented thus:

$$C_3 = (+ \text{ Cop} + E + ES) \pm \text{periphery} [-\text{Ins}]$$

The optional complement tagmeme manifested by  $P_1$  or by a pronoun of subclass  $W_{4.1}$  (see 5.2.7) is followed by the obligatory equation tagmeme manifested by  $P_{21}$  or  $P_{26}$  in which the predicate head is from the equational class and in

<sup>22</sup> See end of the description of  $C_1$ .

the basic form (see 5.2.8), followed by the obligatory equational subject tagmeme manifested by a phrase from class P<sub>0</sub> or a pronoun (see 5.2.9), followed by the optional restricted periphery which excludes the instrument tagmeme. Usually no more than two peripheral tagmemes occur in any one clause. Examples of C<sub>3</sub> follow with constituent tagmemes indicated.

(a)      ne<sup>?</sup>3      kuliya<sup>?</sup>32      lka<sup>4</sup>      nu<sup>3</sup>                      ki<sup>?</sup>yu<sup>1</sup>      kwa<sup>3</sup>  
 C<sub>3</sub> = Cop: P<sub>1.1</sub>                      E: P<sub>21</sub>      ES: P<sub>1.1</sub>  
          person rich              is              the-particular male      that

lo<sup>3</sup>      yka<sup>3</sup>      štiya<sup>34</sup>

L: P<sub>1.1</sub>

on wood Spanish

That man on the chair is a rich person.

(b)      ʔni<sup>3</sup>      ha<sup>4</sup>              ʔni<sup>1</sup>      la<sup>21</sup>      lka<sup>4</sup>      nuʔwi<sup>?</sup>2  
 C<sub>3</sub> = Cop: P<sub>1.2</sub>    E: P<sub>21</sub>      ES: W<sub>4.1</sub>  
          animal negation make fierce is      you-familiar

You are an animal that is never fierce.

(c)      nɔ<sup>?</sup>2              lkɔ<sup>1</sup>      msu<sup>34</sup>      ʔi<sup>1</sup>      yu<sup>3</sup>      ni<sup>2</sup>  
 C<sub>3</sub> = Cop: W<sub>4.1</sub>      E: P<sub>21</sub>      ES: P<sub>4</sub>    T: W<sub>3.1</sub>  
          I              am-I      servant to      man      now

I am the man's servant now.

4.1.4. C<sub>4</sub>, the reflexive clause, consists of two obligatory nuclear tagmemes and a periphery. There is no subject tagmeme; rather the logical subject of the verb is the possessor of the object. The order of the nuclear tagmemes is fixed and may not be changed for emphasis. C<sub>4</sub> may be graphically represented thus:

C<sub>4</sub> = (+ RefA + POb) ± periphery [-Acc]

The obligatory reflexive action tagmeme manifested by P<sub>21</sub>, in which the verb is from the reflexive class W<sub>24</sub> (see 5.2.10), is followed by the obligatory possessed object tagmeme manifested by P<sub>3</sub> or P<sub>4</sub> (see 5.2.11), followed by the

optional periphery except the accompaniment tagmeme. No more than two peripheral tagmemes may occur in any given example, of which one is usually time. Examples of  $C_4$  follow with constituent tagmemes indicated.

- (a)       $ngite^1$        $ste^{\gamma 3}$        $nu^3$        $kw\phi^{\gamma\phi^1}$   $t\check{s}ku^1$   $kwa^3$   
 $C_4 =$  RefA:  $P_{21}$     POb:  $P_3$                           L:  $P_{1.1}$   
 washing clothes-of the-particular female spring there  
 The women are washing their clothes at that spring.

- (b)       $kwi^{\gamma 2}$   $lya^1$        $bra^{34}$   $ku^{32}$        $tlya^{32}$        $\phi^2$   
 $C_4 =$  T:  $C_5$                 RefA:  $P_{21}$     POb:  $P_3$   
 same immediately hour will-eat dinner-of our-inclusive  
 It is the time we eat our dinner.

- (c)       $ty\phi^{\gamma\phi^{32}}$        $k\check{s}u^{34}$   $\gamma_1^1$   $ne^{\gamma 3}$        $bra^3$   $k\phi^{\gamma 2}$   
 $C_4 =$  RefA:  $P_{21}$            POb:  $P_4$                 B  
 will-emerge,dir. cheese to person then  
 then their cheese will be ready

4.1.5.  $C_5$ , the stative clause, consists of two obligatory nuclear tagmemes and a periphery. The order of the nuclear tagmemes is fixed and, unlike some other clause types in class  $C_0$ , the subject tagmeme may not precede the stative predicate for emphasis.<sup>23</sup> Clauses of this type, which often

<sup>23</sup> The inversion of word order in  $C_5$  gives an attributive noun phrase ( $P_1$ ). An example follows.

$ngate^{23}$        $te^{\gamma 34}$   $nde^3$   
 $C_5 =$  [SPR:  $P_{25}$       S:  $P_{1.1}$ ]  
 white      cloth this  
 This cloth is white.

When inverted gives       $te^{\gamma 34}$        $ngate^{23}$        $nde^3$   
 $P_{1.1} =$  [H:  $W_{1.1}$       Col:  $W_{11.5}$       Dem:  $W_{4.3}$ ]  
 cloth      white      this  
 this white cloth





nuclear tagmemes, of which two are obligatory, and the optional periphery.  $C_{11}$  may be graphically represented thus:

$$C_{11} = (+ DA + PnS \pm G \pm SE/IO) \pm \text{periphery}$$

The obligatory directed action tagmeme, manifested by a phrase from class  $P_{20}$ , in which the verb is in the directed form (see 5.3.1), is followed by the obligatory pronominal subject tagmeme manifested by a pronoun of subclass  $w_{04}$  or by a pronominal tone marker on the predicate (see 5.3.2); followed by the optional goal tagmeme on which the attention is focussed and which is manifested by  $P_{11.1}$ ,  $P_{12}$ , or a phrase from class  $P_0$ , or by a pronoun from subclass  $W_{4.2}$  (see 5.3.3); followed by either the optional subject expansion tagmeme manifested by  $P_1$ ,  $P_3$ , or  $P_4$  (see 5.3.4) or the optional indirect object tagmeme (see 5.2.4); followed by the optional periphery which usually includes no more than four peripheral tagmemes in a given example. Examples of  $C_{11}$  follow with constituent tagmemes indicated.

- (a)       $n\dot{s}i\gamma u^{32}$        $ne\gamma^3$        $yka^3$        $lo\gamma o^1$        $ta\gamma a^{23}$        $lo\gamma o^1$        $siyera^4$   
 $C_{11} =$  DA:  $P_{21}$       PnS:  $w_{04}$       G:  $P_1$       Acc           Ins:  $P_{11.2}$   
cutting, dir.      person      wood with      relative with      saw

$ka^3$        $si_t^2$        $bra^3$        $ko\gamma^2$   
T:  $P_2$            B  
yesterday evening      then

He and his brother were cutting up wood last evening  
then using a saw.

- (b)       $\dot{s}iya\gamma^2$        $mykw\gamma^1$             $\gamma_1^1$        $yu^3$   
 $C_{11} =$  T:  $W_{13.2}$       [DA:  $P_{21}$       PnS: pronominal tone]      G:  $P_{11.1}$   
again      hit-he, dir.           to      man  
He was caused to hit the man again.

- (c)       $ngwo^2$        $\gamma o^3$        $ngiy\gamma^3$             $la^2$        $nde^3$   
 $C_{11} =$  [DA:  $P_{21}$       PnS: pronominal tone]      G:  $P_{12}$   
like      that coming-it, dir.      towards here

nu<sup>3</sup> buru<sup>2</sup> bra<sup>3</sup> kɔ<sup>2</sup>?<sup>2</sup>  
 SE: P<sub>1</sub> B  
 the-particular donkey then  
 That's the way the donkey came over here.

4.2.2. C<sub>12</sub>, the directed referential clause, consists of five nuclear tagmemes, of which two are obligatory, and the optional periphery. C<sub>12</sub> may be graphically represented thus:

$$C_{12} = (\underline{+} GE + DR + PnS \underline{+} G \underline{+} SE/R) \underline{+} \text{periphery}$$

The optional goal expansion tagmeme manifested by P<sub>1</sub> (see 5.3.5) is followed by the obligatory directed referential tagmeme manifested by P<sub>21</sub>, P<sub>24</sub>, or P<sub>26</sub>, in which the verb is from the referential class and in the directed form (see 5.3.6); followed by the obligatory pronominal subject tagmeme (see 5.3.2); followed by the optional goal tagmeme (see 5.3.3); followed optionally by either the subject expansion tagmeme (see 5.3.4) or the reference tagmeme (see 5.2.6); followed by the optional periphery in which, like C<sub>11</sub>, no more than four peripheral tagmemes usually occur in a given example. Examples of C<sub>12</sub> follow with constituent tagmemes indicated.

(a) tyukwa<sup>43</sup> tšɪ<sup>1</sup>?<sup>1</sup> yka<sup>3</sup> štɪya<sup>34</sup>  
 C<sub>12</sub> = [DR: P<sub>21</sub> PnS: pronominal tone] G: P<sub>1.1</sub>  
 will-be-on-you, dir. a-little wood Spanish  
 You will sit down for a little on the chair.

(b) ha<sup>4</sup> ndyu<sup>3</sup>?wɪ<sup>32</sup> ?a<sup>3</sup> ša<sup>2</sup> ni<sup>3</sup> kye<sup>3</sup>  
 C<sub>12</sub> = [DR: P<sub>21</sub> PnS: pronominal tone] G: P<sub>1</sub> L: P<sub>11.1</sub>  
 negation is-there-it, dir. more brightness inside stone  
 There is no light (caused to be) inside the rock any more.

(c) ?ni<sup>3</sup> nu<sup>3</sup> nɔ<sup>2</sup> kwɪtyɪ<sup>32</sup> ?ɪ<sup>2</sup> tšku<sup>1</sup>  
 C<sub>12</sub> = GE: P<sub>1</sub> R: P<sub>1</sub>  
 animal which name frog pronoun spring

ndyukwa<sup>32</sup>                                    ko<sup>2</sup>  
 [DR: P<sub>21</sub> PnS: pronominal tone] G: W<sub>4.3</sub>  
 is-on-it, dir.                                    that-particular  
 The animal called frog is to be found in a spring.

(d)     su<sup>2</sup>    ndi<sup>2</sup>o<sup>1</sup>                                    ti<sup>3</sup>    šni<sup>2</sup>o<sup>3</sup>    ndaha<sup>3</sup>  
 C<sub>12</sub> = [DA: P<sub>26</sub> PnS: pronominal tone] G: P<sub>1.1</sub>  
 lying is-adjolning-it, dir.    only dog    lazy

ɔi<sup>1</sup>    kwitu<sup>23</sup>    ndiya<sup>21</sup>    yu<sup>3</sup>    ni<sup>2</sup>  
 R: P<sub>t1.1</sub>    T: W<sub>3.1</sub>  
 to chicken is-there man now  
 The lazy dog is just lying there guarding the man's  
 chicken now.

4.2.3. C<sub>13</sub>, the directed equational clause, consists of four nuclear tagmemes, of which two are obligatory, and the optional periphery. C<sub>13</sub> may be graphically represented thus:

C<sub>13</sub> = (+ Cop + DE + PnS + EG) + periphery

The optional complement tagmeme (see 5.2.7) is followed by the obligatory directed equation tagmeme manifested by P<sub>21</sub> or P<sub>22.1</sub>, in which the verb is from the equational class and in the directed form (see 5.3.9); followed by the obligatory pronominal subject tagmeme (see 5.3.2); followed by the optional equational goal tagmeme manifested by P<sub>1</sub> or P<sub>4</sub>, or by a pronoun of subclass W<sub>4.2</sub> (see 5.3.10); followed by the optional periphery which rarely exceeds two tagmemes in a given example. Examples of C<sub>13</sub> follow with constituent tagmemes indicated.

(a)     ta<sup>3</sup>a<sup>3</sup>    ndška<sup>43</sup>                                    nde<sup>3</sup>  
 C<sub>13</sub> = Cop: P<sub>1</sub> [DE: P<sub>21</sub> PnS: pronominal tone] EG: W<sub>4.2</sub>  
 feast is-being-it, dir.                                    here  
 This is a feast being held here.

(b)  $ti^2$   $nd\check{s}ka^{43}$   $kw\check{i}^3$   $\check{y}\check{i}^3$   $ni^2$   
 $C_{13} = [DE:P_{21} \text{ PnS:pronominal tone}] \text{ EG:P}_1 \text{ T:W}_{3.1}$   
 still 1s-being-he, dlr. wind now  
 The wind is still blowing.<sup>24</sup>

(c)  $wa^2$   $ngwa^{43}$   $biya^2$   $t\check{s}a^2$   $\check{y}o^{21}$   
 $C_{13} = [DE:P_{22} \text{ PnS:pronominal tone}] \text{ EG:P}_4$   
 completion was, dlr. measure thing to-me

$wa^2$   $ska^{43}$   $yih\check{o}^3$   
 T:P<sub>31</sub>  
 completion one year  
 My affair was settled a year ago.

4.3. There are two clause types in the symbiotic class  $C_{20}$ .  $C_{21}$  is a basic type and  $C_{22}$  is undifferentiated as to basic or directed forms. These types are logically dependent on behavioural and/or linguistic context although structurally independent. The tagmeme order is fixed in both clause types.

4.3.1.  $C_{21}$ , the speech clause, consists of three nuclear tagmemes and only one peripheral tagmeme. Two nuclear tagmemes are obligatory. This clause type is used chiefly in the narrative style of discourse.  $C_{21}$  may be graphically represented thus:

$$C_{21} = (+ \text{QM} + \text{Sk} \pm \text{Re}) \pm \text{B}$$

The obligatory quotation mark tagmeme manifested by the limited class of quotational verbs  $W_{28}$  (see 5.4.1) is followed by the obligatory speaker tagmeme manifested by a pronominal tone marker on the predicate, a pronoun, or by a phrase from class  $P_0$  (see 5.4.2); followed by the optional receptor

<sup>24</sup> The directed form of the equational verb 'to-be' is always used when referring to physical phenomena, e.g., wind, thunder, so it may be assumed that the Chatinos believe that a supernatural force is at work to cause these phenomena since this same verb form is used of wounds and disease thought to be caused by demons.

tagmeme manifested by  $P_{11}$  (see 5.4.3); followed by the optional boundary tagmeme as the sole representative of the periphery (see 5.1.6). Examples of  $C_{21}$  follow with constituent tagmemes indicated.

- (a)       $\text{?ni}^{43}$   $\text{yu}^3$      $\text{lo?o}^1$   $\text{snye?}^{32}$   
 $C_{21} = \text{QM}$      $\text{Sk:P}_1$      $\text{Re:P}_{11\cdot 2}$   
           made man    with child-his  
           the man said to his child
- (b)       $\text{yhw}_t^1$   $\text{nu}^3$                        $\text{kwi\check{s}i}^3$   $\text{?i}_t^1$   $\text{nu}_t^3$                        $\text{kun}_t^1$   $\text{tnu}_t^3$   
 $C_{21} = \text{QM}$      $\text{Sk:P}_1$                                        $\text{Re:P}_{11\cdot 1}$   
           said the-particular rabbit to the-particular snake great  
  
            $\text{bra}^3$   $\text{k}_t^3$   
           B  
           then  
   the rabbit said to the great snake then
- (c)       $\text{yhw}_t^1$      $\text{\check{s}uwa}^4$   $\text{?i}_t^1$   $\text{yu}^3$   $\text{nu}^3$      $\text{nsu?wi}^1$   $\text{k}_t^3$   
 $C_{21} = \text{QM}$      $\text{Sk:P}_1$      $\text{Re:P}_{11\cdot 1}$   
           said Juan to man which there-is that-particular  
   John said to the man who was there
- (d)       $\text{yhw}_t^1$   
 $C_{21} = [\text{QM} \text{ Sk:pronominal tone}]$   
           said-he

4.3.2.  $C_{22}$ , the affirmation clause, consists of two nuclear tagmemes, one obligatory and one optional, and the periphery.  $C_{22}$  may be graphically represented thus:

$$C_{22} = (+ \text{AA} \quad \underline{+} \text{G}) \quad \underline{+} \text{periphery}$$

The obligatory affirmative action tagmeme manifested by  $P_{23}$  and carrying the subject person marker (see 5.4.4) is followed by the optional goal tagmeme (see 5.4.5), which occurs rarely since it is usually implied by the preceding behavioural and/or linguistic context; followed by the optional

periphery which seldom occurs. Examples of C<sub>22</sub> follow with constituent tagmemes indicated.

- (a) škwa<sup>43</sup>                      tu<sup>2</sup>  
 C<sub>22</sub> = AA                      will-lie-down-you, dir.    for-sure  
   You will certainly lie down.
- (b) šnyl<sup>32</sup>                      tu<sup>2</sup>                      bra<sup>3</sup> ko<sup>2</sup>  
 C<sub>22</sub> = AA                      B                      will-take-you, dir.    for-sure    then  
   Help yourself then.
- (c) ty<sub>L</sub><sup>2</sup>ɥ<sub>L</sub><sup>43</sup>                      tu<sup>2</sup>                      nɔ<sup>2</sup>    ɥwɔ<sup>3</sup>  
 C<sub>22</sub> = AA                      G:P<sub>4</sub>                      will-live-you, dir.    for-sure    thing of-you-pl./respectful  
  
 nɪ<sup>3</sup>    nyɔ<sup>2</sup>ɥ<sup>1</sup>                      nde<sup>3</sup>  
 L:P<sub>11.1</sub>                      inside    inside-house here  
   You can leave your things in this house.

4.4. To date there is only one type in subordinate class C<sub>30</sub> and this manifests either the time clause-level tagmeme in the clause in which it is included, or the reason sentence-level tagmeme in S<sub>12</sub>. It seems probable that upon further investigation this class will be expanded as other subordinate clauses are analysed.

4.4.1. C<sub>31</sub>, the temporal subordinate clause, has two obligatory nuclear tagmemes and no periphery. C<sub>31</sub> may be graphically represented thus:

$$C_{31} = (+ Sbr + Axs)$$

The obligatory subordinator tagmeme manifested by the limited subclass of subordinator temporal nouns W<sub>3.3</sub> (see 5.5.1) is followed by the obligatory axis tagmeme manifested by clause classes C<sub>0</sub> or C<sub>10</sub> (see 5.5.2). Examples of C<sub>31</sub> follow with constituent tagmemes indicated.

- (a) bra<sup>34</sup> ngu<sup>1</sup> ne<sup>73</sup> ʔi<sup>2</sup>  
 C<sub>31</sub> = Sbr Axs: C<sub>1</sub>  
 hour shooting person pronoun  
 when they were shooting him
- (b) ša<sup>2</sup> ndiʔi<sup>32</sup> ni<sup>73</sup> lyoʔo<sup>32</sup>  
 C<sub>31</sub> = Sbr Axs: C<sub>2</sub>  
 light being-living-it inside inside-corral  
 when it was inside the corral
- (c) ša<sup>2</sup> lka<sup>4</sup> ne<sup>73</sup> nte<sup>34</sup> kune<sup>71</sup>  
 C<sub>31</sub> = Sbr Axs: C<sub>3</sub>  
 light is person people young  
 when a person is young
- (d) bra<sup>34</sup> nu<sup>2</sup> ku<sup>32</sup> tlya<sup>32</sup> o<sup>2</sup>  
 C<sub>31</sub> = Sbr Axs: C<sub>4</sub>  
 hour which will-eat dinner-of we-inclusive  
 when we eat our dinner
- (e) ša<sup>2</sup> tiya<sup>72</sup> nte<sup>34</sup>  
 C<sub>31</sub> = Sbr Axs: C<sub>5</sub>  
 light cold people  
 when people are cold
- (f) bra<sup>34</sup> nu<sup>2</sup> šiyu<sup>32</sup> ne<sup>72</sup> mo<sup>4</sup>ki<sup>4</sup> su<sup>2</sup> lambre<sup>4</sup>  
 C<sub>31</sub> = Sbr Axs: C<sub>11</sub>  
 hour which will-turn, dir. person machine base wire  
 when they turn the machine at the base of the wire (telegraph)
- (g) ša<sup>2</sup> kito<sup>1</sup> ndyukwi<sup>32</sup> tu<sup>3</sup> no<sup>2</sup>ʔo<sup>2</sup> ʔi<sup>1</sup> ne<sup>73</sup>  
 C<sub>31</sub> = Sbr Axs: C<sub>12</sub>  
 light hammock is-up-it, dir. door to person  
 when the hammock is hanging in their doorway
- (h) ša<sup>2</sup> ndška<sup>43</sup> kwi<sup>1</sup>ʔi<sup>2</sup> ʔi<sup>3</sup>  
 C<sub>31</sub> = Sbr Axs: C<sub>13</sub>  
 light is-being, dir. wind pronoun  
 when the wind blows against it



4.5. There are four clause types in the minor clause class  $c_{00}$ . A restricted periphery occurs with three of these,  $c_{01}$ ,  $c_{02}$ , and  $c_{03}$ , whereas the nuclear reference and object tagmemes and the peripheral accompaniment and boundary tagmemes do not occur. Furthermore, no more than two peripheral tagmemes may occur in any given example of these three clause types. The tagmeme order is fixed.  $c_{01}$ ,  $c_{02}$ , and  $c_{03}$  manifest the designation post-peripheral tagmeme in phrase type  $P_{1.2}$ , where the head tagmeme acts as the logical object, main subject, reference, or location described by the minor clause. If the head tagmeme is acting as the logical main subject described by the minor clause, subject will again be indicated in the predicate of the minor clause by the person marker tone.  $c_{04}$  usually manifests the number tagmeme in the pre-periphery of  $P_1$ .

4.5.1.  $c_{01}$ , the basic action minor clause, consists of three nuclear tagmemes of which two are obligatory, and the periphery.  $c_{01}$  may be graphically represented thus:

$$c_{01} = (+ A + S + IO) + \text{periphery} [-\text{Acc} -B]$$

The obligatory action tagmeme in which the verb is in the basic form (the minimum of the predicate phrase usually occurs) (see 5.6.1) is followed by the obligatory subject tagmeme (see 5.6.2), followed by the optional indirect object tagmeme (see 5.6.3), followed by the optional restricted periphery. Examples of  $c_{01}$  follow with constituent tagmemes indicated.

(a)  $(n\acute{o}^2)$  ngusi<sup>1</sup>?<sup>43</sup> ti<sup>2</sup> ka<sup>3</sup>  
 $c_{01} =$  [A: P<sub>21</sub> S: pronominal tone] T: P<sub>12</sub>  
 (thing) bought-I from yesterday  
 (the thing) that I bought yesterday

(b) (se<sup>2</sup>?e<sup>3</sup> lyu<sup>21</sup>) ndu<sup>43</sup> kiya<sup>2</sup>?<sup>32</sup> msa<sup>34</sup>  
 $c_{01} =$  A: P<sub>21</sub> S: P<sub>3</sub>  
 (place ground) standing foot table  
 the place on the ground between where the table legs stand

- (c) (neʔ<sup>3</sup>) ngiya<sup>32</sup> sʔni<sup>2</sup>  
 c<sub>01</sub> = [A:P<sub>21</sub> S:pronominal tone] T:W<sub>13.2</sub>  
 (person) going-he long-ago

seʔe<sup>3</sup> yiʔo<sup>43</sup> tihyu<sup>2</sup>

L:P<sub>1.2</sub>

place went-I far

the person who was going long ago to that far off place  
 where I went

4.5.2. c<sub>02</sub>, the directed action minor clause, consists of three nuclear tagmemes of which two are obligatory and one optional. c<sub>02</sub> may be graphically represented thus:

$$c_{02} = (+ DA + PnS \pm G) \pm \text{periphery} [-Acc -B]$$

The obligatory directed action tagmeme in which the verb is in the directed form (the minimum of the predicate phrase usually occurs) (see 5.6.4) is followed by the obligatory pronominal subject tagmeme (see 5.6.5), followed by the optional goal tagmeme (see 5.6.6), followed by the optional restricted periphery. Examples of c<sub>02</sub> follow with constituent tagmemes indicated.

- (a) (tuʔkwi<sup>21</sup>) tyoʔo<sup>32</sup>  
 c<sub>02</sub> = [DA:P<sub>21</sub> PnS:pronominal tone]  
 (road) will-walk-he, dir.  
 the road he will be caused to take

- (b) (seʔe<sup>3</sup>) šku<sup>32</sup> lyu<sup>21</sup>  
 c<sub>02</sub> = [DA:P<sub>21</sub> PnS:pronominal tone] G:P<sub>1</sub>  
 (place) will-close-in-he, dir. ground  
 the place where he will be shut up in the earth

4.5.3. c<sub>03</sub>, the basic referential minor clause, consists of two obligatory nuclear tagmemes with the optional periphery. c<sub>03</sub> may be graphically represented thus:

$$c_{03} = (+ RA + S) \pm \text{periphery} [-Acc -B]$$

The obligatory referred action tagmeme (see 5.6.7) is followed by the obligatory subject tagmeme (see 5.6.2), followed by the optional restricted periphery. Examples of  $c_{03}$  follow with constituent tagmemes indicated.

- (a) (tuʔwa<sup>3</sup>) ndukwa<sup>43</sup> su<sup>32</sup>  
 $c_{03}$  = RA:P<sub>21</sub> S:P<sub>1</sub>  
 (mouth-his) is-on beard  
 his mouth, where the beard is
- (b) (yʔo<sup>1</sup>) ndiya<sup>21</sup> kuwi<sup>ʔ3</sup> sku<sup>32</sup>  
 $c_{03}$  = RA:P<sub>21</sub> S:P<sub>1</sub> L:W<sub>1.4</sub>  
 (mother-its) is-belonging baby arm-her  
 The mother has the baby in her arms.
- (c) (kuʔ<sup>12</sup>) ndukwi<sup>1</sup> lo<sup>3</sup> tiʔa<sup>3</sup>  
 $c_{03}$  = [RA:P<sub>21</sub> S:pronominal tone] L:P<sub>11.1</sub>  
 (dirt) is-up-it in water  
 the dirt suspended in the water

4.5.4.  $c_{04}$ , the numeral referential minor clause, consists of three obligatory nuclear tagmemes without the periphery. There are two subtypes of  $c_{04}$  which may be graphically represented thus:

$$c_{04.1} = (+ RN_1 + NRA_1 + SN_1)$$

$$c_{04.2} = (+ RN_2 + NRA_2 + SN_2)$$

In  $c_{04.1}$  the obligatory reference number<sub>1</sub> allotagma manifested by the base numerals from subclass  $W_{12.1}$  or by  $P_{33}$  (see 5.6.8) is followed by the obligatory numeral referential action<sub>1</sub> allotagma manifested only by the referential verb ndukwa 'is-on' (see 5.6.9), followed by the obligatory subject number<sub>1</sub> allotagma manifested by numerals of subclass  $W_{12.2}$  (see 5.6.10). In  $c_{04.2}$  the obligatory reference number<sub>2</sub> allotagma, manifested by a restricted  $P_1$  (see 5.6.8), is followed by the obligatory numeral referential action<sub>2</sub> allotagma manifested only by the equational verb nsuʔwi 'there-is'

(see 5.6.9); followed by the obligatory subject number<sub>2</sub> allotagma manifested by numerals of class W<sub>12</sub> or by P<sub>33</sub>, or a further c<sub>04</sub> (see 5.6.10). Examples of c<sub>04</sub> follow with constituent tagmemes indicated.

- (a)           kala<sup>4</sup>           ndukwa<sup>43</sup> ska<sup>2</sup>  
 c<sub>04.1</sub> = RN<sub>1</sub>:W<sub>12.1</sub> NRA<sub>1</sub>     SN<sub>1</sub>  
           twenty       is-on     one  
                           twenty-one
- (b)           tuʔwa<sup>1</sup> tyi<sup>32</sup>           ndukwa<sup>43</sup> sno<sup>1</sup>  
 c<sub>04.1</sub> = RN<sub>1</sub>:P<sub>33</sub>           NRA<sub>1</sub>     SN<sub>1</sub>  
           forty    another-ten is-on     three  
                           fifty-three
- (c)           sno<sup>1</sup> yla<sup>4</sup>    nsuʔwi<sup>32</sup> kaʔyu<sup>1</sup>  
 c<sub>04.2</sub> = RN<sub>2</sub>                 NRA<sub>2</sub>     SN<sub>2</sub>:W<sub>12.2</sub>  
           three score there-is five  
                           sixty-five
- (d)           skwa<sup>1</sup> siyetu<sup>4</sup>    nsuʔwi<sup>32</sup> kala<sup>4</sup>   tyi<sup>1</sup>  
 c<sub>04.2</sub> = RN<sub>2</sub>                 NRA<sub>2</sub>     SN<sub>2</sub>:P<sub>33</sub>  
           six     hundred there-is twenty another-ten  
                           six hundred and thirty
- (e)           hakwa<sup>3</sup> yla<sup>4</sup>    nsuʔwi<sup>32</sup> tiʔyu<sup>1</sup> ndukwa<sup>43</sup> tukwa<sup>1</sup>  
 c<sub>04.2</sub> = RN<sub>2</sub>                 NRA<sub>2</sub>     SN<sub>2</sub>:c<sub>04.1</sub>  
           four     score there-is fifteen is-on     two  
                           ninety-seven

## 5. Clause-Level Tagmemes

A description of the clause-level tagmemes follows. In that there is a common inventory of peripheral tagmemes, most of the characteristic differences between the clause types are to be found in the nuclei. However, characteristic restrictions on the peripheries of certain clause types constitute further contrastive features of those types.

5.1. Peripheral tagmemes occur in a fixed order following the nuclear tagmemes. This order varies only for emphasis as described in 4.0, except for the accompaniment tagmeme. The minimum manifestation of the accompaniment tagmeme may occur following the object tagmeme and preceding the indirect object tagmeme in  $C_1$ .

5.1.1. Location. This tagmeme is manifested by  $P_1$ ,  $P_2$ ,  $P_3$ ,  $P_4$ ,  $P_{11}$ ,  $P_{12}$ ,  $p_{01}$ ,  $p_{03}$ , or nouns from subclasses  $W_{1.4}$  and  $W_{2.4}$ . L: $P_1$  se<sub>2</sub>?e<sub>3</sub> laha<sup>2</sup> kwa<sup>3</sup> 'place empty that' (that bare patch), nu<sup>3</sup> ki?ya<sup>23</sup> ndukwa<sup>43</sup> ska<sup>2</sup> nu<sup>3</sup> tu<sup>3</sup> kye<sup>3</sup> ?i<sup>2</sup> 'the-particular mountain is-on one the-particular cave pronoun' (the mountain where he has his cave); L: $P_2$  no<sub>2</sub>?o<sub>3</sub> tškwō<sup>43</sup> 'house metal' (gaol); L: $P_3$  sto<sub>2</sub>?<sup>2</sup> yka<sup>3</sup> 'claws-of tree' (the branches of the tree); L: $P_4$  kiya<sup>32</sup> wta<sup>34</sup> ?i<sup>1</sup> ne<sup>3</sup> 'foot-of cow to person' (his cow's hoof/leg); L: $P_{11}$  lo<sup>3</sup> yka<sup>3</sup> ndla<sup>34</sup> 'in tree peach' (in a peach tree); L: $P_{12}$  la<sup>3</sup> se<sub>2</sub>?e<sub>3</sub> ndi<sub>2</sub>?i<sub>4</sub><sup>43</sup> šuwa<sup>4</sup> 'towards place is-being/living Juan' (to where John is living); L: $p_{01}$  l?we<sup>3</sup> la<sup>3</sup> 'half more' (middle); L: $p_{03}$  nde<sup>3</sup> ti<sup>3</sup> 'here only'; L: $W_{1.4}$  nyō?o<sup>1</sup> 'inside-house', lyo?o<sup>32</sup> 'inside-corral'; L: $W_{2.4}$  sku?we<sup>3</sup> 'Juquila'. The location tagmeme occurs in all types in classes  $C_0$  and  $C_{10}$  except the basic referential clause,  $C_2$ , and in  $C_{22}$ ,  $c_{01}$ ,  $c_{02}$ , and  $c_{03}$  (see 4.1, 4.2, 4.3.2, 4.5).

5.1.2. Accompaniment. This tagmeme is manifested by  $P_{11.2}$ :  $lo\gamma o^1$   $snye\gamma^{32}$   $reyi^{34}$  'with child-of king',  $lo\gamma o^1$   $ska^3$   $ha^3$   $\check{s}tlya^{34}$   $ngate^{23}$  'with one tortilla Spanish white' (with a white bread roll),  $lu\gamma u^1$  'with-me',  $ha^4$   $lo\gamma o^1$  'negation with-it/him/you' (not with you/him/it). When a negated form occurs, it always precedes the predicate, thereby carrying the emphasis. The accompaniment tagmeme occurs with all types in classes  $C_0$  and  $C_{10}$  except  $C_4$ , and in  $C_{22}$  (see 4.1, 4.2, 4.3.2).

5.1.3. Instrument. This tagmeme is manifested by  $P_{11.2}$ , or by  $P_1$ ,  $P_2$ ,  $P_3$ , and  $P_4$  when in the position of emphasis preceding the predicate. Ins: $P_{11.2}$   $lo\gamma o^1$   $siyera^4$  'with saw'; Ins: $P_1$   $skwo^2$   $ku\gamma tsi^2$  '(with) corn-dough yellow'; Ins: $P_{2.1}$   $t\check{s}kwo^{43}$   $yka^3$  '(with) metal wood' (with an axe); Ins: $P_3$   $ya\gamma^{32}$   $ne\gamma^2$  '(with) hand-of person'; Ins: $P_4$   $m\check{o}kino^4$   $\gamma i^1$   $nu^3$   $ki\gamma yu^1$  '(with) machine to the-particular man'. The instrument tagmeme occurs in  $C_1$ ,  $C_2$ ,  $C_4$ ,  $C_5$ , and types of classes  $C_{10}$  and  $c_{00}$  except  $c_{04}$  (see 4.1, 4.2, 4.5).

5.1.4. Time. This tagmeme is manifested by a temporal noun of class  $W_3$  or temporal particle of class  $W_{13}$ , or by  $P_1$ ,  $P_2$ ,  $P_{12}$ ,  $P_{31}$ ,  $P_{32}$ ,  $C_5$ , or  $C_{31}$ . T: $W_3$   $kya^{43}$  'tomorrow'; T: $W_{13}$   $s\gamma ni^2$  'long-time/distance'; T: $P_1$   $nd\check{s}ga^3$   $ts\check{o}^{23}$  'every day'; T: $P_2$   $ka^3$   $si^2$  'yesterday evening'; T: $P_{12}$   $la^3$   $w\gamma yu^2$  'towards day-after-day-after-tomorrow' (in three day's time); T: $P_{31}$   $ni^2$   $wa^2$   $tukwa^1$   $wsn\check{o}^{34}$  'now completion two weeks' (two weeks ago); T: $P_{32}$   $kulo^{32}$   $lo^2$   $ko\gamma^{12}$   $ndisiyembre^4$  'first in month December' (December 1st); T: $C_5$   $kwi\gamma^2$   $lya^1$   $bra^{34}$  'exactly immediately hour' (it is time...); T: $C_{31}$   $\check{s}a^2$   $ndi\gamma i^{43}$   $ne\gamma^2$   $kwa^3$  'light is-being/living person that' (When that person is here...). Two time tagmemes may occur in the same clause, in which case one is usually emphasised and so precedes the predicate.

The time tagmeme occurs in all types in classes  $C_0$  and  $C_{10}$ , and in  $C_{22}$ ,  $c_{01}$ ,  $c_{02}$ , and  $c_{03}$  (see 4.1, 4.2, 4.3.2, 4.5).

5.1.5. Manner. This tagmeme is manifested by  $p_{03}$  or particles from  $W_{11.7}$ ,  $W_{11.8}$ , and  $W_{11.9}$ .  $M:p_{03}$   $mn\phi^2$   $ti^3$  'secretly only' (softly),  $kwi^2$   $ti^3$  'exactly only' (nearly);  $M:W_{11.7}$   $t\check{s}i^1$  'a-little';  $M:W_{11.8}$   $kwe^2$  'loudly';  $M:W_{11.9}$   $tlyi^{32}$  'slippery'. This tagmeme occurs rarely, manner being more frequently indicated within the predicate phrase. The manner tagmeme probably occurs in all types of classes  $C_0$ ,  $C_{10}$ , and  $c_{00}$  except  $c_{04}$ , and in  $C_{22}$  (see 4.1, 4.2, 4.3.2, 4.5).

5.1.6. Boundary. This tagmeme is manifested only by a particular example of  $P_{1.1}$ :  $bra^3$   $k\phi^2$  'hour that-particular' (then), and acts as a clause-termination marker. Like other tagmemes it may precede the predicate for emphasis, and in that position has a meaning of 'then/next'. When preceding the predicate together with a time tagmeme manifested by  $C_{31}$ , the boundary tagmeme follows the time tagmeme and immediately precedes the predicate. The boundary tagmeme occurs terminating all types in classes  $C_0$ ,  $C_{10}$ , and  $C_{20}$  (see 4.1, 4.2, 4.3).

5.2. The nuclear tagmemes of the basic clause types are here presented in detail.

5.2.1. Action. This tagmeme is manifested by  $P_{21}$ ,  $P_{22}$ , or  $P_{26}$ , in which the phrase head tagmeme is manifested by a verb in the basic form and from class  $W_{23}$ , the active class of verbs, or by  $P_{24}$ .  $A:P_{21}$   $wa^2$   $ndihl^1$  'completion passing-he' (he has gone past);  $A:P_{22.2}$   $ha^4$   $t\check{s}a^{43}$   $nsk\phi^1$   $k\phi^2$  'negation tight tying-he will-be there' (he is-tying it up securely);  $A:P_{24}$   $ha^4$   $lye^{32}$   $tlya^2$   $t\check{t}i^{43}$  'negation much cold em.-verbr.-I' (I do not feel very cold);  $A:P_{26}$   $ya^{32}$   $\phi^{43}$  'went carrying-I' (I went to bring). The action tagmeme occurs in  $C_1$  and  $c_{01}$  (see 4.1.1, 4.5.1).

5.2.2. Subject. This tagmeme is manifested by  $P_1$ ,  $P_2$ ,  $P_3$ ,  $P_4$ ,  $P_6$ ,  $P_{33}$ ,  $P_{03}$ ,  $c_{04}$ , and/or by a pronominal tone marker on the predicate, or by a word from classes  $W_{4.1}$ ,  $W_{12.3}$ ,  $W_{12.4}$ , and  $w_{04}$ . S: $P_1$  ska<sup>3</sup> nu<sup>3</sup> ki<sup>2</sup>yu<sup>1</sup> tlyu<sup>3</sup> 'one the-particular man big' (one big man); S: $P_2$  te<sup>34</sup> kitšo<sup>2</sup> 'cloth hair-of' (blanket); S: $P_3$  ska<sup>3</sup> kiya<sup>32</sup> nu<sup>3</sup> kwō<sup>2</sup>q<sup>1</sup> 'one foot-of the-particular female' (one of the woman's feet); S: $P_4$  tukwa<sup>1</sup> kuwe<sup>32</sup> ʔi<sup>1</sup> ne<sup>3</sup> kwa<sup>3</sup> 'two pig to person there' (that person's two pigs); S: $P_6$  ne<sup>3</sup> ša<sup>3</sup> ne<sup>3</sup> nu<sup>3</sup> ha<sup>4</sup> ndškwī<sup>2</sup> tša<sup>32</sup> tnyō<sup>32</sup> 'person different person which negation speaking-he word work' (a Mexican, one who does not speak Chatino); S: $P_{33}$  ti<sup>2</sup>yu<sup>1</sup> ška<sup>1</sup> 'fifteen another-one' (sixteen); S: $p_{03}$  tukwa<sup>1</sup> ti<sup>3</sup> 'two only'; S: $c_{04}$  kala<sup>4</sup> ndukwa<sup>43</sup> ska<sup>2</sup> 'twenty is-on one' (twenty-one); S:tone marker ku<sup>2</sup>u<sup>32</sup> 'will-drink-I' (I will drink); S: $W_{4.1}$  no<sup>2</sup> 'I'; S: $W_{12.3}$  ška<sup>1</sup> 'another-one'; S: $W_{12.4}$  kiti<sup>1</sup> 'another-seven'; S: $w_{04}$  (tsa<sup>43</sup>) wo<sup>2</sup> '(will-go) you-pl./respectful' (you will go). The subject tagmeme occurs in  $C_1$ ,  $C_2$ ,  $C_5$ ,  $c_{01}$ , and  $c_{03}$  (see 4.1, 4.5).

5.2.3. Object. This tagmeme is manifested by  $P_1$ ,  $P_2$ ,  $P_3$ ,  $P_4$ ,  $P_{33}$ ,  $P_{03}$ , or  $c_{04}$ . O: $P_1$  škwī<sup>2</sup> no<sup>2</sup> tsu<sup>2</sup>we<sup>32</sup> ti<sup>3</sup> 'altogether things good only' (just good things all through); O: $P_2$  tškwō<sup>43</sup> yka<sup>3</sup> 'metal wood' (axe); O: $P_3$  ste<sup>32</sup> wo<sup>2</sup> 'clothes-of you-pl./respectful'; O: $P_4$  te<sup>23</sup> ʔyo<sup>21</sup> 'water-pot to-me'; O: $P_{33}$  (kuta<sup>32</sup>) kala<sup>4</sup> nga<sup>2</sup>yu<sup>32</sup> (ʔyo<sup>21</sup>) '(will-give-you) twenty plus-five (to-me)' ([Give me] twenty-five); O: $p_{03}$  (kuto<sup>32</sup>) sno<sup>1</sup> ti<sup>3</sup> '(will-give-I) three only' ([I will give] just three). The object tagmeme occurs only in  $C_1$  (see 4.1.1).

5.2.4. Indirect Object. This tagmeme is manifested by  $P_{11.1}$  or by pronouns of subclass  $W_{4.2}$ . IO: $P_{11.1}$  ʔi<sup>1</sup> nu<sup>3</sup> luwe<sup>2</sup> ti<sup>3</sup> 'to the-particular small only' (to the child); IO: $W_{4.2}$  ʔno<sup>3</sup> 'to-we-inclusive'. The indirect object tagmeme occurs in  $C_1$ ,  $C_{11}$ , and  $c_{01}$  (see 4.1.1, 4.2.1, 4.5.1).



5.2.5. Referred Action. This tagmeme is manifested by  $P_{21}$  or  $P_{22.2}$ , in which the phrase head tagmeme is manifested by a verb in the basic form and from the referential class  $W_{21}$ , or by  $nsu?wi^{32}$  'there-is' from subclass  $W_{22.2}$ . RA:  $P_{21}$   $wa^2$   $tsu?we^{32}$   $ndi?i^{32}$  'completion good is-living-he' (He is well),  $ha^4$   $nsu?wi^{32}$  'negation there-is-it' (There isn't any there); RA: $P_{22.2}$   $mdiya^{21}$   $tukwa^{32}$  'was-belonging-he will-be-on' (he mounted). The referred action tagmeme occurs in  $C_2$  and  $c_{03}$  (see 4.1.2, 4.5.3).

5.2.6. Reference. This tagmeme is manifested by  $P_{11}$ ,  $P_1$ ,  $P_2$ ,  $P_3$ , or  $P_4$ , or by  $W_{4.2}$ . R: $P_{11}$   $?i^1$   $kwitu^{23}$   $ndiya^{21}$   $?i^1$   $yu^3$  'to chicken is-belonging to man' (to the chicken the man has); R: $P_1$   $ska^3$   $y?o^1$  'one mother'; R: $P_2$   $yka^3$   $no?o^3$  'wood house' (ship); R: $P_3$   $šk?o^2$   $ne^3$   $sko^2$  'shirt-of person messenger' (the town-messenger's shirt); R: $P_4$   $yka^3$   $hu?wa^{34}$   $?i^1$   $ne^3$  'tree banana to person'. The reference tagmeme occurs in  $C_2$  and  $C_{12}$  (see 4.1.2, 4.2.2).

5.2.7. Complement. This tagmeme is manifested by  $P_1$  or by a pronoun of subclass  $W_{4.1}$ . Cop: $P_{1.2}$   $?ni^3$   $ha^4$   $?ni^{45}$   $la^{21}$  'animal negation make fierce' (animal which is never fierce); Cop: $P_1$   $ska^3$   $kwihi^2$  'one bag'; Cop: $W_{4.1}$   $no?o^2$  'I'. The complement tagmeme occurs in  $C_3$  and  $C_{13}$  (see 4.1.3, 4.2.3).

5.2.8. Equation. This tagmeme is manifested by  $P_{21}$  or  $P_{28}$  in which the phrase head tagmeme is manifested by a verb in the basic form and from the equational class  $W_{22}$ , or by a verb from subclass  $W_{22.3}$  which is not expandable to form a phrase.  $W_{22.1}$   $lka^{43}$  'is',  $W_{22.2}$   $nsu?wi^{32}$  'there-is',  $W_{22.3}$   $no^2$  'name'. The equation tagmeme occurs only in  $C_3$  (see 4.1.3).

5.2.9. Equational Subject. This tagmeme is manifested by  $P_1$ ,  $P_2$ ,  $P_3$ ,  $P_4$ , a pronoun from classes  $W_{4.1}$  or  $w_{04}$ , or

by a pronominal tone marker on the predicate. ES:P<sub>1</sub> sn<sub>o</sub><sup>1</sup> yih<sub>o</sub><sup>3</sup> 'three years'; ES:P<sub>2</sub> yka<sup>3</sup> msn<sub>o</sub><sup>34</sup> 'tree apple'; ES:P<sub>3</sub> snye<sup>32</sup> šn<sub>o</sub><sup>3</sup> 'child-of Juana' (Joan's child); ES:P<sub>4</sub> msu<sup>34</sup> ʔyo<sup>21</sup> 'servant to-me'; ES:W<sub>4.1</sub> nu<sup>2</sup>wi<sup>2</sup> 'you-familiar'; ES:w<sub>04</sub> wo<sup>3</sup> 'you-pl./respectful'; ES:tone lk<sub>o</sub><sup>1</sup> 'am-I'. The equational subject tagmeme occurs only in C<sub>3</sub> (see 4.1.3).

5.2.10. Reflexive Action. This tagmeme is manifested by P<sub>21</sub>, in which the phrase head tagmeme is manifested by a verb in either the basic or directed form and from the reflexive class W<sub>24</sub>: ngite<sup>1</sup> 'cleaning', ndyo<sup>32</sup> 'emerging, dir.', ndšku<sup>32</sup> 'eating', ndiy<sup>32</sup> 'washing'. The reflexive action tagmeme occurs only in C<sub>4</sub> (see 4.1.4).

5.2.11. Possessed Object. This tagmeme is manifested by P<sub>3</sub> or P<sub>4</sub>. POB:P<sub>3</sub> tlya<sup>32</sup> wo<sup>2</sup> 'dinner-of you-pl./respectful'; POB:P<sub>4</sub> kš<sub>u</sub><sup>34</sup> ʔ<sub>i</sub><sup>1</sup> ne<sup>3</sup> 'cheese to person' (their cheese). The possessed object tagmeme occurs only in C<sub>4</sub> (see 4.1.4).

5.2.12. Stative Predicate. This tagmeme is manifested by P<sub>25</sub>: wa<sup>2</sup> tlyu<sup>3</sup> ʔa<sup>1</sup> 'completion big very' (It was very big), ha<sup>4</sup> tsu<sup>32</sup>we<sup>32</sup> ʔa<sup>4</sup> 'negation good more' (It is no more good), ti<sup>2</sup> ngate<sup>23</sup> tš<sub>i</sub><sup>1</sup> 'still white a-little' (It is still a little white). The stative predicate tagmeme occurs only in C<sub>5</sub> (see 4.1.5).

5.3. The nuclear tagmemes of the directed clause types are here presented in detail.

5.3.1. Directed Action. This tagmeme is manifested by P<sub>21</sub>, P<sub>22</sub>, or P<sub>23</sub>, in which the phrase head tagmeme is manifested by a verb in the directed form and from the W<sub>23</sub> class of active verbs, or by P<sub>24</sub>. DA:P<sub>21</sub> wa<sup>2</sup> nš<sub>i</sub><sup>1</sup>yu<sup>1</sup> tš<sub>i</sub><sup>1</sup> 'completion cutting-he, dir. a-little' (He has just cut a little); DA:P<sub>22</sub> ško<sup>1</sup> k<sub>o</sub><sup>32</sup> ʔ<sub>o</sub><sup>32</sup> 'will-tie-up, dir. will-be-there' (will

tie someone else securely); DA:P<sub>24</sub> nškye<sup>1</sup> ti<sup>32</sup> 'thinking, dir.' (it was thought), see 3.5.6 and 3.5.7; DA:P<sub>28</sub> hyo<sup>32</sup> tyo<sup>1</sup> 'will-return, dir. will-give-I, dir.' (I will return to pay). The directed action tagmeme occurs in C<sub>11</sub> and c<sub>02</sub> (see 4.2.1, 4.5.2).

5.3.2. Pronominal Subject. This tagmeme is manifested by a minor pronoun of class w<sub>04</sub> or pronominal tone marker on the predicate. PnS:w<sub>04</sub> ndyo<sup>0</sup>o<sup>1</sup> ne<sup>3</sup> 'emerging, dir. person', ndyi<sup>1</sup>?i<sup>1</sup> wo<sup>3</sup> 'living/being, dir. you-pl./respectful' (You are being caused to live there), nskwe<sup>23</sup> ba<sup>3</sup> 'climbing, dir. we-exclusive', nškwa<sup>43</sup> o<sup>3</sup> 'lying-down, dir. we-inclusive' (We are all lying down); PnS:tone ndyi<sup>0</sup>o<sup>1</sup> 'is-staying-he, dir.' The pronominal subject tagmeme occurs in all types in class C<sub>10</sub>, and c<sub>02</sub> (see 4.2, 4.5.2).

5.3.3. Goal. This tagmeme is manifested by P<sub>1</sub>, P<sub>3</sub>, P<sub>4</sub>, P<sub>11.1</sub> when the relator<sub>1</sub> allotagma is manifested by the particle ?i<sup>1</sup> 'to', P<sub>12</sub>, or by a pronoun from subclasses W<sub>4.2</sub> or W<sub>4.3</sub>, and is always the focus of attention in any clause where it occurs. G:P<sub>1</sub> yka<sup>3</sup> štlya<sup>34</sup> nde<sup>3</sup> 'wood Spanish this' (this chair); G:P<sub>3</sub> snye<sup>32</sup> reyi<sup>34</sup> 'child-of king'; G:P<sub>4</sub> tšibu<sup>4</sup> ?i<sup>1</sup> ne<sup>3</sup> 'goat to person'; G:P<sub>11.1</sub> ?i<sup>1</sup> nu<sup>3</sup> kuno<sup>2</sup> 'to the-particular robber'; G:P<sub>12</sub> la<sup>3</sup> nde<sup>3</sup> 'towards here'; G:W<sub>4.2</sub> ?wo<sup>3</sup> 'to-you-pl./respectful'; G:W<sub>4.3</sub> ko<sup>2</sup> 'that-particular' (that one). The goal tagmeme occurs in C<sub>11</sub>, C<sub>12</sub>, C<sub>22</sub>, and c<sub>02</sub> (see 4.2, 4.3.2, 4.5.2).

5.3.4. Subject Expansion. This tagmeme is manifested by P<sub>1</sub>, P<sub>3</sub>, or P<sub>4</sub>. SE:P<sub>1</sub> nu<sup>3</sup> buru<sup>2</sup> 'the-particular donkey'; SE:P<sub>3</sub> snye<sup>32</sup> ne<sup>3</sup> 'child-of person'; SE:P<sub>4</sub> kwiyu<sup>34</sup> ?i<sup>1</sup> ne<sup>3</sup> 'mule to person'. The subject expansion tagmeme occurs in C<sub>11</sub> and C<sub>12</sub> (see 4.2.1, 4.2.2) where it is not in the attention focus.

5.3.5. Goal Expansion. This tagmeme is manifested by

P<sub>1</sub> and occurs rarely. GE:P<sub>1.3</sub> ʔni<sup>3</sup> nu<sup>3</sup> no<sup>2</sup> kwityiʔ<sup>32</sup> ʔi<sup>2</sup> 'animal which name frog pronoun' (the animal called frog). The goal expansion tagmeme occurs only in C<sub>12</sub> in data analysed to date, but it seems probable that it may occur also in C<sub>11</sub> and C<sub>13</sub> (see 4.2.1).

5.3.6. Directed Referential. This tagmeme is manifested by P<sub>21</sub> or P<sub>28</sub> in which the phrase head tagmeme is manifested by a verb in the directed form and from the referential class W<sub>21</sub>, or by P<sub>24</sub> in which the head tagmeme is manifested by a directed verb from W<sub>27.0.4</sub>. DR:P<sub>21</sub> ha<sup>4</sup> ndyuʔwi<sup>1</sup> ʔa<sup>4</sup> 'negation there-is, dir. more' (there is no longer); DR:P<sub>28</sub> kya<sup>32</sup> ndiʔo<sup>1</sup> (neʔ) 'will-go is-adjoining, dir. (person)' (he will follow); DR:P<sub>24</sub> ndyiʔi<sup>4</sup> tiʔ<sup>32</sup> 'is-living, dir. em.-verbr.-he' (he is being made to feel). The directed referential tagmeme occurs only in C<sub>12</sub> (see 4.2.2).

5.3.7. Reference. This is the same tagmeme that occurs in C<sub>2</sub> (see 5.2.6).

5.3.8. Complement. This is the same tagmeme that occurs in C<sub>3</sub> (see 5.2.8).

5.3.9. Directed Equation. This tagmeme is manifested by P<sub>21</sub> or P<sub>22.1</sub> in which the phrase head tagmeme is manifested by a verb in the directed form and from subclasses W<sub>22.1</sub> and W<sub>22.2</sub> of the equational class of verbs. DE:P<sub>21</sub> lyc<sup>32</sup> ndška<sup>43</sup> 'much is-being, dir.' (there is a lot); kwe<sup>2</sup> ndška<sup>43</sup> 'loudly is-being, dir.' (that is loud), wa<sup>2</sup> ndška<sup>43</sup> tšiʔ<sup>1</sup> 'completion is-being, dir. a-little' (That is a little better); DE:P<sub>22.1</sub> wa<sup>2</sup> ngwa<sup>43</sup> biyaʔ<sup>2</sup> 'completion was-being, dir. balance-of' (It was settled). The directed equation tagmeme occurs only in C<sub>13</sub> (see 4.2.3).

5.3.10. Equational Goal. This tagmeme is manifested by a pronoun of subclass W<sub>4.2</sub> or by P<sub>1</sub> or P<sub>4</sub> which often

occur in the minimum form. EG:W<sub>4.2</sub> ʔw<sub>0</sub><sup>3</sup> 'to-you-pl./respectful; EG:P<sub>1</sub> kw<sub>i</sub>ʔ<sub>i</sub><sup>3</sup> 'wind', tiʔyu<sup>32</sup> 'thunder'; EG:P<sub>4</sub> tšaʔ<sup>32</sup> ʔyo<sup>21</sup> 'thing to-me'. The equational goal tagmeme occurs only in C<sub>13</sub> (see 4.2.3).

5.4. The nuclear tagmemes of the symbiotic clause types are here presented in detail.

5.4.1. Quotation Mark. This tagmeme is manifested by the two members of the limited class of quotational verbs W<sub>28</sub>: ʔni 'making', yhw<sub>i</sub> 'said'. These words indicate that a quotation is completed. When the speaker tagmeme is manifested by pronominal tone the one word is the complete speech clause as yhw<sub>i</sub><sup>1</sup> 'said-he'. The quotation mark tagmeme occurs only in C<sub>21</sub> (see 4.3.1).

5.4.2. Speaker. This tagmeme is manifested by P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub>, P<sub>4</sub>, a pronoun from classes W<sub>4.1</sub> or w<sub>04</sub>, or a pronominal tone marker on the predicate. Sk:P<sub>1</sub> nu<sup>3</sup> la<sup>3</sup> kuʔno<sup>2</sup> 'the-particular alligator'; Sk:P<sub>2</sub> šuwa<sup>3</sup> nte<sup>23</sup> 'Juan hill' (John-on-the-hill); Sk:P<sub>3</sub> sti<sup>2</sup> mo<sup>43</sup> 'father-of Maximo'; Sk:P<sub>4</sub> msu<sup>34</sup> ʔ<sub>i</sub><sup>1</sup> neʔ<sup>3</sup> 'servant to person', nu<sup>3</sup> šeʔe<sup>2</sup> kula<sup>3</sup> 'the-particular scorpion old'; Sk:W<sub>4.1</sub> nuʔwi<sup>32</sup> 'you-familiar'; Sk:w<sub>04</sub> (yhw<sub>i</sub><sup>2</sup>) ba<sup>2</sup> '(said) we-exclusive'; Sk:tone yhw<sub>i</sub><sup>1</sup> 'said-he', ʔni<sup>43</sup> 'making-he'. The speaker tagmeme occurs only in C<sub>21</sub> (see 4.3.1).

5.4.3. Receptor. This tagmeme is manifested by P<sub>11</sub> in which the relator tagmeme is manifested by two independent prepositions only ʔ<sub>i</sub><sup>1</sup> 'to' and loʔo<sup>1</sup> 'with' from subclass W<sub>14.1</sub>: ʔ<sub>i</sub><sup>1</sup> nu<sup>3</sup> kuʔ<sup>32</sup> 'to the-particular cripple'; ʔ<sub>i</sub><sup>1</sup> nu<sup>3</sup> kun<sub>0</sub><sup>1</sup> tnu<sub>0</sub><sup>3</sup> 'to the-particular snake great'; loʔo<sup>1</sup> sti<sup>2</sup> 'with father-his'. The receptor tagmeme occurs only in C<sub>21</sub> (see 4.3.1).

5.4.4. Affirmative Action. This tagmeme is manifested

by P<sub>23</sub> and is both predicate and subject since the latter occurs only as a pronominal tone marker on the predicate in the first or second persons: ku<sup>32</sup> tu<sup>73</sup> 'will-eat-you for-sure' (eat it); kya<sup>43</sup> tu<sup>73</sup> 'will-go-you, dir. for-sure' (you are certainly going). The affirmative action tagmeme occurs only in C<sub>22</sub> (see 4.3.2).

5.4.5. Goal. This is the same tagmeme that occurs in C<sub>11</sub> and C<sub>12</sub> (see 5.3.3).

5.5. The two nuclear tagmemes of the subordinate clause constitute its contrastive features in that no peripheral tagmemes are posited. These two tagmemes are here presented in detail.

5.5.1. Subordinator. This tagmeme is manifested by the two members of a limited subclass of subordinator temporal nouns W<sub>3.2</sub>, i.e., ša<sup>2</sup> 'light/brightness' and bra<sup>34</sup> 'hour' which, when manifesting the subordinator tagmeme, have the general meaning of 'when'. The subordinator tagmeme occurs only in C<sub>31</sub> (see 4.4.1).

5.5.2. Axis. This tagmeme is manifested by all the clause types in classes C<sub>0</sub> and C<sub>10</sub>. Axs:C<sub>1</sub> (ša<sup>2</sup>) tsa<sup>70</sup><sup>43</sup> lo<sup>3</sup> kiya<sup>732</sup> '(when) will-go-I in market' (when I go to market); Axs:C<sub>2</sub> (ša<sup>2</sup>) ndi<sup>71</sup><sup>43</sup> Nyanu<sup>4</sup> '(when) is-living Justiniano' (when Justiniano is here); Axs:C<sub>3</sub> (ša<sup>2</sup>) lka<sup>43</sup> ne<sup>72</sup> nte<sup>34</sup> kune<sup>71</sup> '(when) is person people young' (when people are young); Axs:C<sub>4</sub> (ša<sup>2</sup>) ku<sup>32</sup> tlya<sup>32</sup> o<sup>2</sup> '(when) will-eat dinner-of we-inclusive' (when we eat our dinner); Axs:C<sub>5</sub> (ša<sup>2</sup>) tikye<sup>73</sup> nte<sup>34</sup> '(when) hot people' (when people are hot); Axs:C<sub>11</sub> (ša<sup>2</sup>) tyi<sup>1</sup> no<sup>2</sup> ni<sup>72</sup> '(when) will-finish, dir. thing inside' (when what is inside is finished); Axs:C<sub>12</sub> (bra<sup>34</sup>) tye<sup>7e</sup><sup>43</sup> ne<sup>72</sup> '(when) will-be-staying, dir. person' (when they get married); Axs:C<sub>13</sub> (bra<sup>34</sup>) lye<sup>32</sup> ndška<sup>43</sup> ti<sup>7yu</sup><sup>32</sup> '(when) much is-being, dir. thunder' (when it thun-

ders a lot). The axis tagmeme occurs only in  $C_{31}$  (see 4.4.1).

5.6. The main contrastive characteristics distinguishing class  $c_{00}$  from other clause type classes is the lack of certain nuclear and peripheral tagmemes. Except for the tagmemes of  $c_{04}$ , the tagmemes which occur in minor clauses are the same as those found in the corresponding major clauses.

5.6.1. Action. This is the same tagmeme as that in  $C_1$  (see 5.2.1).

5.6.2. Subject. This is the same tagmeme as that in  $C_1$ ,  $C_2$ , and  $C_5$  (see 5.2.2).

5.6.3. Indirect Object. This is the same tagmeme as that in  $C_1$  (see 5.2.4).

5.6.4. Directed Action. This is the same tagmeme as that in  $C_{11}$  (see 5.3.1).

5.6.5. Pronominal Subject. This is the same tagmeme as that in  $C_{11}$  and  $C_{12}$  (see 5.3.2).

5.6.6. Goal. This is the same tagmeme as that in  $C_{11}$  and  $C_{12}$  (see 5.3.3).

5.6.7. Referred Action. This is the same tagmeme as that in  $C_{12}$  (see 5.2.5).

5.6.8. Reference Number. This tagmeme has two allotagmas, and the reference number<sub>1</sub> allotagma is manifested by the base numerals from subclass  $W_{12.1}$  or by  $P_{33}$ .  $RN_1$ :  $P_{33}$  kala<sup>4</sup> ndi<sup>?</sup>yu<sup>32</sup> 'twenty plus-fifteen' (thirty-five), tu<sup>?</sup>wa<sup>1</sup> nga<sup>?</sup>yu<sup>32</sup> 'forty plus-five' (forty-five). The reference number<sub>2</sub> allotagma is manifested by a restricted  $P_1$  con-

sisting only of two tagmemes and no post-periphery:  $sn\acute{o}^1$   $yla^3$  'three score';  $ska^3$   $siy\acute{e}tu^4$  'one hundred'. The reference number tagmeme occurs only in  $c_{04}$  (see 4.5.4).

5.6.9. Numeral Referential Action. This tagmeme has two allotagmas, and the numeral referential action<sub>1</sub> allotagma is manifested only by the referential verb *ndukwa* 'is-on' from class  $W_{21}$ , whereas the numeral referential action<sub>2</sub> allotagma is manifested only by the equational verb *nsu?wi* 'there-is' from class  $W_{22.2}$ . The numeral referential action tagmeme occurs only in  $c_{04}$  (see 4.5.4).

5.6.10. Subject Number. This tagmeme has two allotagmas, and the subject number<sub>1</sub> allotagma is manifested by the empiric primes of subclass  $W_{12.2}$ , whereas the subject number<sub>2</sub> allotagma is manifested by numerals of subclasses  $W_{12.1}$  or  $W_{12.2}$ , or by  $P_{33}$ , or  $c_{04}$ .  $SN_1:W_{12.2}$  ( $kala^4$  *ndukwa*<sup>43</sup>)  $kati^1$  '(twenty is-on) seven' (twenty-seven);  $SN_2:W_{12.1}$  ( $sn\acute{o}^1$   $yla^3$   $nsu?wi^{32}$ )  $ti^1$  '(three score there-is) ten' (seventy);  $SN_2:W_{12.2}$  ( $hakwa^4$   $yla^3$   $nsu?wi^{32}$ )  $skwa^1$  '(four score there-is) six' (eighty-six);  $SN_2:P_{33}$  ( $tukwa^1$   $siy\acute{e}tu^4$   $nsu?wi^{32}$ )  $ti^2$   $\check{s}no^1$  '(two hundred there-is) ten another-three' (two hundred and thirteen);  $SN_2:c_{04.1}$  ( $sn\acute{o}^1$   $siy\acute{e}tu^4$   $nsu?wi^{32}$ )  $kala^4$  *ndukwa*<sup>43</sup>  $tukwa^1$  '(three hundred there-is) twenty is-on two' (three hundred and twenty-two);  $SN_2:c_{04.2}$  ( $hakwa^4$   $mi^4$   $nsu?wi^{32}$ )  $ska^3$   $siy\acute{e}tu^4$   $nsu?wi^{32}$   $kala^4$  '(four thousand there-is) one hundred there-is twenty' (four thousand, one hundred and twenty). The subject number tagmeme occurs only in  $c_{04}$  (see 4.5.4).



## 6. Colon Types

At the colon syntactic level, the distinctions nuclear versus peripheral and major versus minor are not applicable. A new distinction, however, of relative simplicity versus relative complexity may be applied. This results in two classes of colons: the simple colon class ( $K_0$ ) and the complex colon class ( $K_{10}$ ). There are five types in class  $K_0$  and three types in class  $K_{10}$ .

The colon is essentially a bipartite structure, and in class  $K_0$  the members usually consist of just one clause each, or occasionally an included colon; in class  $K_{10}$  the members characteristically consist of included colons or sentences. Up to three levels of inclusions have been encountered, and an optional pause between members is not unusual. The actual co-occurrences of clauses, colons, or sentences in the two members of the various colon types give rise to co-occurrence subtypes<sup>25</sup> of each type.

A two-dimensional matrix might be posited for the colon level since the first three types in class  $K_0$  are similar to those in class  $K_{10}$ , and there are two sets of contrastive criteria. The primary distinction within such a matrix would be statement-statement and axiom-elaboration, versus activity-instigation and situation-result, versus antecedent-consequent and initiation-sequence, versus predication-development, versus thesis-antithesis, of which the last two are without a parallel type in class  $K_{10}$ . The second distinction would be between simple and complex types.

<sup>25</sup> Some of the co-occurrence restrictions summarised for colon and sentence types will doubtless prove on further study to be lacunae in our present data; others will prove to be systemic restrictions. While only the latter are of structural interest, the resolution of this problem must await further investigation.

6.1. There are five colon types in class  $K_0$ . These simple colons allow of little complexity within their members in that they are usually only clause-clause combinations which involve completely independent clauses, i.e., classes  $C_0$  and  $C_{10}$ . However  $C_{22}$ , a symbiotic clause, may manifest the first member of  $K_3$ .

6.1.1.  $K_1$ , the statement-statement colon, is a repetitive construction where the predicate of the clause manifesting the first member is repeated in the second member. Occasionally the first clause is repeated in its entirety to manifest the second member. The subject referent is not necessarily the same in the two members. The members of this colon are reversible. The statement-statement colon is the only colon type where the same tagmeme is repeated as the second member, and is found occasionally to expand to three members all repetitions of the same tagmeme; in this case the same predicate is repeated again in the third statement.  $K_1$  may be represented graphically thus:

$$K_1 = + \text{Sta} + \text{Sta} + \underline{\text{Sta}}$$

The obligatory statement tagmeme must be repeated once and may be repeated twice. It is manifested by  $C_1$ ,  $C_2$ ,  $C_3$ ,  $C_{11}$ ,  $C_{12}$ ,  $C_{13}$ ,  $C_{21}$ , or  $K_4$  (see 7.1.1). There are no significant subtypes of  $K_1$  in that all co-occurrences are predictable. Thus  $C_1$  occurs with  $C_1$ ,  $C_2$  occurs with  $C_2$ , and  $C_{11}$  occurs with  $C_{11}$ . Examples of  $K_1$  follow with constituent tagmemes indicated.

- (a)       $\text{nguhwi}^1$   $y^?o^{12}$        $\text{nguhwi}^1$   $sti^1$   
 $K_1 = \text{Sta: } C_1$                        $\text{Sta: } C_1$   
           died      mother-my died      father-my  
                     My mother and father are dead.

- (b)       $ndiya^{21}$        $ngu\check{s}u^?3$   $ndiya^{21}$        $ska^3$   $nu^3$   
 $K_1 = \text{Sta: } C_2$                        $\text{Sta: } C_2$   
           is-belonging aged      is-belonging one the-particular





## subtype (ii)

bra<sup>34</sup> ngwilyu<sup>32</sup> ngwo<sup>2</sup> <sup>1</sup> tiru<sup>4</sup> <sup>2</sup> <sup>1</sup>  
 K<sub>2</sub> = Act:C<sub>1</sub> Inst:C<sub>2</sub>  
 immediately fell-over-he was-adjointing bullet pronoun  
 He immediately fell as the bullet hit him.

## subtype (iii)

tσα<sup>2</sup> <sup>3</sup> sku<sup>2</sup>we<sup>2</sup> kya<sup>43</sup>  
 K<sub>2</sub> = Act:C<sub>1</sub>  
 will-go-I Juquila tomorrow  
  
 ndšga<sup>3</sup> kisu<sup>32</sup> wa<sup>2</sup> nguwe<sup>32</sup>  
 Inst:C<sub>1</sub>  
 every avocado completion ripened  
 I am going to Juquila tomorrow as all the avocados are ripe.

## subtype (iv)

- (a) ha<sup>4</sup> kwi<sup>2</sup>ya<sup>32</sup> no<sup>2</sup> ti<sup>2</sup> <sup>1</sup> <sup>2</sup> lyu<sup>2</sup> <sup>1</sup> <sup>2</sup> <sup>a</sup>  
 K<sub>2</sub> = Act:C<sub>1</sub> Inst:C<sub>5</sub>  
 negation will-carry-you thing heavy lesser-you very  
 You are not to carry heavy things as you are so little.
- (b) ha<sup>4</sup> kuta<sup>32</sup> no<sup>2</sup> la<sup>2</sup> ku<sup>2</sup> kuwi<sup>2</sup> <sup>32</sup> <sup>1</sup> <sup>2</sup>  
 K<sub>2</sub> = Act:K<sub>12</sub> [Sit Res]  
 negation will-give-you thing fierce will-eat baby pronoun  
  
 ti<sup>2</sup> <sup>1</sup> <sup>2</sup> <sup>a</sup> tiye<sup>32</sup> kuwi<sup>2</sup> <sup>32</sup> <sup>1</sup> <sup>2</sup>  
 Inst:C<sub>5</sub>  
 hurting much stomach-of baby pronoun  
 Do not give anything 'fierce' to your baby to eat as the  
 baby's stomach is hurting him.

## subtype (v)

ha<sup>4</sup> kuhwi<sup>2</sup> <sup>43</sup> si<sup>2</sup> <sup>1</sup> <sup>2</sup> <sup>43</sup> lka<sup>4</sup>  
 K<sub>2</sub> = Act:C<sub>1</sub> Inst:C<sub>3</sub>  
 negation will-sell-I is-not thing to-me is  
 I will not sell it as it is not mine.

subtype (vi)

ndška<sup>3</sup> se<sub>č</sub>ʔe<sub>č</sub><sup>3</sup> yu<sup>3</sup> ngušu<sup>3</sup> tše<sub>č</sub><sup>2</sup> nyo<sub>č</sub>ʔ<sub>č</sub><sup>43</sup>  
 K<sub>2</sub> = Act: C<sub>13</sub> Inst: K<sub>11</sub> [Ax  
 is-being-he, dir. place man aged bad looking, dir.

nu<sup>3</sup> kitsu<sup>32</sup> šnyo<sub>č</sub><sup>1</sup> tšanyi<sup>2</sup> bra<sup>3</sup> ko<sub>č</sub>ʔ<sup>2</sup>  
 Elb]

the-particular spotted will-nauseate, dir. truly then  
 He is caused to be like an old man as the spots look so bad  
 that they cause people to feel really nauseated.

subtype (vii)

ndšku<sup>32</sup> nte<sub>č</sub><sup>34</sup> ʔ<sub>č</sub><sup>1</sup> ʔ<sub>č</sub><sup>3</sup> šy<sub>č</sub>ʔ<sup>4</sup> ʔni<sup>3</sup> lka<sup>4</sup> ʔ<sub>č</sub><sup>2</sup>  
 K<sub>2</sub> = Act: C<sub>1</sub> Inst: K<sub>4</sub> [Dev Pred]  
 eating people to pronoun tasty animal is pronoun  
 People eat this animal and it is very tasty.

subtype (viii)

tla<sup>4</sup> ndyo<sub>č</sub>ʔ<sub>č</sub><sup>32</sup> ne<sub>č</sub>ʔ<sup>2</sup> tšku<sup>1</sup>  
 K<sub>2</sub> = Act: C<sub>11</sub>  
 night walking, dir. person spring

ndih<sub>č</sub><sup>32</sup> ko<sub>č</sub>ʔ<sup>2</sup> ʔ<sub>č</sub><sup>1</sup> ne<sub>č</sub>ʔ<sup>3</sup>  
 Inst: C<sub>4</sub>  
 gaining that-particular to person  
 At night they go to the spring to get them.

6.1.3. K<sub>3</sub>, the antecedent-consequent colon, is not reversible. It signifies a series of two actions in immediate sequence with the same subject referent. The predicate in the first member always includes a verb indicating motion or position, and although the subject may be repeated in the second member it is never expanded. The most commonly occurring aspect sequences in the predicates of the two members are continuative-continuative, continuative-completive, or intentive-intentive. K<sub>3</sub> may be graphically represented thus:

K<sub>3</sub> = + Ant + Cons

The obligatory antecedent tagmeme, manifested by  $C_1$ ,  $C_{11}$ ,  $C_{22}$ , or  $K_1$  (see 7.1.4), is followed by the obligatory consequent tagmeme manifested by  $C_1$ ,  $C_4$ ,  $C_{11}$ ,  $C_{12}$ , or  $K_1$  (see 7.1.5).

There are five subtypes of  $K_3$ . These co-occurrence subtypes are classified according to given manifestations of the consequent tagmeme. Subtype (i): The antecedent tagmeme may be manifested by  $C_1$ ,  $C_{11}$ , or  $C_{22}$  when the consequent tagmeme is manifested by  $C_1$ . Subtype (ii): The antecedent tagmeme may be manifested by  $C_1$  or  $C_{11}$  when the consequent tagmeme is manifested by  $C_{11}$ . Subtype (iii): The antecedent tagmeme may be manifested by  $C_1$  or  $C_{11}$  when the consequent tagmeme is manifested by  $C_{12}$ . Subtype (iv): The antecedent tagmeme is manifested by  $K_1$  when the consequent tagmeme is manifested by  $K_1$ . Subtype (v): The antecedent tagmeme is manifested by  $C_{11}$  when the consequent tagmeme is manifested by  $C_4$ . Examples of  $K_3$  follow with constituent tagmemes indicated.

subtype (i)

	hyo <sup>32</sup>	tu <sup>743</sup>	su <sup>7</sup> w <sup>o</sup> <sub>4</sub> <sup>32</sup>	to <sup>2</sup>	ɔ <sub>1</sub> <sup>2</sup>	šiya <sup>72</sup>
$K_3 =$	Ant: $C_{22}$		Cons: $C_1$			
	will-return-I for-sure-I will-put-I lard pronoun again					
	I will certainly come back and put more ointment on you.					

subtype (ii)

	ky <sup>a</sup> <sup>43</sup>	hyo <sup>32</sup>	tyo <sup>43</sup>	tnyi <sup>34</sup>	ɔ <sub>1</sub> <sup>2</sup>
$K_3 =$	Ant: $C_1$		Cons: $C_{11}$		
	tomorrow will-return-I will-give-I, dir. money pronoun				
	I will return tomorrow and pay you.				

subtype (iii)

	su <sup>2</sup>	ti <sup>3</sup>	nu <sup>3</sup>	šni <sup>7</sup> <sub>1</sub> <sup>3</sup>	no <sup>3</sup>	ndi <sup>7</sup> <sub>o</sub> <sup>1</sup>
$K_3 =$	Ant: $C_1$			Cons: $C_{12}$		
	lying just the-particular dog of-ours is-adjoining, dir.					
	Our dog just stays lying there in one place.					

subtype (iv)

ngudo<sup>2o1</sup> yu<sup>3</sup> ngudo<sup>2o1</sup> yu<sup>3</sup>  
 K<sub>3</sub> = Ant:K<sub>1</sub> [Sta Sta]  
 emerged man emerged man

ngiya<sup>32</sup> ytsa<sup>21</sup> yu<sup>3</sup> bra<sup>3</sup> ko<sup>2</sup>2 ngyia<sup>32</sup> ytsa<sup>21</sup> yu<sup>3</sup> bra<sup>3</sup> ko<sup>2</sup>2  
 Cons:K<sub>1</sub> [Sta Sta]  
 going told man then going told man then  
 Leaving, the man went and told then.

subtype (v)

kyo<sup>1</sup> ku<sup>32</sup> tlya<sup>32</sup>  
 K<sub>3</sub> = Ant:C<sub>11</sub> Cons:C<sub>4</sub>  
 will-come-you, dir. will-eat dinner-your  
 Come in and eat your dinner.

6.1.4. K<sub>4</sub>, the predication-development colon, is a structure in which the development tagmeme is the logical goal of the predicate in the predication tagmeme, or if that predicate is a stative, then the development tagmeme is the logical subject. The members in this type are reversible. There is no restriction on the aspect combination of the predicates in the two members. K<sub>4</sub> may be graphically represented thus:

$$K_4 = + \text{Pred} \quad + \text{Dev}$$

The obligatory predication tagmeme, manifested by C<sub>1</sub>, C<sub>3</sub>, C<sub>5</sub>, C<sub>11</sub>, or C<sub>13</sub> (see 7.1.6), is followed or preceded by the obligatory development tagmeme manifested by C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub>, C<sub>5</sub>, C<sub>11</sub>, C<sub>12</sub>, C<sub>13</sub>, K<sub>2</sub>, K<sub>3</sub>, K<sub>4</sub>, or K<sub>11</sub> (see 7.1.7).

There are five subtypes of K<sub>4</sub>. These co-occurrence subtypes are classified according to given manifestations of the predication tagmeme. Subtype (i): When the predication tagmeme is manifested by C<sub>11</sub> the development tagmeme may be manifested by C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>5</sub>, C<sub>11</sub>, C<sub>12</sub>, K<sub>3</sub>, or a simple form of K<sub>11</sub>. Subtype (ii): When the predication tagmeme is manifested by C<sub>5</sub> the development tagmeme may be manifested



by  $C_1$ ,  $C_2$ ,  $C_3$ ,  $C_5$ ,  $C_{12}$ , or  $K_4$ . Subtype (iii): When the predication tagmeme is manifested by  $C_1$ , the development tagmeme may be manifested by  $C_1$ ,  $C_2$ ,  $C_3$ ,  $C_4$ ,  $C_5$ ,  $K_2$ , or  $K_4$ . Subtype (iv): When the predication tagmeme is manifested by  $C_{13}$ , the development tagmeme is manifested by  $C_1$ ,  $C_2$ ,  $C_{11}$ ,  $C_{12}$ , or  $K_4$ . Subtype (v): When the predication tagmeme is manifested by  $C_3$ , the development tagmeme is manifested by  $C_1$ ,  $C_3$ ,  $C_5$ , or  $C_{13}$ . Examples of  $K_4$  follow with constituent tagmemes indicated.

subtype (i)

	$\text{ʔa}^4$	$\text{ska}^2$	$\text{ʔa}^3$	$\text{nɔ}^2$	$\text{ʃu}^4$	$\text{ʃkye}^2$	$\text{ti}^4$
$K_4 =$	Dev: $C_5$					Pred: $C_{11}$	
	negation	one	more	thing	tasty	think-I, dir.	

I am caused to think that nothing is tasty any longer. (See 3.5.6)

subtype (ii)

	$\text{tsu}^2\text{we}^{32}$	$\text{wa}^2$	$\text{ngulihyi}^{32}$	$\text{yu}^2\text{wi}^1$	$\text{buru}^2$	$\text{bra}^3$	$\text{kɔ}^2$
$K_4 =$	Pred: $C_5$	Dev: $K_4$	[Pred	Dev]			
	good	completion	lacked	there-was, dir.	donkey	then	

It would have been good had the donkey lacked his load at that time.

subtype (iii)

	$\text{wa}^2$	$\text{ngiya}^{32}$				
$K_4 =$	Pred: $C_1$					
	completion	going-he				

	$\text{wa}^2$	$\text{ndiya}^{21}$	$\text{se}^2\text{e}^3$	$\text{ndi}^2\text{i}^{32}$	$\text{lhya}^3$	$\text{bra}^3$	$\text{kɔ}^2$
	Dev: $C_2$						
	completion	is-there	place	is-living	sugar-cane	then	

He went on until he got to the place where the sugar cane is growing.

subtype (iv)

	$\text{ha}^4$	$\text{nd}^3\text{ka}^{43}$	$\text{ʔa}^3$	$\text{tsa}^{32}$	$\text{tihyu}^1$
$K_4 =$	Pred: $C_{13}$			Dev: $C_1$	
	negation	is-being, dir.	more	will-go-he	far

He is unable to go far distances any more.

subtype (v)

lka<sup>4</sup> ngudih<sub>t</sub><sup>32</sup> ne<sup>2</sup>  
 K<sub>4</sub> = Pred:C<sub>3</sub> Dev:C<sub>1</sub>  
 is-it passed person  
 It is the place where they passed.

6.1.5. K<sub>5</sub>, the thesis-antithesis colon, is a balanced structure in which the second member states the antithesis of the first. This construction is relatively rare, and in the data encountered, only K<sub>5</sub> was found to manifest either member. K<sub>5</sub> may be graphically represented thus:

K<sub>5</sub> = + The + Athe

The obligatory thesis tagmeme manifested by C<sub>5</sub> (see 7.1.8) is followed by the obligatory antithesis tagmeme manifested by C<sub>5</sub> (see 7.1.9). Examples of K<sub>5</sub> follow with constituent tagmemes indicated.

(a) t<sub>t</sub>ʔi<sub>t</sub><sup>2</sup> kuwe<sup>2</sup> t<sub>t</sub><sup>2</sup> sa<sup>3</sup> kuwe<sup>2</sup> tihyo<sub>t</sub><sup>23</sup>  
 K<sub>5</sub> = The Athe  
 heavy pig lard light pig bone  
 A fat pig is heavy, but a bony pig is light.

(b) sa<sup>3</sup> kwitu<sup>23</sup> kwite<sup>2</sup> t<sub>t</sub>ʔi<sub>t</sub><sup>2</sup> kwitu<sup>23</sup> ndi<sup>2</sup>ya<sup>34</sup>  
 K<sub>5</sub> = The Athe  
 light chicken pullet heavy chicken pretty  
 A young pullet is light but a good-looking hen is heavy.

(c) tlyu<sup>3</sup> nte<sub>t</sub><sup>34</sup> kula<sup>3</sup> luwe<sup>2</sup> nte<sub>t</sub><sup>34</sup> kune<sup>2</sup>  
 K<sub>5</sub> = The Athe  
 big people old small people young  
 Adults are big but children are small.

6.2. There are three colon types in class K<sub>10</sub>, and these types allow of much greater complexity within their members than those of class K<sub>0</sub>. This makes the co-occurrence subtypes greater in number and in membership.

It is in this class that a pause may occur between members, particularly when they are complex.

6.2.1.  $K_{11}$ , the axiom-elaboration colon, might be considered as suspiciously like a complex form of  $K_1$ . However, in  $K_{11}$  the same predicate is not always repeated and the second member rarely repeats the clause or colon structure of the first member. Also, in  $K_{11}$  either the subject referent is the same in the two members or the cause or goal of a directed verb in the first member is the subject in the second member. The aspect of the predicate in the first member is usually the same as that in the second member, and the aspect-sequence which most commonly occurs is continuative-continuative.  $K_{11}$  may be graphically represented thus:

$$K_{11} = + Ax + Elb$$

The obligatory axiom tagmeme, manifested by  $C_1, C_2, C_5, C_{11}, C_{13}, C_{21}, K_1, K_3, K_4, K_{11}, K_{12}, K_{13}$ , a primary sentence ( $S_1$ ), a reason sentence ( $S_{12}$ ), a comment sentence ( $S_{21}$ ), or a quotative sentence ( $S_{32}$ ) (see 7.2.1), is followed by the obligatory elaboration tagmeme manifested by  $C_1, C_2, C_3, C_5, C_{11}, C_{12}, C_{13}, C_{21}, K_1, K_2, K_4, K_{11}, K_{12}, K_{13}$ , or a reason sentence ( $S_{12}$ ), a balance sentence ( $S_{15}$ ), a purpose sentence ( $S_{11}$ ), an address sentence ( $S_{31}$ ), or a quotative sentence ( $S_{32}$ ) (see 7.2.2).

There are thirteen co-occurrence subtypes of  $K_{11}$ . Subtypes (i) - (x) are classified according to certain manifestations of the axiom tagmeme. Other manifestations of the axiom tagmeme encountered to date occur only with the elaboration tagmeme manifested by  $K_4$ , a reason sentence ( $S_{12}$ ), or  $C_1$ , and these comprise subtypes (xi) - (xiii). Subtype (i): When the axiom tagmeme is manifested by  $C_1$  the elaboration tagmeme is manifested by  $C_1, C_2, C_3, C_5, C_{11}, C_{13}, K_1, K_4, K_{11}, K_{12}$ , or a balance sentence ( $S_{15}$ ). Subtype (ii): When the axiom tagmeme is manifested by  $C_2$ , the elaboration tagmeme is manifested by  $C_1, C_2, C_3, C_{11}, K_{12}$ ,

or a balance sentence ( $S_{15}$ ), a purpose sentence ( $S_{11}$ ), or a quotative sentence ( $S_{32}$ ). Subtype (iii): When the axiom tagmeme is manifested by  $C_5$ , the elaboration tagmeme is manifested by  $C_1$ ,  $C_3$ ,  $C_5$ ,  $C_{13}$ ,  $K_4$ , or  $K_{11}$ . Subtype (iv): When the axiom tagmeme is manifested by  $C_{11}$ , the elaboration tagmeme is manifested by  $C_2$ ,  $C_{11}$ , or  $K_4$ . Subtype (v): When the axiom tagmeme is manifested by  $K_4$ , the elaboration tagmeme is manifested by  $C_{11}$  or  $K_4$ . Subtype (vi): When the axiom tagmeme is manifested by  $K_{11}$ , the elaboration tagmeme is manifested by  $C_{12}$ ,  $K_2$ , or  $S_{32}$ . Subtype (vii): When the axiom tagmeme is manifested by  $S_{32}$ , the elaboration tagmeme is manifested by  $K_{11}$ ,  $S_{31}$ , or  $S_{32}$ . Subtype (viii): When the axiom tagmeme is manifested by  $C_{21}$ , the elaboration tagmeme is manifested by  $C_{21}$  or  $K_1$ . Subtype (ix): When the axiom tagmeme is manifested by  $C_{13}$ , the elaboration tagmeme is manifested by  $C_1$  or  $K_1$ . Subtype (x): When the axiom tagmeme is manifested by  $K_{13}$ , the elaboration tagmeme is manifested by  $K_{13}$ . Subtype (xi): The axiom tagmeme may be manifested by  $S_1$  or  $S_{21}$  when the elaboration tagmeme is manifested by  $K_4$ . Subtype (xii): The axiom tagmeme may be manifested by  $K_{12}$  or  $S_{12}$  when the elaboration tagmeme is manifested by  $S_{12}$ . Subtype (xiii): The axiom tagmeme may be further manifested by  $K_1$  or  $K_3$  when the elaboration tagmeme is manifested by  $C_1$ . Examples of  $K_{11}$  follow with constituent tagmemes indicated.

subtype (i)

ha <sup>4</sup>	t <sup>3</sup> sa <sup>43</sup>	ska <sup>2</sup>	ka <sup>4</sup> no <sup>4</sup>	su <sup>1</sup> wa <sup>1</sup>	bi <sup>2</sup> ya <sup>2</sup>
$K_{11}$ = Ax: $C_1$				Eib: $K_{12}$ [Sit: $S_{15}$ < Bai	
	negation	wiil-go-you	one	competition	will-put measure-your

yo <sup>43</sup>	lo <sup>1</sup> o <sup>1</sup>	su <sup>1</sup> wa <sup>1</sup>	bi <sup>2</sup> yo <sup>43</sup>	ʔ <sup>2</sup>	nyo <sup>43</sup> ʔ <sup>43</sup>
	BHi	Bald>			Res: $K_1$ <Sta
to-me	with	wiil-put	measure-my	pronoun	looking, dir.

nu<sup>2</sup> ti<sup>2</sup>?i<sup>2</sup> la<sup>3</sup> nyo<sup>2</sup>?o<sup>43</sup> nu<sup>2</sup> sa<sup>2</sup> la<sup>3</sup>  
Sta>|

which heavy more looking, dir. which light more

Won't you have a competition with me where you set your weight against mine and we will see which is the heavier and which is the lighter.

subtype (ii)

ti<sup>2</sup> nyo<sup>2</sup>?o<sup>43</sup> tšalyu<sup>21</sup> nsu<sup>2</sup>?wi<sup>1</sup> ?ni<sup>3</sup>  
K<sub>11</sub> = Ax: C<sub>2</sub>  
towards kind-of world there-is animal

nsu<sup>2</sup>?wi<sup>32</sup> lo<sup>3</sup> kitše<sup>1</sup> lo<sup>2</sup> nsu<sup>2</sup>?wi<sup>32</sup> ni<sup>2</sup> kiš<sup>1</sup>?<sup>3</sup>  
Elb: S<sub>15</sub> [Bai BHI Bald]  
there-is in town and there-is inside weed

All over the world there are animals, both in the towns and in the countryside.

subtype (iii)

nu<sup>2</sup>?wi<sup>32</sup> la<sup>2</sup> ?a<sup>1</sup> ?i<sup>1</sup> šni<sup>2</sup>?<sup>3</sup> ?no<sup>3</sup>  
K<sub>11</sub> = Ax: C<sub>5</sub>  
you-familiar fierce-you very to dog of-we-inclusive

ha<sup>4</sup> nda<sup>1</sup> kyha<sup>3</sup> ku<sup>2</sup> šni<sup>2</sup>?<sup>3</sup>  
Elb: K<sub>11</sub> [Ax: K<sub>12</sub> <Sit Res>  
negation giving-you tortilla will-eat dog

?a<sup>4</sup> no<sup>2</sup> nda<sup>43</sup>  
Elb: C<sub>1</sub>]  
negation thing giving-you

You are very horrid to our dog -- you won't give it tortillas to eat, you don't give it anything at all!

subtype (iv)

šiya<sup>2</sup> ti<sup>3</sup> nglyo<sup>32</sup> tsu<sup>2</sup>?we<sup>32</sup> wa<sup>2</sup>  
K<sub>11</sub> = Ax: C<sub>11</sub> Elb: K<sub>4</sub> [Pred Dev]  
again only coming-he, dir. good completion

ndukwa<sup>1</sup> ska<sup>3</sup> kwiyu<sup>34</sup> kila<sup>3</sup> tsu<sup>2</sup>?we<sup>32</sup> bra<sup>3</sup> ko<sup>2</sup>?  
is-on-he one mule male good then

He is just coming back again and it is well that he is mounted on a good horse.

subtype (v)

nde<sup>2</sup> tnyq<sup>32</sup> hyq<sup>32</sup> ngiyq<sup>32</sup> teʔe<sup>1</sup> ʔwo<sup>3</sup>  
 K<sub>11</sub> = Ax:K<sub>4</sub> [Dev Pred] Elb:C<sub>11</sub>  
 this work will-return-I coming-I, dir. will-stay to-you-pl.  
 The reason I am returning is to fetch all of you.

subtype (vi)

ndiya<sup>21</sup> ʔi<sup>3</sup> ngila<sup>32</sup> ʔi<sup>2</sup> ša<sup>2</sup> msf<sup>2</sup>  
 K<sub>11</sub> = Ax:K<sub>11</sub> [Ax Elb]  
 is-belonging-it pronoun arriving-he pronoun light evening

bra<sup>3</sup> koʔ<sup>2</sup> ngila<sup>32</sup> ku<sup>32</sup> kyha<sup>3</sup>  
 Elb:K<sub>2</sub> [Act Inst]

then arriving-he will-eat-he tortilla

It is there because when it is evening he always arrives to eat his meal.

subtype (vii)

kwi<sup>ʔ1</sup> yhw<sup>32</sup> ne<sup>ʔ3</sup> ša<sup>ʔ3</sup>  
 K<sub>11</sub> = Ax:S<sub>32</sub> [Quot:S<sub>31</sub> <Ads> Qt:C<sub>21</sub>]  
 same said person different

kwi<sup>ʔ1</sup> ʔni<sup>3</sup> nde<sup>3</sup> lka<sup>4</sup> ʔi<sup>2</sup>  
 Elb:S<sub>31</sub> [Ads:K<sub>4</sub> <Dev Pred>]  
 same animal this is pronoun

"That's the one!" said the Mexican, "that's exactly the same animal."

subtype (viii)

yhw<sup>1</sup> yhw<sup>32</sup> ne<sup>ʔ3</sup> ʔi<sup>1</sup> tyi<sup>2</sup> škwa<sup>3</sup> ʔi<sup>1</sup> ne<sup>ʔ3</sup>  
 K<sub>11</sub> = Ax:C<sub>21</sub> Elb:K<sub>1</sub> [Sta]  
 said-he said person to cook to person

yhw<sup>32</sup> ne<sup>ʔ3</sup> ʔi<sup>1</sup> nu<sup>3</sup> kwoʔ<sup>1</sup> ndfkye<sup>ʔ32</sup> no<sup>2</sup>  
 Sta]  
 said person to the-particular female cooking thing

ndšku<sup>1</sup> ne<sup>3</sup>

eating person

said he to his cook, the woman who cooked his food

subtype (ix)

ʔni<sup>3</sup> nu<sup>3</sup> kwityi<sup>32</sup> ʔi<sup>2</sup> ša<sup>3</sup>  
 K<sub>11</sub> = Ax: C<sub>13</sub>  
 animal the-particular frog pronoun different

nyo<sup>2</sup> ʔ<sup>43</sup> ko<sup>2</sup> ʔni<sup>3</sup> tsu<sup>32</sup>we<sup>32</sup> lka<sup>4</sup>  
 Elb: K<sub>1</sub> [Sta  
 looking, dir. that-particular animal good is

ko<sup>2</sup> ʔni<sup>3</sup> ndšku<sup>1</sup> nte<sup>34</sup> lka<sup>4</sup> ko<sup>2</sup>  
 Sta]

that-particular animal eating people is that-one

The frog, that is a different looking animal, a good animal,  
 an animal which people eat.

subtype (x)

mdyi<sup>1</sup> yku<sup>32</sup> ti<sup>3</sup> ne<sup>3</sup> ʔi<sup>2</sup> mdo<sup>1</sup> ne<sup>3</sup>  
 K<sub>11</sub> = Ax: K<sub>13</sub> [Init Seq: K<sub>3</sub> <Ant  
 finished, dir. ate only person pronoun emerged person

ngiya<sup>43</sup> ne<sup>2</sup> ndo<sup>1</sup> ne<sup>3</sup> ndiya<sup>21</sup> tukwa<sup>32</sup>  
 Cons>] Elb: K<sub>13</sub> [Init: K<sub>3</sub> <Ant Cons>  
 going person emerging person was-belonging will-be-on

ne<sup>2</sup> kwiyu<sup>34</sup> ʔi<sup>1</sup> ne<sup>3</sup> ndo<sup>1</sup> ngiya<sup>43</sup> ne<sup>2</sup> bra<sup>3</sup> ko<sup>2</sup>  
 Seq: K<sub>3</sub>]

person mule to person emerging going person then

He finished eating it and went out, then he mounted his  
 mule and left.

subtype (xi)

ko<sup>2</sup> nda<sup>43</sup> ne<sup>3</sup> nda<sup>32</sup> ngusu<sup>3</sup>wa<sup>43</sup>  
 K<sub>11</sub> = Ax: S<sub>21</sub> [ER Comt] Elb: K<sub>4</sub> [Pred Dev: K<sub>3</sub> <Ant  
 that's-what giving person giving put

nkyeʔ<sup>23</sup> ti<sup>3</sup> kalu<sup>4</sup>

Cons>]

cooking only soup

That's what they gave, what had been put in the soup and cooked.

subtype (xii)

tsuʔwe<sup>32</sup> ndšku<sup>32</sup> lo<sup>2</sup> koʔ<sup>2</sup> tšaʔ<sup>2</sup> ndšku<sup>32</sup> wo<sup>2</sup> ʔi<sup>3</sup>  
 K<sub>11</sub> = Ax:S<sub>12</sub> [Rea RHI Out]  
 good eating and that's-why eating you-pl. pronoun

no<sup>2</sup> ndšku<sup>32</sup> nte<sup>34</sup> lka<sup>4</sup> koʔ<sup>2</sup> tšaʔ<sup>2</sup> ndšku<sup>32</sup> wo<sup>2</sup> ʔi<sup>3</sup>  
 Elb:S<sub>12</sub> [Rea RHI Out]  
 thing eating people is that's-why eating you-pl. pronoun  
 It's a good thing, that's why you eat it -- a thing that  
 people usually eat, that's why you are all eating it.

subtype (xiii)

ndoʔo<sup>1</sup> ngiya<sup>32</sup> bra<sup>3</sup> koʔ<sup>2</sup> ngiya<sup>32</sup> šiyaʔ<sup>2</sup>  
 K<sub>11</sub> = Ax:K<sub>3</sub> [Ant Cons] Elb:C<sub>1</sub>  
 emerging-he going-he then going-he again  
 Going out he left again then.

6.2.2. K<sub>12</sub>, the situation-result colon, might be considered as suspiciously like a complex form of K<sub>2</sub>. K<sub>12</sub>, however, may not be transformed into a reason sentence (S<sub>12</sub>), neither member is ever manifested by C<sub>5</sub>, and there are restrictions as to the aspect sequence in the predicates of the two members. The possible aspect sequences which may occur in K<sub>12</sub> are intentive-intentive, continuative-intentive, continuative-continuative, completive-intentive, completive-continuative, or completive-completive. This type is not reversible. K<sub>12</sub> may be graphically represented thus:

K<sub>12</sub> = + Sit + Res

The obligatory situation tagmeme, manifested by C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>11</sub>, C<sub>12</sub>, C<sub>13</sub>, K<sub>1</sub>, K<sub>2</sub>, K<sub>4</sub>, K<sub>11</sub>, K<sub>12</sub>, K<sub>13</sub>, a purpose sentence (S<sub>11</sub>), or a balance sentence (S<sub>15</sub>) (see 7.2.3), is followed by



the obligatory result tagmeme manifested by  $C_1$ ,  $C_2$ ,  $C_3$ ,  $C_4$ ,  $C_{11}$ ,  $C_{12}$ ,  $C_{22}$ ,  $K_1$ ,  $K_3$ ,  $K_4$ ,  $K_{12}$ , or a quotative sentence ( $S_{32}$ ) (see 7.2.4).

There are eleven co-occurrence subtypes of  $K_{12}$ . Subtypes (i) - (x) are classified according to certain manifestations of the result tagmeme. The other manifestations of the result tagmeme encountered to date all occur with the situation tagmeme manifested only by  $C_1$  and comprise subtype (xi). Subtype (i): The situation tagmeme may be manifested by  $C_1$ ,  $C_2$ ,  $C_3$ ,  $C_{11}$ ,  $C_{12}$ ,  $C_{13}$ ,  $K_1$ ,  $K_2$ ,  $K_4$ ,  $K_{11}$ ,  $K_{12}$ ,  $K_{13}$ , a purpose sentence ( $S_{11}$ ), or a balance sentence ( $S_{15}$ ) when the result tagmeme is manifested by  $C_1$ . Subtype (ii): The situation tagmeme may be manifested by  $C_1$ ,  $C_{11}$ ,  $K_4$ , or purpose sentence ( $S_{11}$ ) when the result tagmeme is manifested by  $C_2$ . Subtype (iii): The situation tagmeme may be manifested by  $C_1$ ,  $C_{11}$ , or  $C_{13}$  when the result tagmeme is manifested by  $C_{11}$ . Subtype (iv): The situation tagmeme may be manifested by  $C_1$  or  $K_{13}$  when the result tagmeme is manifested by  $K_4$ . Subtype (v): The situation tagmeme is manifested by  $C_1$  or  $K_1$  when the result tagmeme is manifested by  $K_3$ . Subtype (vi): The situation tagmeme is manifested by  $C_1$  or  $C_{13}$  when the result tagmeme is manifested by  $C_{12}$ . Subtype (vii): The situation tagmeme may be manifested by  $C_2$  or  $K_{12}$  when the result tagmeme is manifested by  $C_3$ . Subtype (viii): The situation tagmeme may be manifested by  $C_1$  or  $C_2$  when the result tagmeme is manifested by  $K_{12}$ . Subtype (ix): The situation tagmeme may be manifested by  $K_{11}$  when the result tagmeme is manifested by a quotative sentence ( $S_{32}$ ). Subtype (x): The situation tagmeme may be manifested by  $C_1$  or by a balance sentence ( $S_{15}$ ) when the result tagmeme is manifested by  $K_1$ . Subtype (xi): When the situation tagmeme is manifested by  $C_1$  the result tagmeme may be further manifested by  $C_4$  or  $C_{22}$ . Examples of  $K_{12}$  follow with constituent tagmemes indicated.

## subtype (i)

ha<sup>4</sup> ndiʔi<sub>i</sub><sup>23</sup> nyanu<sup>4</sup> ni<sup>2</sup> tš̃i<sub>i</sub><sup>1</sup> ti<sup>3</sup> ku<sup>32</sup>  
 K<sub>12</sub> = Sit: C<sub>2</sub> Res: C<sub>1</sub>  
 negation is- living Justiniano now a- little only will- eat  
 Justiniano is not here at present so just a little is eaten.

## subtype (ii)

wa<sup>2</sup> ngite<sub>i</sub><sup>32</sup> neʔ<sup>3</sup> nyoʔo<sub>i</sub><sup>1</sup> tyi<sup>2</sup> ndiʔi<sub>i</sub><sup>32</sup> bra<sup>3</sup> koʔ<sup>2</sup>  
 K<sub>12</sub> = Sit: C<sub>1</sub> Res: C<sub>2</sub>  
 completion entering person inside-house own is- living then  
 They entered their own house and were at home then.

## subtype (iii)

lye<sup>32</sup> ʔa<sup>1</sup> ngwa<sup>4</sup> kw̃i<sub>i</sub><sup>3</sup> ngwitš̃a<sup>32</sup> o<sub>i</sub><sup>2</sup> yka<sup>3</sup> tnu<sub>i</sub><sup>3</sup>  
 K<sub>12</sub> = Sit: C<sub>13</sub> Res: C<sub>11</sub>  
 much very was, dir. wind broke, dir. it tree great  
 The wind was very strong and blew down a huge tree.

## subtype (iv)

la<sup>2</sup> kwa<sup>3</sup> la<sup>2</sup> tyu<sub>i</sub><sup>2</sup> hwaki<sub>i</sub><sup>2</sup> loʔo<sup>1</sup>  
 K<sub>12</sub> = Sit: K<sub>13</sub> [Init: C<sub>11</sub> Seq: S<sub>15</sub> <Bal BHi  
 towards there more will-stand-you, dir. will-pull-you with  
 hwaki<sub>i</sub><sup>1</sup> nyoʔo<sub>i</sub><sup>43</sup> nu<sup>2</sup> tsa<sup>2</sup> la<sup>3</sup> ndyu<sub>i</sub><sup>32</sup>  
 Bald>] Res: K<sub>4</sub> [Pred Dev]  
 will-pull-I looking, dir. which tight more standing, dir.  
 You stand over there and then you pull against me and I will  
 pull against you so that we will see who is able to stand the  
 firmest.

## subtype (v)

nguio<sup>32</sup> hakwa<sup>3</sup> msu<sup>34</sup> nguio<sup>32</sup> hakwa<sup>3</sup> breta<sup>4</sup>  
 K<sub>12</sub> = Sit: K<sub>1</sub> [Sta Sta  
 took-out-he four servant took-out-he four crowbar  
 nguio<sup>32</sup> hakwa<sup>3</sup> pala<sup>4</sup> liʔya<sup>1</sup> ngiya<sup>32</sup> bra<sup>3</sup> koʔ<sup>2</sup>  
 Sta] Res: K<sub>3</sub> [Ant Cons]  
 took-out-he four spade carrying going then  
 He sent four servants with four crowbars and four spades  
 which they went off carrying.

subtype (vi)

ʔa<sup>4</sup> ska<sup>2</sup> ka<sup>4</sup> no<sup>2</sup> ʔwo<sup>3</sup>  
 K<sub>12</sub> = Sit: C<sub>13</sub>  
 negation one will-be thing to-you-pl./respectful

tyi<sup>3</sup>ʔi<sup>32</sup> ʔwo<sup>3</sup> nde<sup>3</sup>  
 Res: C<sub>12</sub>  
 will-be-living to-you-pl. here  
 Nothing will happen to your things if they stay here for you.

subtype (vii)

ndi<sup>3</sup>ʔi<sup>23</sup> rey<sup>4</sup> kitše<sup>3</sup> lka<sup>4</sup> bra<sup>3</sup> ko<sup>2</sup>  
 K<sub>12</sub> = Sit: C<sub>2</sub> Res: C<sub>3</sub>  
 is-living king town is then  
 There is a king living there so it is a town.

subtype (viii)

kuta<sup>21</sup> ska<sup>3</sup> sa<sup>3</sup> šu<sup>2</sup>wi<sup>1</sup> ti<sup>2</sup>a<sup>3</sup> ku<sup>2</sup>ʔi<sup>32</sup>  
 K<sub>12</sub> = Sit: C<sub>1</sub> Res: K<sub>12</sub> [Sit Res]  
 will-give-you one cup will-put-you, dir. water will-drink-I  
 Give me a cup of water to drink.

subtype (ix)

ʔni<sup>3</sup> ia<sup>2</sup> lka<sup>4</sup> nde<sup>3</sup> yhw<sup>1</sup>i<sup>1</sup> ha<sup>4</sup> ndšku<sup>1</sup> nte<sup>34</sup>  
 K<sub>12</sub> = Sit: K<sub>11</sub> [Ax: S<sub>32</sub> <Quot QT> Elb: S<sub>32</sub> <Quot  
 animal fierce is here said-he negation eating people

nde<sup>3</sup> yhw<sup>1</sup>i<sup>1</sup> kaha<sup>1</sup> nte<sup>34</sup> si<sup>1</sup>  
 QT>] Res: S<sub>32</sub> [Quot: S<sub>31</sub> <Ads: S<sub>14</sub> (Inj CnHi  
 here said-he will-die people if

ku<sup>2</sup> ne<sup>3</sup> nde<sup>3</sup> yhw<sup>1</sup>i<sup>1</sup>  
 Cond> QT]  
 will-eat person here said-he

This is a dangerous animal which people do not eat because they die if they eat it.

subtype (x)

mskwe<sup>32</sup> yu<sup>32</sup>wa<sup>32</sup> nde<sup>3</sup> nyo<sup>3</sup>o<sup>43</sup> sa<sup>2</sup> la<sup>3</sup>  
 K<sub>12</sub> = Sit: C<sub>1</sub> Res: K<sub>1</sub> [Sta  
 climbed load here looking, dir. light more

nyo<sup>3</sup>o<sup>43</sup> ti<sup>3</sup>o<sup>43</sup> la<sup>3</sup>  
 Sta]  
 looking, dir. heavy more

The loads were lifted to see which was the lighter and which the heavier.

subtype (xi)

nda<sup>43</sup> nu<sup>3</sup> kw<sup>3</sup>o<sup>3</sup>o<sup>1</sup> kyha<sup>3</sup>  
 K<sub>12</sub> = Sit: C<sub>1</sub>  
 giving the-particular female tortilla

ku<sup>2</sup> lomsa<sup>34</sup> ne<sup>3</sup>  
 Res: C<sub>4</sub>  
 will-eat breakfast-of person

The woman gave tortillas for him to eat for his breakfast.

6.2.3. K<sub>13</sub>, the initiation-sequel colon, might be considered as suspiciously like a complex form of K<sub>3</sub>. K<sub>13</sub>, however, allows of much greater complexity within the members, does not necessarily have a verb of position or motion in the first member and often repeats and expands the subject in the second member. This type is not reversible. K<sub>13</sub> may be graphically expressed thus:

K<sub>13</sub> = + Init + Seq

The obligatory initiation tagmeme, manifested by C<sub>1</sub>, C<sub>2</sub>, C<sub>4</sub>, C<sub>11</sub>, K<sub>2</sub>, K<sub>3</sub>, K<sub>4</sub>, K<sub>12</sub>, or a purpose sentence (S<sub>11</sub>), or a comment sentence (S<sub>21</sub>) (see 7.2.5), is followed by the obligatory sequel tagmeme manifested by C<sub>1</sub>, C<sub>2</sub>, C<sub>11</sub>, K<sub>2</sub>, K<sub>3</sub>, K<sub>4</sub>, or a balance sentence (S<sub>15</sub>) (see 7.2.6).

There are six subtypes of K<sub>13</sub>. These co-occurrence subtypes (i) - (v) are classified according to certain manifestations of the sequel tagmeme. Other manifestations of

the sequel tagmeme occur only when the initiation tagmeme is manifested by  $C_1$  and comprise subtype (vi). Subtype (i): The initiation tagmeme may be manifested by  $C_1$ ,  $C_2$ ,  $K_2$ ,  $K_3$ ,  $K_4$ ,  $K_{12}$ , or a purpose sentence ( $S_{11}$ ) when the sequel tagmeme is manifested by  $C_1$ . Subtype (ii): The initiation tagmeme may be manifested by  $C_1$ ,  $K_2$ , or  $K_{12}$  when the sequel tagmeme is manifested by  $C_{11}$ . Subtype (iii): The initiation tagmeme may be manifested by  $C_1$ ,  $C_4$ ,  $C_{11}$ ,  $K_3$ , or  $S_{21}$  when the sequel tagmeme is manifested by  $K_3$ . Subtype (iv): The initiation tagmeme is manifested by  $K_3$  when the sequel tagmeme is manifested by  $K_4$ . Subtype (v): The initiation tagmeme may be manifested by  $C_2$ ,  $C_{11}$ , or a comment sentence ( $S_{21}$ ) when the sequel tagmeme is manifested by a balance sentence ( $S_{15}$ ). Subtype (vi): When the initiation tagmeme is manifested by  $C_1$ , the sequel tagmeme may be further manifested by  $C_2$  or  $K_2$ . Examples of  $K_{13}$  follow with constituent tagmemes indicated.

## subtype (i)

ngwilyu<sup>32</sup>                      wa<sup>2</sup>                      msoʔo<sup>43</sup>                      ʔi<sup>2</sup> o<sup>3</sup>  
 $K_{13}$  = Init:  $K_{12}$  [Sit:  $K_2$  <Act Inst>  
 fell-over-he                      completion knocked-out to them

ngusti<sup>1</sup>                      bra<sup>3</sup> ko<sup>ʔ2</sup>                      yiha<sup>ʔ43</sup>                      bra<sup>3</sup> ko<sup>ʔ2</sup>  
 Res:  $C_1$ ]    Seq:  $C_1$   
 collapsed-he                      then                      slept-he                      then  
 Collapsing he fell over completely knocked out by them,  
 so then he slept.

## subtype (ii)

ngusno<sup>43</sup> ʔya<sup>1</sup>                      nu<sup>3</sup>    šni<sup>ʔ3</sup>                      biya<sup>ʔ2</sup>                      lʔwe<sup>3</sup>  
 $K_{13}$  = Init:  $K_2$  [Act  
 ran                      carrying the-particular dog                      measure half

nsuʔwi<sup>1</sup>                      mškalayu<sup>4</sup>                      ngila<sup>32</sup>                      seʔe<sup>3</sup>                      ndukwa<sup>43</sup>                      nu<sup>2</sup>  
 Inst]    Seq:  $C_{11}$   
 there-is mezcal                      arriving place is-on                      the-particular

ʔo<sup>4</sup>

coyote

The dog ran off carrying a measure and a half of mezcal, then arrived at the place where the coyote was sitting.

subtype (iii)

mdy<sup>1</sup> yku<sup>32</sup> ti<sup>3</sup> kyha<sup>3</sup> ʔi<sup>2</sup> ndoʔo<sup>1</sup> yu<sup>3</sup>  
 K<sub>13</sub> = Init: C<sub>1</sub> Seq: K<sub>3</sub> [Ant  
 finished, dir. ate-he only tortilla pronoun emerging man

ya<sup>43</sup> yu<sup>2</sup> ioʔo<sup>1</sup> bra<sup>3</sup> koʔ<sup>2</sup>

Cons]

went man with-him then

The man just finished eating his meal and going out went with him then.

subtype (iv)

ndoʔo<sup>1</sup> yu<sup>3</sup> ya<sup>32</sup> nɔ<sup>2</sup> yu<sup>3</sup> siʔyu<sup>32</sup> yku<sup>3</sup> bra<sup>3</sup> koʔ<sup>2</sup>  
 K<sub>13</sub> = Init: K<sub>3</sub> [Ant Cons] Seq: K<sub>4</sub> [Dev Pred]  
 emerging man went thing man cut ate then  
 The men emerged and went, and later ate the things they cut.

subtype (v)

bra<sup>3</sup> koʔ<sup>2</sup> ngutyu<sup>32</sup> ti<sup>1</sup> wta<sup>34</sup> koʔ<sup>2</sup> mdyu<sup>32</sup>  
 K<sub>13</sub> = Init: S<sub>21</sub> [Top ER Comt]  
 then fell-down rope cow that's-the-one fell-on

ʔi<sup>2</sup> kaʔyu<sup>1</sup> yaʔ<sup>1</sup> ytsu<sup>32</sup> io<sup>2</sup> ska<sup>3</sup> ti<sup>3</sup> tiru<sup>4</sup> nsuʔwi<sup>1</sup>  
 Seq: S<sub>15</sub> [Bal BHI Bald]

pronoun five times erupted and one only bullet there-is

niʔ<sup>2</sup> pistola<sup>4</sup> ʔi<sup>2</sup> ša<sup>2</sup> ngiha<sup>43</sup>

inside pistol pronoun light finding-he

Next, down fell the cow rope - that is what fell on it - and the pistol fired five times, yet there was only one bullet in it when he discovered it.

subtype (vi)

	mskɔʔ <sup>1</sup>	tukwi <sup>1</sup>	neʔ <sup>3</sup>	ʔi <sup>2</sup>	tukwa <sup>32</sup>	neʔ <sup>3</sup>
K <sub>13</sub> =	Init: C <sub>1</sub>		Seq: C <sub>2</sub>			
	tied	will-be-up	person	pronoun	will-be-on	person

ti<sup>1</sup> yni<sup>2</sup>

rope neck-it

They tied it up high and will put the rope on its neck.

## 7. Colon-Level Tagmemes

A description of the colon tagmemes follows. Since the colon types are essentially bipartite, there are no peripheral tagmemes at this level.

7.1. Tagmemes comprising the simple colons of class  $K_0$  may be manifested by either clauses or colons but not by sentences. In general there is less complexity in the internal structure of such tagmemes.

7.1.1. Statement. This tagmeme is manifested by  $C_1$ ,  $C_2$ ,  $C_3$ ,  $C_{11}$ ,  $C_{12}$ ,  $C_{13}$ ,  $C_{21}$ , or  $K_4$ .

Sta:  $C_1$  *nguhwi*<sup>1</sup> *sti*<sup>32</sup> 'died father-his' (His father is dead.); Sta:  $C_2$  *ndiya*<sup>21</sup> *rsu*<sup>31</sup> *ʔ*<sub>2</sub><sup>3</sup> 'is-belonging reason pronoun' (He had a reason...); Sta:  $C_3$  *ʔni*<sup>3</sup> *šy*<sup>ʔ4</sup> *lka*<sup>4</sup> *kɔ*<sup>ʔ2</sup> 'animal tasty is that-particular' (That is a tasty animal.); Sta:  $C_{11}$  *štya*<sup>32</sup> *ska*<sup>3</sup> *kitu*<sup>ʔ3</sup> *tlyu*<sup>2</sup> 'will-put-she, dir. one pot big' (She will put on a big pot.); Sta:  $C_{12}$  *tsu*<sup>ʔwe</sup><sup>32</sup> *yu*<sup>ʔwi</sup><sup>43</sup> *šiy*<sup>ʔ23</sup> *kalu*<sup>4</sup> *kwityi*<sup>ʔ32</sup> 'good there-was, dir. flavouring soup frog' (The frog soup was well flavoured.); Sta:  $C_{13}$  *ša*<sup>ʔ3</sup> *y*<sup>ʔo</sup><sup>43</sup> *kɔ*<sup>ʔ2</sup> 'different looked, dir. that-particular' (That one has a different appearance.); Sta:  $C_{21}$  *yhwi*<sup>32</sup> *ne*<sup>ʔ3</sup> *ʔ*<sub>2</sub><sup>1</sup> *tyi*<sup>2</sup> *škwa*<sup>3</sup> *ʔ*<sub>2</sub><sup>1</sup> *ne*<sup>ʔ3</sup> 'said person to cook to person' (he said to his cook);

	<i>ngite</i> <sup>ʔ1</sup>	<i>sa</i> <sup>ʔa</sup> <sup>2</sup> <i>ti</i> <sup>ʔ43</sup>	<i>ku</i> <sup>32</sup>	<i>loms</i> <sup>ʔ43</sup>
Sta = $K_4$ [Pred			Dev]	
	meaning-uncertain	very em. -verbr. -I	will-eat-I	breakfast-my
		I was very hungry		for my breakfast.

The statement tagmeme occurs only in  $K_1$  and must be repeated once, while it may be repeated twice.



7.1.2. Activity. This tagmeme is manifested by C<sub>1</sub>, C<sub>5</sub>, C<sub>11</sub>, C<sub>13</sub>, K<sub>1</sub>, K<sub>3</sub>, K<sub>4</sub>, or K<sub>12</sub>.

Act: C<sub>1</sub> tsa<sup>o</sup>43 sku<sup>w</sup>e<sup>2</sup> kya<sup>43</sup> 'will-go-I Juquila tomorrow' (I am going to Juquila tomorrow.); Act: C<sub>5</sub> kuliya<sup>o</sup>32 tšanyi<sup>2</sup> 'rich-he truly' (He is really rich.); Act: C<sub>11</sub> šu<sup>w</sup>i<sup>1</sup> to<sup>2</sup> yni<sup>2</sup> o<sup>3</sup> 'will-put, dir. lard neck we-inclusive' (Lard is put on our necks.); Act: C<sub>13</sub> ndška<sup>2</sup> se<sup>o</sup>e<sup>3</sup> yu<sup>3</sup> ngu<sup>š</sup>u<sup>3</sup> 'is-he, dir. place man elderly' (He is caused to be in the old men's place.);

(a) nsu<sup>w</sup>i<sup>32</sup> tne<sup>3</sup> nsu<sup>w</sup>i<sup>32</sup> tne<sup>3</sup> nsu<sup>w</sup>i<sup>32</sup> tne<sup>3</sup>  
 Act = K<sub>1</sub> [Sta Sta Sta]  
 there-is blood there-is blood there-is blood  
 There was blood, and more blood and more blood.

(b) ndo<sup>o</sup>1 yu<sup>3</sup> ngiya<sup>43</sup> yu<sup>2</sup>  
 Act = K<sub>3</sub> [Ant Cons]  
 emerging man going man  
 Emerging the man went away.

(c) lye<sup>32</sup> ʔa<sup>1</sup> ndška<sup>1</sup> nte<sup>34</sup> ko<sup>ʔ2</sup>.  
 Act = K<sub>4</sub> [Pred Dev]  
 much very eating people that-particular  
 People eat it a lot.

(d) ha<sup>4</sup> kuta<sup>21</sup> no<sup>2</sup> la<sup>2</sup> ku<sup>32</sup> kuwi<sup>ʔ32</sup>  
 Act = K<sub>12</sub> [Sit Res]  
 negation will-give-you thing fierce will-eat baby  
 ʔi<sup>2</sup>  
 pronoun  
 Don't give your baby other than bland things to eat.

The activity tagmeme occurs only in K<sub>2</sub>.

7.1.3. Instigation. This tagmeme is manifested by C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub>, C<sub>5</sub>, C<sub>11</sub>, K<sub>4</sub>, or K<sub>11</sub>. It is the manifestations of

this tagmeme that determine the eight co-occurrence subtypes of  $K_2$ .

Inst: $C_1$  ndšga<sup>3</sup> kisu<sup>32</sup> wa<sup>2</sup> nguwe<sup>32</sup> 'every avocado completion ripened' (All the avocados are ripe.); Inst: $C_2$  ngwo<sup>2</sup> tiru<sup>4</sup> ʔi<sup>2</sup> 'was-adjoining bullet pronoun' (The bullet hit him.); Inst: $C_3$  no<sup>2</sup> ʔyo<sup>43</sup> lka<sup>4</sup> 'thing of-mine is-it' (It is mine.); Inst: $C_4$  ndihi<sup>32</sup> ko<sup>2</sup> ʔi<sup>1</sup> ne<sup>3</sup> 'gaining that-particular of person' (...getting those of theirs); Inst: $C_5$  lyu<sup>1</sup> ʔa<sup>2</sup> 'lesser-you very' (You are very small.); Inst: $C_{11}$  ya<sup>2</sup> ndyo<sup>32</sup> ʔi<sup>1</sup> salbahe<sup>4</sup> 'went emerging-it, dir. to ruffian' (It [the blood] had come from the ruffian.);

- (a) šu<sup>4</sup> ʔni<sup>3</sup> lka<sup>4</sup> ʔi<sup>2</sup>  
 Inst =  $K_4$  [Dev Pred]  
 tasty animal is pronoun  
 It is a tasty animal.

- (b) tše<sup>2</sup> nyo<sup>43</sup> nu<sup>2</sup> kitsu<sup>32</sup> šnyo<sup>1</sup> tšanyi<sup>2</sup>  
 Inst =  $K_{11}$  [Ax Elb]  
 bad looking, dir. the spotted will-nauseate, dir. truly  
 bra<sup>3</sup> ko<sup>2</sup>

then

The man with the infected spots looked so unsightly that anyone seeing him would be nauseated.

The instigation tagmeme occurs only in  $K_2$ .

7.1.4. Antecedent. This tagmeme is manifested by  $C_1$ ,  $C_{11}$ ,  $C_{22}$ , or  $K_1$ .

Ant: $C_1$  ngusno<sup>43</sup> 'ran-he' (He ran.); Ant: $C_{11}$  yo<sup>32</sup> ne<sup>3</sup> nsu<sup>32</sup>wi<sup>32</sup> 'came, dir. person there-is' (Those who were there came [this way].); Ant: $C_{22}$  hyo<sup>32</sup> tu<sup>43</sup> 'will-return-I for-sure-I' (I will certainly come back.);

ngudoʔo<sup>32</sup> yu<sup>3</sup> ngudoʔo<sup>32</sup> yu<sup>3</sup>  
 Ant = K<sub>1</sub> [Sta                    Sta]  
           emerged man emerged man  
           The man emerged.

The antecedent tagmeme occurs only in K<sub>3</sub>.

7.1.5. Consequent. This tagmeme is manifested by C<sub>1</sub>, C<sub>2</sub>, C<sub>4</sub>, C<sub>11</sub>, or K<sub>1</sub>. It is the manifestations of this tagmeme that determine the five co-occurrence subtypes of K<sub>3</sub>.

Cons:C<sub>1</sub> kulo<sup>32</sup> ʔ<sub>i</sub><sup>1</sup> ndla<sup>4</sup> 'will-draw-out-it to cloud'  
 (It [the sun] will emerge from the cloud.); Cons:C<sub>4</sub> ku<sup>32</sup>  
 tlya<sup>32</sup> wə<sup>3</sup> 'will-eat dinner-of you-pl./respectful' (You  
 will eat your dinner.); Cons:C<sub>11</sub> tyə<sup>43</sup> tnyl<sup>34</sup> ʔ<sub>i</sub><sup>2</sup> 'will-give-  
 I, dir. money pronoun' (I will pay you the money.); Cons:C<sub>12</sub>  
 ndlʔə<sup>1</sup> 'is-there/staying-he' (He is staying [in one place].);

ngiya<sup>32</sup> ytsa<sup>ʔ1</sup> yu<sup>3</sup> bra<sup>3</sup> kə<sup>ʔ2</sup> ngiya<sup>32</sup> ytsa<sup>ʔ1</sup> yu<sup>3</sup> bra<sup>3</sup> kə<sup>ʔ2</sup>  
 Cons = K<sub>1</sub> [Sta                    Sta]  
           going told man then going told man then  
           The man went and told then.

The consequent tagmeme occurs only in K<sub>3</sub>.

7.1.6. Predication. This tagmeme is manifested by C<sub>1</sub>, C<sub>3</sub>, C<sub>5</sub>, C<sub>11</sub>, or C<sub>13</sub>, and never by a colon type. It is the manifestations of this tagmeme that determine the five co-occurrence subtypes of K<sub>4</sub>.

Pred:C<sub>1</sub> wa<sup>2</sup> snu<sup>ʔ43</sup> tsə<sup>23</sup> nə<sup>ʔə43</sup> 'completion eight  
 days seeing-I' (I saw a week ago); Pred:C<sub>3</sub> lka<sup>4</sup> ne<sup>ʔ3</sup> 'is  
 person'; Pred:C<sub>5</sub> wa<sup>2</sup> tsu<sup>ʔwe32</sup> 'completion good' (it was  
 good...); Pred:C<sub>11</sub> škye<sup>ʔ2</sup> ti<sup>ʔ43</sup> 'think-I, dir.' (I think  
 about...); Pred:C<sub>13</sub> ha<sup>4</sup> ndška<sup>43</sup> ʔa<sup>3</sup> 'negation is-being-it,  
 dir. more' (it is no longer able...).

The predication tagmeme occurs only in K<sub>4</sub>.

7.1.7. Development. This tagmeme is manifested by C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub>, C<sub>5</sub>, C<sub>11</sub>, C<sub>12</sub>, C<sub>13</sub>, K<sub>2</sub>, K<sub>3</sub>, K<sub>4</sub>, or K<sub>11</sub>.

Dev: C<sub>1</sub> kuhwi<sup>?</sup>43 ʔi<sup>2</sup> ni<sup>2</sup> 'will-sell-I pronoun now' (Now I shall sell it.); Dev: C<sub>2</sub> ndiya<sup>21</sup> ska<sup>3</sup> ti<sup>3</sup> tuʔkwi<sup>21</sup> 'is-belonging one only road' (There is only one road.); Dev: C<sub>3</sub> lka<sup>4</sup> kwa<sup>3</sup> ʔi<sup>2</sup> 'is-there there pronoun' (what is there of yours...); Dev: C<sub>4</sub> ku<sup>32</sup> lomsa<sup>34</sup> neʔ<sup>3</sup> 'will-eat breakfast-of person' (He will eat his breakfast.); Dev: C<sub>5</sub> nde<sup>3</sup> tnyo<sup>32</sup> 'here work' (this is the job...); Dev: C<sub>11</sub> nu<sup>3</sup> tsa<sup>3</sup> la<sup>3</sup> ndyu<sup>32</sup> 'which tight more standing, dir.' (The firmest will remain standing.); Dev: C<sub>12</sub> tyuʔwi<sup>32</sup> teʔ<sup>34</sup> nde<sup>3</sup> ʔyo<sup>21</sup> 'there-will-be-it, dir. cloth here to-me' (You will mend this garment of mine.); Dev: C<sub>13</sub> nyo<sup>?</sup>ʔ<sup>43</sup> no<sup>2</sup> ska<sup>3</sup> ʔni<sup>3</sup> 'looking, dir. name one animal' (the name of a single animal appears...);

(a) ngusuʔwa<sup>43</sup> nkyeʔ<sup>23</sup> ti<sup>3</sup> kalu<sup>4</sup>  
Dev = K<sub>2</sub> [Act Inst]  
put-she cooking only soup  
She put it to cook in the soup.

(b) ndyoʔ<sup>?</sup>1 kwiyu<sup>34</sup> ʔi<sup>2</sup> ngiya<sup>32</sup> bra<sup>3</sup> ko<sup>?</sup>2  
Dev = K<sub>3</sub> [Ant Cons]  
walking, dir. mule pronoun going-he then  
He is making his mule walk and going away.

(c) taka<sup>43</sup> ʔi<sup>2</sup> kulo<sup>32</sup> tiʔa<sup>3</sup>  
Dev = K<sub>4</sub> [Pred Dev]  
will-be, dir. pronoun will-draw-out-you water  
Will you be able to produce water?

(d) kuʔni<sup>32</sup> tšaʔ<sup>32</sup> tsuʔwe<sup>32</sup>  
Dev = K<sub>11</sub> [Ax  
will-make-you thing good  
šuwā<sup>32</sup> teʔ<sup>34</sup> nde<sup>3</sup> ʔyo<sup>21</sup>  
Eib]  
will-mend-you cloth here to-me  
Please would you mend this garment of mine?

The development tagmeme fills the role of logical object, goal, or location of the predication tagmeme and occurs only in  $K_4$ .

7.1.8. Thesis. This tagmeme is manifested only by  $C_5$ . The:  $C_5$   $ti^2 \eta^2 nte^{34}$   $tnu^3$  'heavy people great' (A large person is heavy.)

The thesis tagmeme occurs only in  $K_5$ .

7.1.9. Antithesis. This tagmeme is manifested only by  $C_5$ . Athe:  $C_5$   $sa^3 nte^{34}$   $luwe^2 ti^3$  'light people small only' (A small person is light.)

The antithesis tagmeme occurs only in  $K_5$ .

7.2. The colon types of class  $K_{10}$  by definition have tagmemes of greater complexity than those of class  $K_0$ . Manifestations of these complex tagmemes often include sentences as well as clauses or further colons.

7.2.1. Axiom. This tagmeme is manifested by  $C_1$ ,  $C_2$ ,  $C_5$ ,  $C_{11}$ ,  $C_{13}$ ,  $C_{21}$ ,  $K_1$ ,  $K_3$ ,  $K_4$ ,  $K_{11}$ ,  $K_{12}$ ,  $K_{13}$ , a primary sentence ( $S_1$ ), a reason sentence ( $S_{12}$ ), a comment sentence ( $S_{21}$ ), or a quotative sentence ( $S_{32}$ ). It is the manifestations of this tagmeme that determine the twelve co-occurrence subtypes of  $K_{11}$ , but  $K_1$  and  $K_3$  occur manifesting the axiom tagmeme only in subtype (xil).

Ax:  $C_1$   $ha^4 tsa^{43}$   $ska^2 kan\phi^4$  'negation will-go-you one competition' (Will you have a competition with me?); Ax:  $C_2$   $ti^2 ny\phi^2 \phi^{43}$   $tšalyu^{21}$   $nsu^2 wi^1 \eta ni^3$  'from kind-of world there-is animal' (All over the world there are animals.); Ax:  $C_5$   $nu^2 wi^{32}$   $la^2 \eta a^1 \eta i^1 šni^3 \eta no^3$  'you-familiar fierce very to dog of-ours-inclusive' (You are very unkind to our dog.); Ax:  $C_{11}$   $mštya^{43}$   $\eta i^2 hi^{12}$   $\eta i^1 \phi^3 bra^3 ko^2$  'put, dir. pronoun ashes to them then' (They had put ashes over the

thing.); Ax: C<sub>13</sub> ʔni<sup>3</sup> nu<sup>3</sup> kwityi<sup>ʔ32</sup> ʔi<sup>2</sup> ša<sup>ʔ3</sup> nyo<sup>ʔ43</sup> ko<sup>ʔ2</sup>  
 'animal the-particular frog pronoun different looking, dir.  
 that-particular' (The frog, that animal appears different.);  
 Ax: C<sub>21</sub> yhw<sup>i32</sup> tyi<sup>2</sup> škwa<sup>3</sup> 'said cook';

(a) ndo<sup>ʔ43</sup> tškw<sup>43</sup> ndo<sup>ʔ43</sup> tškw<sup>43</sup>  
 Ax = K<sub>1</sub> [Sta Sta]  
 walking metal walking metal  
 The bells were ringing and ringing.

(b) ndo<sup>ʔ43</sup> ngly<sup>32</sup> bra<sup>3</sup> ko<sup>ʔ2</sup>  
 Ax = K<sub>3</sub> [Ant Cons]  
 emerging-he going-he then  
 Emerging he went.

(c) nde<sup>3</sup> tnyo<sup>32</sup> hyo<sup>32</sup>  
 Ax = K<sub>4</sub> [Dev Pred]  
 here work will-return-I  
 This is what I will come back to do.

(d) ndiya<sup>21</sup> ʔi<sup>2</sup>  
 Ax = K<sub>11</sub> [Ax  
 is-belonging-he to-him  
  
 ngila<sup>32</sup> ʔi<sup>2</sup> ša<sup>2</sup> ms<sup>i2</sup> bra<sup>3</sup> ko<sup>ʔ2</sup>  
 Elb]  
 arriving-he pronoun light evening then  
 He was there (where the other one was) having arrived  
 because it was evening then.

(e) ngite<sup>ʔ1</sup> ti<sup>ʔ32</sup> ne<sup>ʔ3</sup> ku<sup>1</sup> ne<sup>ʔ3</sup> kyha<sup>3</sup>  
 Ax = K<sub>12</sub> [Sit Res]  
 are-hungry person will-eat person tortilla  
 They are hungry so they will eat a meal.

(f) ndyi<sup>1</sup> yku<sup>32</sup> ti<sup>3</sup> ne<sup>ʔ3</sup> ʔi<sup>2</sup>  
 Ax = K<sub>13</sub> [Init  
 finishing, dir. ate only person pronoun

ndo<sup>o</sup>1 ne<sup>3</sup> ngiya<sup>43</sup> ne<sup>2</sup>  
 Seq: K<sub>3</sub> <Ant Cons>]  
 emerging person going person  
 He finished eating it, went out and went away.

(g) ni<sup>2</sup> ha<sup>4</sup> ndu<sup>u</sup>32 ʔa<sup>4</sup> snye<sup>ʔ</sup>32 ʔi<sup>2</sup>  
 Ax = S<sub>1</sub> [J Epn]  
 now negation conceiving more child-of pronoun  
 Now she isn't producing any more children (calves).

(h) tsu<sup>ʔ</sup>we<sup>32</sup> ndšku<sup>32</sup> ko<sup>ʔ</sup>2 tša<sup>ʔ</sup>2  
 Ax = S<sub>12</sub> [Rea:K<sub>4</sub> <Pred Dev> RH†  
 good eating that's-why

ndšku<sup>32</sup> wo<sup>2</sup> ʔi<sup>3</sup>  
 Out: C<sub>1</sub>]  
 eating you-pl./respectful pronoun  
 It is good to eat, that's why you eat it.

(i) ko<sup>ʔ</sup>2 nda<sup>43</sup> ne<sup>ʔ</sup>3  
 Ax = S<sub>21</sub> [ER Comt]  
 that's-the-one giving person  
 That is the one that they gave.

(j) kye<sup>ʔ</sup>32 ʔi<sup>1</sup> ʔi<sup>3</sup> yhw<sup>i</sup>1  
 Ax = S<sub>32</sub> [Quot QT]  
 cook to pronoun said-he  
 "Cook it" he said.

The axiom tagmeme occurs only in K<sub>11</sub>.

7.2.2. Elaboration. This tagmeme is manifested by C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>5</sub>, C<sub>11</sub>, C<sub>12</sub>, C<sub>13</sub>, C<sub>21</sub>, K<sub>1</sub>, K<sub>2</sub>, K<sub>3</sub>, K<sub>4</sub>, K<sub>11</sub>, K<sub>12</sub>, K<sub>13</sub>, a purpose sentence (S<sub>11</sub>), a reason sentence (S<sub>12</sub>), a balance sentence (S<sub>15</sub>), an address sentence (S<sub>31</sub>), or a quotative sentence (S<sub>32</sub>).

Elb: C<sub>1</sub> yku<sup>32</sup> no<sup>2</sup> ko<sup>ʔ</sup>2 ʔi<sup>3</sup> bra<sup>3</sup> ko<sup>ʔ</sup>2 'ate-he thing that-particular pronoun then' (He ate that special thing of his then.); Elb: C<sub>2</sub> ndukwa<sup>43</sup> ti<sup>ʔ</sup>a<sup>2</sup> bra<sup>3</sup> ko<sup>ʔ</sup>2 'is-on water then' (There was water there then.); Elb: C<sub>3</sub> yu<sup>3</sup> ša<sup>ʔ</sup>3 tnu<sup>3</sup>

lka<sup>4</sup> bra<sup>3</sup> ko<sup>2</sup> 'man different great is-he then' (He is an important man [not a Chatino].); Elb:C<sub>5</sub> tikye<sup>2</sup> nu<sup>3</sup> kaha<sup>43</sup> o<sup>2</sup> 'hot which will-die we-inclusive' (It is hot enough to kill us all.); Elb:C<sub>11</sub> ngiy<sup>32</sup> te<sup>2</sup>e<sup>2</sup> wo<sup>3</sup> 'coming-he, dir. will-be-staying to-you-pl./respectful' (He is coming to fetch you all.); Elb:C<sub>12</sub> ndyukwa<sup>43</sup> ne<sup>2</sup> ni<sup>2</sup> nyo<sup>2</sup>o<sup>1</sup> 'is-on, dir. person inside inside-house' (They are sitting inside the house.); Elb:C<sub>13</sub> ha<sup>4</sup> ndška<sup>43</sup> ʔa<sup>3</sup> ni<sup>2</sup> 'negation is-being-he, dir. more now' (He is unable any more now.); Elb:C<sub>21</sub> yhw<sup>32</sup> nu<sup>3</sup> kw<sup>2</sup>o<sup>1</sup> ndikye<sup>32</sup> no<sup>2</sup> ndšku<sup>1</sup> ne<sup>2</sup> 'said the-particular female cooking thing eating person' (said the woman who cooked his food...);

(a) yku<sup>2</sup> ne<sup>2</sup>ʔ<sup>3</sup> kye<sup>2</sup> kwityi<sup>2</sup>ʔ<sup>32</sup>

Elb = K<sub>1</sub> [Sta

ate person head-of frog

yku<sup>2</sup> ne<sup>2</sup>ʔ<sup>3</sup> ti<sup>2</sup> nyo<sup>2</sup>o<sup>1</sup> kwityi<sup>2</sup>ʔ<sup>32</sup>

Sta]

ate person from kind-of frog

He ate the frog's head and he ate the frog's body.

(b) ngila<sup>32</sup> ku<sup>32</sup> kyha<sup>3</sup>

Elb = K<sub>2</sub> [Act Inst]

arriving-he will-eat-he tortilla

He is arriving to eat his meal.

(c) ha<sup>4</sup> ndška<sup>43</sup> ʔa<sup>3</sup> ku<sup>2</sup>u<sup>32</sup> snye<sup>2</sup> ʔi<sup>3</sup>

Elb = K<sub>4</sub> [Pred Dev]

negation is-being-it, dir. more will-live child-of pronoun

It (the cow) is unable to conceive offspring any more.

(d) kwa<sup>3</sup> ndšku<sup>1</sup> ne<sup>2</sup>ʔ<sup>3</sup> ha<sup>3</sup> štlya<sup>34</sup> kwa<sup>3</sup> ndi<sup>2</sup>o<sup>32</sup>

Elb = K<sub>11</sub> [Ax

Elb:K<sub>1</sub> <Sta

there eating person tortilla Spanish there drinking

ne<sup>2</sup>ʔ<sup>3</sup> mškalyu<sup>4</sup> kwa<sup>3</sup> ndi<sup>2</sup>o<sup>32</sup> ne<sup>2</sup>ʔ<sup>3</sup> lkwi<sup>3</sup>

Sta>]

person mezcal there drinking person tepache

They are there eating sweetbread and drinking mezcal and tepache.



- (e) ha<sup>4</sup> ndi<sub>i</sub>ŋi<sub>i</sub><sup>23</sup> nyanu<sup>4</sup> ni<sup>2</sup> tš̄i<sub>i</sub>ŋ<sup>1</sup> ti<sup>3</sup> ku<sup>32</sup>  
 Elb = K<sub>12</sub> [Sit Res]  
 negation is-living Justiniano now a-little only will-eat  
 Justiniano is not here now so just a little will be eaten.

- (f) ndo<sup>ŋo</sup><sup>1</sup> ne<sup>ŋ</sup><sup>3</sup> mdiya<sup>21</sup> tukwa<sup>32</sup> ne<sup>ŋ</sup><sup>2</sup> kwiyu<sup>34</sup>  
 Elb = K<sub>13</sub> [Init: K<sub>3</sub> <Ant Cons>  
 emerging person was-there will-be-on person mule  
 ŋi<sup>1</sup> ne<sup>ŋ</sup><sup>3</sup> ndo<sup>ŋo</sup><sup>1</sup> ngiya<sup>43</sup> ne<sup>ŋ</sup><sup>2</sup> bra<sup>3</sup> ko<sup>ŋ</sup><sup>2</sup>  
 Seq: C<sub>1</sub>]  
 to person emerging going person then  
 Going out, he mounted his mule and left then.

- (g) no<sup>ŋo</sup><sup>1</sup> nda<sup>32</sup> tš̄a<sup>ŋ</sup><sup>2</sup>  
 Elb = S<sub>11</sub> [Set: K<sub>4</sub> <Pred Dev> PHI  
 seeing-you giving-he in-order-that  
 tiya<sup>43</sup> ŋyo<sup>21</sup>  
 Pur: C<sub>2</sub>]  
 will-be-belonging-it to-me  
 When you see what he is giving you can bring some for  
 me to have.

- (h) no<sup>2</sup> ndšku<sup>32</sup> nte<sup>34</sup> lka<sup>4</sup> ko<sup>ŋ</sup><sup>2</sup> tš̄a<sup>ŋ</sup><sup>2</sup>  
 Elb = S<sub>12</sub> [Rea: C<sub>3</sub> RH1  
 thing eating people is that's-the-one thing  
 ndšku<sup>32</sup> wo<sup>2</sup> ŋi<sup>3</sup>  
 Out: C<sub>1</sub>]  
 eating you-pl./respectful pronoun  
 It's a thing good for eating, that's why you eat it.

- (i) kuta<sup>32</sup> hakwa<sup>3</sup> pala<sup>4</sup> ŋyo<sup>21</sup> lo<sup>2</sup>  
 Elb = S<sub>15</sub> [Bal BHI  
 will-give-you four spade to-me and  
 kuta<sup>32</sup> sno<sup>1</sup> breta<sup>4</sup>  
 Bald]  
 will-give-you three crowbar  
 Give me four spades and three crowbars.

- (j) nu<sup>3</sup> wa<sup>2</sup> no<sup>2</sup>ʔo<sup>43</sup> ndšku<sup>1</sup> ʔi<sup>3</sup> yhw<sup>1</sup><sub>i</sub>  
 Elb = S<sub>32</sub> [Quot QT]  
 which completive seeing-I eating-I pronoun said-he  
 "which I saw and ate" he said.

The elaboration tagmeme elaborates on or explains the axiom tagmeme and occurs only in K<sub>11</sub>.

7.2.3. Situation. This tagmeme is manifested by C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>11</sub>, C<sub>12</sub>, C<sub>13</sub>, K<sub>1</sub>, K<sub>2</sub>, K<sub>4</sub>, K<sub>11</sub>, K<sub>12</sub>, K<sub>13</sub>, a purpose sentence (S<sub>11</sub>), or a balance sentence (S<sub>15</sub>).

Sit: C<sub>1</sub> ngula<sup>1</sup> kuwi<sup>32</sup> 'was-born baby' (The baby was born.); Sit: C<sub>2</sub> ndiya<sup>21</sup> kiʔo<sup>4</sup> libru<sup>34</sup> neʔ<sup>2</sup> kwa<sup>3</sup> 'is-belonging many book person there' (That person has a lot of books.); Sit: C<sub>3</sub> tsuʔwe<sup>32</sup> lka<sup>4</sup> tiye<sup>32</sup> neʔ<sup>3</sup> 'good is stomach-of person' (It pleases them.); Sit: C<sub>11</sub> štu<sup>1</sup> neʔ<sup>3</sup> ʔi<sup>1</sup> o<sup>3</sup> 'will-pluck, dir. person to them' (They will pluck them [the fruit].); Sit: C<sub>12</sub> tsuʔwe<sup>32</sup> yuʔwi<sup>43</sup> kwityi<sup>32</sup> niʔ<sup>2</sup> kiʔno<sup>3</sup> 'good there-was, dir. frog inside plate' (There was plenty of frog [meat] in the plate.); Sit: C<sub>13</sub> lye<sup>32</sup> ʔa<sup>1</sup> ngwa<sup>43</sup> kwiʔi<sup>3</sup> 'much very was, dir. wind' (The wind was very strong.);

- (a) ndukwo<sup>43</sup> ndukwo<sup>43</sup>  
 Sit = K<sub>1</sub> [Sta Sta]  
 is-on-I is-on-I  
 I am sitting here.

- (b) ngwilyu<sup>32</sup> wa<sup>2</sup> msoʔo<sup>43</sup> ʔi<sup>1</sup> neʔ<sup>3</sup>  
 Sit = K<sub>2</sub> [Act Inst]  
 fell-over-he completion knocked-out to person  
 He fell over completely unconscious.

- (c) siʔi<sup>1</sup> ska<sup>3</sup> ti<sup>3</sup> nyoʔo<sup>43</sup> no<sup>2</sup> ʔi<sup>3</sup>  
 Sit = K<sub>4</sub> [Pred Dev]  
 is-not one only looking, dir. name pronoun  
 There is not just one name for them.

- (d)     ʔnɪ<sup>3</sup>     la<sup>2</sup>     lka<sup>4</sup>     nde<sup>3</sup>     yhwɪ<sup>1</sup>  
 Sit = K<sub>11</sub> [Ax: S<sub>32</sub> <Quot             QT>  
           animal fierce is     this said-she  
  
           ha<sup>4</sup>             ndšku<sup>1</sup>     nte<sup>34</sup>     nde<sup>3</sup>     yhwɪ<sup>1</sup>  
           Elb: S<sub>32</sub> <Quot                     QT>]  
           negation eating people this said-she  
           "This is a fierce animal which people do not eat" she said.
- (e)     kuhwɪ<sup>1</sup>            tʉʔ<sup>32</sup>            ʔɪ<sup>3</sup>            ku<sup>32</sup>  
 Sit = K<sub>12</sub> [Sit   Res]  
           will-kill-I for-sure-I pronoun will-eat-you  
           I will certainly kill it for you to eat.
- (f)     ha<sup>4</sup>            šnyɪ<sup>32</sup>                    ʔa<sup>3</sup>     yaʔ<sup>32</sup>     taʔa<sup>23</sup>  
 Sit = K<sub>13</sub> [Init: C<sub>11</sub>  
           negation will-take-you, dir. more hand brother  
  
           hwaki<sup>2</sup>             ʔyo<sup>21</sup>     lo<sup>2</sup>     hwaki<sup>1</sup>            ʔɪ<sup>2</sup>  
           Seq: S<sub>15</sub> <Bal                    BHI Bald>]  
           will-pull-you to-me and will-pull-I pronoun  
           Won't you grab hands together (with me), then you pull  
           against me and I will pull against you.
- (g)     ka<sup>3</sup>     tɪʔ<sup>43</sup>            tšaʔ<sup>2</sup>                    kuta<sup>43</sup>  
 Sit = S<sub>11</sub> [Set            PHI   Pur]  
           will-want-I to-the-effect-that will-give  
  
           wo<sup>2</sup>                    su<sup>2</sup>            slyɪ<sup>2</sup>            ʔwo<sup>3</sup>  
  
           you-pl./respectful base trousers to-you-pl./respectful  
           I want you to give me the seat out of your trousers.
- (h)     yhwɪ<sup>32</sup>            ʔɪ<sup>2</sup>            lo<sup>2</sup>     nkyeʔ<sup>32</sup>            ʔɪ<sup>1</sup>     ʔɪ<sup>3</sup>  
 Sit = S<sub>15</sub> [Bal   BHI Bald: K<sub>11</sub> <Ax  
           killed-she pronoun and cooking-she to pronoun  
  
           ngwa<sup>4</sup>            ʔɪ<sup>3</sup>            kalu<sup>4</sup>  
           Elb>]  
           was, dir. pronoun soup  
           She killed it and cooked it to make soup.

The situation tagmeme occurs only in  $K_{12}$ .

7.2.4. Result. This tagmeme is manifested by  $C_1$ ,  $C_2$ ,  $C_3$ ,  $C_4$ ,  $C_{11}$ ,  $C_{12}$ ,  $C_{22}$ ,  $K_1$ ,  $K_3$ ,  $K_4$ ,  $K_{12}$ , or a quotative sentence ( $S_{32}$ ). It is the manifestations of this tagmeme that determine ten of the eleven co-occurrence subtypes of  $K_{12}$ , but  $C_4$ ,  $C_{22}$ , and  $K_1$  manifest the result tagmeme in subtype (ix) only.

Res:  $C_1$   $ndi^2$   $\text{ʔa}^4$   $kwi\text{ʔyo}^4$   $kuwi\text{ʔ}^{32}$   $\text{ʔba}^3$   $\text{ʔi}^2$  'soon very will-carry-I baby to-we-exclusive pronoun' (I will bring our baby to you in a little while.); Res:  $C_2$   $ko\text{ʔ}^1$   $ya\text{ʔ}^{32}$   $kwiyu^3$   $\text{ʔyo}^2$   $ska^3$   $bra^3$   $ti^3$  'will-be-adjoining hand-of mule to-me one hour only' (It will be on my mule's hoof just a little time.); Res:  $C_3$   $kit\check{s}e^3$   $lka^4$   $bra^3$   $ko\text{ʔ}^2$  'town is then' (...so it is a town); Res:  $C_4$   $ku^2$   $lomsa^3$   $ne\text{ʔ}^3$  'will-eat breakfast-of person' (He will eat his breakfast.); Res:  $C_{11}$   $\check{s}ka^1$   $ko\text{ʔ}^{12}$   $tya^1$   $tnyi^3$   $\text{ʔi}^1$   $ne\text{ʔ}^3$  'another month will-give-you, dir. money to person' (Next month you will pay them.); Res:  $C_{12}$   $tyi\text{ʔ}^1$   $\text{ʔwo}^3$   $nde^3$  'will-live-it, dir. to-you-pl. here' (It can stay here for you.); Res:  $C_{22}$   $ku^{32}$   $tu\text{ʔ}^{32}$  'will-eat-he for-sure-he' (He will certainly eat [it].);

(a)  $nyo\text{ʔ}^4$   $sa^2$   $la^3$   $nyo\text{ʔ}^4$   $ti\text{ʔ}^2$   $la^3$   
 Res =  $K_1$  [Sta Sta]  
 looking, dir. light more looking, dir. heavy more  
 We will see which is the lighter and which is the heavier.

(b)  $li\text{ʔya}^1$   $ngiya^2$   $bra^3$   $ko\text{ʔ}^2$   
 Res =  $K_3$  [Ant Cons]  
 carrying-he going-he then  
 Carrying (it) he left.

(c)  $ndi\check{s}ko\text{ʔ}^{32}$   $ndukwa^4$   $kye^3$   $nga\text{ʔa}^1$   
 Res =  $K_4$  [Pred Dev]  
 gazed-he is-on flower red  
 He gazed at the place where the red flowers were.

- (d)      šuʔwi<sup>1</sup>                      tɬʔa<sup>3</sup>    kuʔu<sup>32</sup>  
 Res = K<sub>12</sub> [Sit                      Res]  
          will-put-you, dir.    water    will-drink-I  
          You put some water in (it) so that I can drink it.
- (e)      kaha<sup>1</sup>      nte<sup>34</sup>                      sɬ<sup>1</sup>    ku<sup>2</sup>      neʔ<sup>3</sup>      nde<sup>3</sup>  
 Res = S<sub>32</sub> [Quot: S<sub>31</sub> <Ads: S<sub>14</sub> (Inj CnHI Cond)>  
          will-die people                      if      will-eat person here
- yhw<sup>1</sup>  
          QT]  
          said-she  
          "People die if they eat this" she said.

The result tagmeme occurs only in K<sub>12</sub>.

7.2.5. Initiation. This tagmeme is manifested by C<sub>1</sub>, C<sub>2</sub>, C<sub>4</sub>, C<sub>11</sub>, K<sub>2</sub>, K<sub>3</sub>, K<sub>4</sub>, K<sub>12</sub>, a purpose sentence (S<sub>11</sub>), or a comment sentence (S<sub>21</sub>).

Init: C<sub>1</sub> wa<sup>2</sup> ngus<sup>32</sup> teʔ<sup>34</sup> ni<sup>2</sup> 'completion wrung-she cloth now' (She has wrung out the clothes now.); Init: C<sub>2</sub> ndiya<sup>21</sup> sno<sup>1</sup> 'is-belonging three' (Three of them were there.); Init: C<sub>4</sub> mdyi<sup>1</sup> yku<sup>32</sup> ti<sup>3</sup> kyha<sup>3</sup> ʔi<sup>2</sup> 'finished, dir. ate only tortilla pronoun' (He only just finished eating his tortillas.); Init: C<sub>11</sub> la<sup>3</sup> kwa<sup>2</sup> la<sup>3</sup> tyu<sup>32</sup> 'towards there more will-stand-you, dir.' (You stand over there a little more.);

- (a)      ngusno<sup>43</sup> ʔya<sup>1</sup>      nu<sup>3</sup>                      šni<sup>ʔ3</sup> biya<sup>ʔ2</sup>    lʔwe<sup>3</sup>  
 Init = K<sub>2</sub> [Act  
          ran            carrying the-particular dog    measure half
- nsuʔwi<sup>1</sup>    mškal<sup>4</sup>  
          Inst]  
          there-is mezcal  
          The dog ran off carrying a measure and a half of mezcal.

- (b)      ndoʔo<sup>1</sup>    yu<sup>3</sup>    ngiya<sup>32</sup>  
 Init = K<sub>3</sub> [Ant                      Cons]  
 emerging man going-he  
 Emerging, the man went.
- (c)      ha<sup>4</sup>           ka<sup>43</sup>           ʔa<sup>3</sup>    hyc<sup>43</sup>           loʔo<sup>1</sup> yka<sup>3</sup> kya<sup>43</sup>  
 Init = K<sub>4</sub> [Pred                      Dev]  
 negation will-be more will-return-I with wood tomorrow  
 I will not be able to return with wood tomorrow.
- (d)      ndiya<sup>21</sup>           snɔ̄<sup>1</sup>    ngusuʔwa<sup>32</sup> ʔi<sup>1</sup> salbahe<sup>43</sup> bra<sup>3</sup> kɔ̄ʔ<sup>2</sup>  
 Init = K<sub>12</sub> [Sit                                  Res]  
 is-belonging three put-it to ruffian then  
 There were three there and they used them on the ruffians.
- (e)      nsuʔwa<sup>1</sup>           ʔi<sup>3</sup>           tškwɔ̄<sup>43</sup> tšaʔ<sup>2</sup>  
 Init = S<sub>11</sub> [Set                                  PHi]  
 putting-he pronoun metal in-order-that  
  
 ʔa<sup>4</sup>           kɔ̄<sup>1</sup>           ʔa<sup>2</sup>  
 Pur]  
 negation will-come more  
 He put them in irons so that they would not come any more.
- (f)      bra<sup>3</sup> kɔ̄ʔ<sup>2</sup>    ngutyu<sup>32</sup>    ti<sup>1</sup>    wta<sup>34</sup> kɔ̄ʔ<sup>2</sup>  
 Init = S<sub>21</sub> [Top    ER]  
 then fell-down rope cow that-is-what  
  
 mdyu<sup>32</sup> ʔi<sup>2</sup>  
 Comt]  
 fell-on pronoun  
 Next the cow rope fell down, that is just what fell on it  
 (the snake).

The initiation tagmeme occurs only in K<sub>13</sub>.

7.2.6. Sequel. This tagmeme is manifested by C<sub>1</sub>, C<sub>2</sub>, C<sub>11</sub>, K<sub>2</sub>, K<sub>3</sub>, K<sub>4</sub>, or a balance sentence (S<sub>15</sub>). The manifestations of this tagmeme determine five of the six co-occurrence subtypes of K<sub>13</sub>.



## 8. Sentence Types

There are both major and minor sentences. The major sentences are independent or symbiotic but the unique minor sentence occurs without the sentence periphery and may manifest a phrase-level tagmeme. There are five classes of sentences of which four are major classes: simple sentence class ( $S_0$ ), hinge sentence class ( $S_{10}$ ), symbiotic sentence class ( $S_{20}$ ), quotation sentence class ( $S_{30}$ ), minor sentence class ( $s_{00}$ ).

8.1. There are two sentence types in the simple sentence class  $S_0$ .

8.1.1.  $S_1$ , the primary sentence, which consists of one obligatory nuclear tagmeme and the periphery, may be graphically represented thus:

$$S_1 = \pm J \quad (+ E_{pn})$$

The optional junction tagmeme, manifested by the conjunction  $lo^2$  'and' from subclass  $W_{14.2}$  or by an expression of agreement or a contraction of such expression, or by certain temporal nouns of subclass  $W_{3.1}$  (see 9.1.1), is followed by the obligatory expression tagmeme manifested by a clause of any type from classes  $C_0$ ,  $C_{10}$ , or  $C_{20}$ , or any colon type (see 9.2.1).

There are two subtypes of  $S_1$ . Subtype (i): The expression tagmeme is manifested by a clause. Subtype (ii): The expression tagmeme is manifested by a colon. Examples of  $S_1$  follow with constituent tagmemes indicated.



subtype (I)

- (a) ka<sup>4</sup>      nō<sup>2</sup>      ngila<sup>43</sup>      y<sup>2</sup>o<sup>1</sup>      yu<sup>3</sup>      bra<sup>3</sup>      kō<sup>2</sup><sup>2</sup>  
 S<sub>1</sub> = J                          Epn: C<sub>1</sub>  
 will-be thing arriving mother-of man then  
 So the man's mother arrived then.

- (b) tsu<sup>2</sup>we<sup>32</sup>      ʔ<sub>i</sub><sup>2</sup>      ni<sup>2</sup>      ngudya<sup>32</sup>      wō<sup>2</sup>      ska<sup>3</sup>      siyētū<sup>4</sup>      ʔyō<sup>21</sup>  
 S<sub>1</sub> = J                          Epn: C<sub>11</sub>  
 good      pronoun now gave, dir. you-pl. one hundred to-me  
 All right now, you have paid me the one hundred.

- (c) we<sup>3</sup>      ni<sup>2</sup>      škwō<sup>43</sup>                          tū<sup>2</sup><sup>43</sup>  
 S<sub>1</sub> = J                          Epn: C<sub>22</sub>  
 good now will-lie-I, dir. for-certain-I  
 All right, I will certainly lie down.

subtype (II)

- (a) we<sup>3</sup>      ni<sup>2</sup>      tsa<sup>43</sup>                          ni<sup>2</sup>      nō<sup>1</sup>                          taʔa<sup>23</sup>      sno<sup>1</sup>  
 S<sub>1</sub> = J                          Epn: K<sub>3</sub> [Ant: C<sub>1</sub>      Cons: C<sub>1</sub>]  
 good now will-go-you now look-for-you relative three  
 Now go and look for the three sisters.

- (b) lo<sup>2</sup>      ndiya<sup>21</sup>                          kalu<sup>4</sup>      kō<sup>2</sup><sup>2</sup>  
 S<sub>1</sub> = J      Epn: K<sub>11</sub> [Ax: C<sub>2</sub>  
 and is-belonging soup that-particular  
  
 ndiya<sup>21</sup>                          kalu<sup>4</sup>      nkye<sup>23</sup>      kō<sup>2</sup><sup>2</sup>                          ʔ<sub>i</sub><sup>1</sup>      nte<sup>34</sup>  
 Elb: C<sub>2</sub>]  
 is-belonging soup cooking that-particular to people  
 And there is that particular kind of soup, there is the  
 peoples' soup of that particular kind already cooked.

8.1.2. S<sub>2</sub>, the descriptive sentence, consists of two members and the periphery. There are two subtypes, S<sub>2.1</sub> and S<sub>2.2</sub>, which may be graphically represented thus:

S<sub>2.1</sub> =  $\pm$  J    (+ Sub<sub>1</sub>    + Exn)

S<sub>2.2</sub> =  $\pm$  J    (+ Sub<sub>2</sub>     $\pm$  Exn)



conjunction which determines the relationship of the first member in the sentence to the second member. On occasion in narrative a hinge sentence is recorded as direct speech. A pause often occurs before the hinge in such a sentence so that when quoted the first member of the hinge sentence occurs as the address sentence ( $S_{31}$ ) manifesting the quotation tagmeme in one quotative sentence ( $S_{32}$ ), while the hinge together with the second member occur as the address sentence manifesting the quotation tagmeme of a second  $S_{32}$ . This may be illustrated by the cause sentence ( $S_{13}$ ) in which  $S_{13} = + \text{Sug} + \text{CHi} + \text{Cau}$ , but in recorded speech these members may be split apart to form two address sentences which manifest the quotation tagmemes of two consecutive quotative sentences as in the following example.

$S_{32}, S_{32} = S_{13}$  [Quot/Sug: $S_{31}$  <Ads:C<sub>11</sub> VAd> QT:C<sub>21</sub>]      negation will-shout-you, dir. Friend said dog lazy

ha<sup>4</sup>      š<sup>32</sup>iʔya<sup>32</sup>      tš<sup>32</sup>e      yhw<sup>32</sup><sub>i</sub>      š<sup>32</sup>niʔ<sup>3</sup>      ndaha<sup>3</sup>

ʔ<sup>1</sup><sub>i</sub>    ʔ<sup>34</sup>o      siʔya<sup>1</sup>      kuhwi<sup>43</sup>      neʔ<sup>2</sup>    ʔ<sup>3</sup><sub>i</sub>      yhw<sup>1</sup><sub>i</sub>

[Quot/(CHI Cau): $S_{31}$  <Ads>      QT:C<sub>21</sub>]      to coyote because will-kill they pronoun said-he

bra<sup>3</sup>    kʔ<sup>2</sup>

then

"Don't you shout Friend" said Lazy Dog to Coyote,  
 "because they will kill you" he said then.

8.2.1.  $S_{11}$ , the purpose sentence, consists of two members and the periphery. The second member, together with the hinge, may be repeated an indefinite number of times; up to four repetitions have been encountered in the data analysed. The aspect of the second member is almost always intensive, or is very rarely continuative, when that of the first member is not intensive. The members of this sentence type are not reversible.  $S_{11}$  may be graphically represented thus:

$$S_{11} = +J \quad (+ \text{Set} \quad [+ \text{PHI} \quad + \text{Pur}]^n)$$

The optional periphery is followed by the obligatory setting tagmeme manifested by types from classes  $C_0$ ,  $K_0$  and  $K_{10}$ , or by  $C_{11}$ ,  $S_{14}$ ,  $S_{15}$ ,  $S_{22}$ , or  $S_{23}$  (see 9.3.1), followed by the obligatory purpose hinge tagmeme manifested by the conjunction  $t\check{s}a^2$  'in-order-that/to-the-effect-that' (see 9.3.2), followed by the obligatory purposive tagmeme manifested by types from classes  $C_0$ ,  $C_{10}$ ,  $K_0$  and  $K_{10}$ , or by  $S_{14}$  (see 9.3.3).

There are nine subtypes of  $S_{11}$  on the basis of co-occurrence of the various manifestations of the setting tagmeme with the various manifestations of the purposive tagmeme. These co-occurrence subtypes are classified according to given manifestations of the purposive tagmeme in subtypes (i) - (viii). Other manifestations of the purposive tagmeme encountered to date occur only when  $C_1$  manifests the setting tagmeme; these comprise subclass (ix). Subtype (i): The setting tagmeme may be manifested by  $C_1$ ,  $C_2$ ,  $C_{11}$ ,  $K_1$ ,  $K_2$ ,  $K_3$ ,  $K_{11}$ ,  $S_{14}$ , or  $S_{23}$  when the purposive tagmeme is manifested by  $C_1$ . Subtype (ii): The setting tagmeme may be manifested by  $C_1$ ,  $C_3$ ,  $C_{11}$ ,  $K_{11}$ , or  $K_{13}$  when the purposive tagmeme is manifested by  $C_{11}$ . Subtype (iii): The setting tagmeme may be manifested by  $C_1$  or  $K_1$  when the purposive tagmeme is manifested by  $C_3$ . Subtype (iv): The setting tagmeme may be manifested by  $C_1$ ,  $C_{11}$ , or  $K_{12}$  when the purposive tagmeme is manifested by  $C_{12}$ . Subtype (v): The setting tagmeme may be manifested by  $C_1$  or  $C_4$  when the purposive tagmeme is manifested by  $C_2$ . Subtype (vi): The setting tagmeme may be manifested by  $C_1$  or  $K_1$  when the purposive tagmeme is manifested by  $K_2$ . Subtype (vii): The setting tagmeme may be manifested by  $C_1$  or  $S_{23}$  when the purposive tagmeme is manifested by  $K_3$ . Subtype (viii): The setting tagmeme is manifested by  $S_{15}$  or  $S_{22}$  when the purposive tagmeme is manifested by  $K_4$ . Subtype (ix): When the setting tagmeme is manifested by  $C_1$ , the purposive tagmeme may be further manifested by  $K_{11}$  or  $S_{14}$ . A maximum example of  $S_{11}$  follows.

- $S_{11} = \text{Set: } C_1$   
 nsi<sup>1</sup>ya<sup>1</sup> ne<sup>3</sup> msu<sup>34</sup> ʔi<sup>1</sup> ne<sup>3</sup> wta<sup>34</sup> tša<sup>2</sup>  
 PHI  
 calling person servant to person cattle in-order-that
- šo<sup>1</sup> su<sup>2</sup>wa<sup>43</sup> ne<sup>2</sup> ʔi<sup>3</sup> ni<sup>2</sup> lyo<sup>2</sup>o<sup>32</sup>  
 Pur<sup>1</sup>: C<sub>1</sub>  
 will-gather, dir. will-put person pronoun inside in-corral
- rantšu<sup>4</sup> ʔi<sup>1</sup> ʔi<sup>3</sup> tša<sup>2</sup> kulo<sup>43</sup> ne<sup>2</sup> sty<sup>1</sup>ʔ<sup>2</sup>  
 PHI Pur<sup>2</sup>: C<sub>1</sub>  
 ranch to pronoun in-order-that will-draw-out person milk
- ʔi<sup>3</sup> tša<sup>2</sup> tyo<sup>2</sup>o<sup>1</sup> kšu<sup>34</sup> ʔi<sup>1</sup> ne<sup>3</sup>  
 PHI Pur<sup>3</sup>: C<sub>11</sub>  
 pronoun in-order-that will-emerge, dir. cheese to person
- tša<sup>2</sup> tsa<sup>43</sup> hwi<sup>2</sup>ʔ<sup>43</sup> ne<sup>2</sup> lo<sup>3</sup> kiya<sup>3</sup>  
 PHI Pur<sup>4</sup>: C<sub>1</sub>  
 in-order-that will-go sell person in market  
 The ranchers' servants call their cattle so that they can put them all together in the ranch corral to milk them, so that they can make cheese to take to market to sell.

Other examples of  $S_{11}$  follow with constituent tagmemes indicated.

subtype (i)

- $S_{11} = \text{Set: } K_3$  [Ant: C<sub>1</sub> Cons: C<sub>1</sub>]  
 kun<sup>1</sup> se<sup>2</sup>e<sup>3</sup> tsa<sup>43</sup> se<sup>2</sup>e<sup>2</sup> ku<sup>2</sup>tsi<sup>2</sup> ti<sup>3</sup>  
 will-look-for-you place will-go-you place will-hide only
- tša<sup>2</sup> ha<sup>4</sup> nyo<sup>2</sup>ʔ<sup>43</sup> ne<sup>2</sup> ʔi<sup>3</sup>  
 PHI Pur: C<sub>1</sub>  
 in-order-that negation looking, dir. person pronoun  
 You will look for a place and then hide there so that they will not see you.

## subtype (ii)

	hy <sub>ɔ̣</sub> <sup>32</sup>	tša <sup>ʔ2</sup>	š <sub>u</sub> <sup>32</sup>	wo <sub>ɔ̣</sub> <sup>2</sup>
S <sub>11</sub> =	Set: C <sub>1</sub>	PHI	Pur: C <sub>11</sub>	
	will-return-I	in-order-that	will-fight, dir.	you-pl.
	I will return to fight with you.			

## subtype (iii)

	ngwo <sub>ɔ̣</sub> <sup>2</sup>	ʔ <sub>ɔ̣</sub> <sup>3</sup>	hiyo <sup>32</sup>	ti <sup>ʔ32</sup>	ni <sup>2</sup>	tša <sup>ʔ2</sup>		no <sub>ɔ̣</sub> <sup>2</sup>	ngwo <sub>ɔ̣</sub> <sup>2</sup>	ʔ <sub>ɔ̣</sub> <sup>3</sup>
S <sub>11</sub> =	Set: C <sub>1</sub>					PHI		Pur: C <sub>3</sub>		
	like	that	know-you	now	to-the-effect-that	name	like	that		
	Now you know what I am called.									

## subtype (iv)

	ha <sup>4</sup>	ndiya <sup>21</sup>	kyha <sup>3</sup>	kuta <sup>32</sup>	ska <sup>3</sup>	ku <sup>2</sup>
S <sub>11</sub> =	Set: K <sub>12</sub>	[Sit: C <sub>2</sub>		Res: K <sub>12</sub>	<Sit: C <sub>1</sub>	Res: C <sub>1</sub> >]
	negation	is-belonging	tortilla	will-give-you	one	will-eat
	o <sub>ɔ̣</sub> <sup>2</sup>	tša <sup>ʔ2</sup>	tyi <sub>ɔ̣</sub> <sup>ʔ43</sup>	o <sub>ɔ̣</sub> <sup>3</sup>		
		PHI	Pur: C <sub>12</sub>			
	we-inclusive	in-order-that	will-live, dir.	we-inclusive		
	Don't you have a tortilla to give us to eat so that we won't starve?					

## subtype (v)

	sko <sub>ɔ̣</sub> <sup>43</sup>	ti <sup>2</sup>	nskw <sub>ɔ̣</sub> <sup>43</sup>	ti <sub>ɔ̣</sub> <sup>ʔ32</sup>	tša <sup>ʔ2</sup>
S <sub>11</sub> =	Set: C <sub>1</sub>				PHI
	one-I	only	lying-I	will-live	to-the-effect. that
	ha <sup>4</sup>	tukwi <sub>ɔ̣</sub> <sup>2</sup>	ndiya <sup>21</sup>	ʔyo <sub>ɔ̣</sub> <sup>21</sup>	
		Pur: C <sub>2</sub>			
	nobody	is-belonging	to-me		
	I am lying here all alone as there is no one to be here with me.				

## subtype (vi)

	ku <sup>ʔni</sup> <sup>32</sup>	tša <sup>ʔ2</sup>	kaha <sup>43</sup>	no <sub>ɔ̣</sub> <sup>2</sup>
S <sub>11</sub> =	Set: C <sub>1</sub>	PHI	Pur: K <sub>2</sub>	[Act: C <sub>1</sub>
	will-make-he	in-order-that	will-obtain-he	thing

koʔo<sup>43</sup> kuw1ʔ<sup>32</sup> ʔ<sub>1</sub><sup>1</sup> neʔ<sup>3</sup>

Inst: C<sub>1</sub>]

will-drink baby to person

He will do it so that he can get the stuff for his baby to drink.

subtype (vii)

la<sup>3</sup> ka<sup>4</sup> ndukwa<sup>1</sup> ni<sup>2</sup> tšaʔ<sup>2</sup>  
 S<sub>11</sub> = Set: S<sub>23</sub> [Itg IS: C<sub>2</sub>] PHI  
 where will-be is-on now in-order-that

kyo<sub>2</sub><sup>32</sup> ku<sup>32</sup> tlya<sup>32</sup>  
 Pur: K<sub>3</sub> [Ant: C<sub>11</sub> Cons: C<sub>4</sub>]  
 will-come-he, dir. will-eat dinner-his  
 Where will you sit so that he will come here and eat his dinner?

subtype (viii)

ta<sup>3</sup> tšanyi<sup>2</sup> tšaʔ<sup>2</sup> •  
 S<sub>11</sub> = Set: S<sub>22</sub> [AR Alt: C<sub>5</sub>] PHI  
 or-interrogative true to-the-effect-that

taka<sup>4</sup> ʔ<sub>1</sub><sup>2</sup> kulo<sup>32</sup> tiʔa<sup>3</sup>  
 Pur: K<sub>4</sub> [Dev: K<sub>4</sub> <Pred: C<sub>13</sub> Dev: C<sub>1</sub>>  
 will-be, dir. pronoun will-draw-out-you water

ka<sup>4</sup> ʔ<sub>1</sub><sup>2</sup>  
 Pred: C<sub>13</sub>]  
 will-be to-you  
 Or isn't it true that you will be able to find water here?

subtype (ix)

noʔ<sup>2</sup> kuʔni<sup>1</sup> tšaʔ<sup>2</sup> kaha<sup>32</sup> kaʔ<sup>12</sup>  
 S<sub>11</sub> = Set: C<sub>1</sub> PHI Pur: S<sub>14</sub> [Inj: C<sub>1</sub>  
 I will-make-I in-order-that will-obtain-he coffin

si<sup>1</sup> kwa<sup>3</sup>  
 CnHi Cond: C<sub>5</sub>]  
 if there  
 I will see that he has a coffin if that's all.

8.2.2.  $S_{12}$ , the reason sentence, consists of two members and the periphery. The second member, together with the hinge, may be repeated once, and in rare instances the members may be reversed. The aspect of the second member is always continuative or completive. Although all examples of  $K_2$  may transform to  $S_{12}$  this transform is one way only in that all examples of  $S_{12}$  do not transform to  $K_2$ .  $S_{12}$  may be graphically represented thus:

$$S_{12} = \pm J \left( + \text{Rea} \left[ + \text{RH} \left[ + \text{Out} \right]^2 \right] \right)$$

The optional periphery is followed by the obligatory reason tagmeme manifested by types from classes  $C_0$  or  $C_{10}$ , or by  $C_{31}$ ,  $K_1$ ,  $K_4$ , or  $S_{14}$  (see 9.3.4), followed by the obligatory reason hinge tagmeme manifested by the stative clause  $k_0^2$   $t\check{s}a^2$  'that's-why' (see 9.3.5), followed by the obligatory outcome tagmeme manifested by  $C_1$ ,  $C_2$ ,  $C_3$ ,  $C_5$ ,  $K_2$ ,  $K_{11}$ , or  $S_{11}$  (see 9.3.6).

There are four subtypes of  $S_{12}$ . Co-occurrence classes in subtypes (i) - (iii) are classified according to given manifestations of the outcome tagmeme. Other manifestations of the outcome tagmeme occur only when the reason tagmeme is manifested by  $C_1$  and these comprise subtype (iv). Subtype (i): The reason tagmeme may be manifested by  $C_1$ ,  $C_3$ ,  $C_5$ ,  $C_{12}$ ,  $C_{31}$ ,  $K_4$ , or  $S_{14}$  when the outcome tagmeme is manifested by  $C_1$ . Subtype (ii): The reason tagmeme may be manifested by  $C_2$  or  $C_{11}$  when the outcome tagmeme is manifested by  $C_5$ . Subtype (iii): The reason tagmeme is manifested by  $K_1$  when the outcome tagmeme is manifested by  $K_{11}$ . Subtype (iv): When the reason tagmeme is manifested by  $C_1$ , the outcome tagmeme may be further manifested by  $C_2$ ,  $C_3$ ,  $K_2$ , or  $S_{11}$ . Examples of  $S_{12}$  follow with constituent tagmemes indicated.

subtype (i)

$\check{s}a^2$   $nu^3$   $\check{s}lyu^1$   $ne^3$   $m_0kino^4$   $su^2$   $lambre^4$   
 $S_{12} = \text{Rea}: C_{31}$   
 light which will-turn, dir. person machine base wire





$S_{13}$  may be graphically represented thus:

$$S_{13} = \underline{+} J \left( \overbrace{+ \text{Sug} \quad [+ \text{CHI} \quad \downarrow \text{Caul}]} \right)$$

The optional periphery is followed by the obligatory suggestion tagmeme manifested by  $C_1$ ,  $C_{11}$ ,  $C_{12}$ ,  $K_4$ ,  $S_{14}$ , or  $S_{31}$  (see 9.3.7), followed by the obligatory cause hinge tagmeme manifested by the conjunction  $si'ya^1$  'because, since' (see 9.3.8), followed by the obligatory cause tagmeme manifested by  $C_1$  or  $C_{13}$  (see 9.3.9). As this sentence type occurs rarely, few examples have been encountered and therefore the fact of the cause tagmeme being manifested by  $C_1$  and once only by  $C_{13}$  is as yet insufficient evidence for determining subtypes. Examples of  $S_{13}$  follow with constituent tagmemes indicated.

- (a)  $lo^2$   $si'ya^1$   $s'ni^2$   $ykw_i^{43}$   $lo'o^1$   
 $S_{13} = J$   $CHI$   $Cau: C_1$   
 and because long-ago spoke-I with-you

$ha^4$   $hlya^{32}$   $ti^{32}$   $t\check{s}a^{72}$   $ykw_i^{43}$   $lo'o^1$   
 $Sug: C_1$   
 negation forget-you word spoke-I with-you

And don't forget what I told you because I spoke to you  
 a long time ago.

- (b)  $nde^3$   $\gamma wo^3$   $ty_i^{43}$   $ba^3$   $\check{s}i\gamma_i^1$   
 $S_{13} = Sug: C_{12}$   
 here to-you-pl. will-live, dir. we-exclusive little-white

$si'ya^1$   $ngiya^{43}$   $y'o^1$   $ba^3$   $lo^3$   $kit\check{s}e^1$   
 $CHI$   $Cau: C_1$   
 because going mother we-exclusive in town

We will stay here at your place for a little while because  
 our mother has gone to town.

- (c)  $si^1$   $tyukwa^{32}$   $sndadu^4$   $\gamma_i^2$   
 $S_{13} = Sug: S_{14}$  [ $CnHI$   $Cond: C_{12}$   
 if will-be-on, dir. soldier pronoun

ha<sup>4</sup>      šno<sup>32</sup>                      tša<sup>2</sup>  
 Inj: S<sub>11</sub> <Set: C<sub>11</sub>                      PHi  
 negation will-run-he, dir. in-order-that

ku<sup>43</sup>              ne<sup>2</sup>      ʔ<sup>2</sup>              si<sup>1</sup>ya<sup>1</sup>      ndugu<sup>1</sup>      ne<sup>3</sup>      ʔ<sup>1</sup>  
 Pur: C<sub>1</sub>>]                                      CHI      Cau: C<sub>1</sub>  
 will-shoot person pronoun because shooting person to

nte<sup>34</sup>      nu<sup>3</sup>      šno<sup>1</sup>

people which will-run, dir.

If the soldiers catch him he must not try to run away or they will shoot him because that is what they do to people who run away.

8.2.4. S<sub>14</sub>, the condition sentence, consists of two members together with the common junction peripheral tagmeme and another optional peripheral tagmeme which occurs only in this sentence type. The two members are reversible. The aspect combination of completive-completive may occur but usually the manifestation of the condition tagmeme has the intentive aspect. S<sub>14</sub> may be graphically represented thus:

S<sub>14</sub> = ± J ± F ( + Inj [ + CnHi + Cond ] )

The optional junction tagmeme is followed by the optional focus tagmeme manifested by P<sub>1</sub>, followed by the obligatory injunction tagmeme manifested by C<sub>1</sub>, C<sub>3</sub>, C<sub>5</sub>, C<sub>11</sub>, K<sub>4</sub>, K<sub>11</sub>, K<sub>12</sub>, or S<sub>11</sub> (see 9.3.10), followed by the obligatory condition hinge tagmeme manifested by the borrowed conjunction si<sup>1</sup> 'if' (see 9.3.11), followed by the obligatory condition tagmeme manifested by class C<sub>10</sub> or by C<sub>1</sub>, C<sub>2</sub>, C<sub>5</sub>, K<sub>2</sub>, S<sub>32</sub>, P<sub>4</sub>, or P<sub>11.2</sub> (see 9.3.12).

There are seven co-occurrence subtypes of S<sub>14</sub>. Subtypes (i) - (vi) are classified according to certain manifestations of the condition tagmeme. Other manifestations of this tagmeme occur only when the injunction tagmeme is manifested by C<sub>1</sub> and comprise subtype (vii). Subtype (i):





si<sup>1</sup> ha<sup>4</sup> loʔo<sup>1</sup> mokin<sup>4</sup> ʔba<sup>3</sup>

CnHi Cond:P<sub>11.2</sub>

if negation with machine to-we-exclusive

We cannot learn very quickly if we do not have our machine  
(tape recorder).

8.2.5. S<sub>15</sub>, the balance sentence, consists of two members and the periphery. The second member may be repeated an indefinite number of times; up to three repetitions have been encountered in the data analysed. The aspects of the two members agree and, as indicated in subtype (x), often both members are manifested by the same clause or sentence type in a given example. S<sub>15</sub> may be graphically represented thus:

$$S_{15} = \pm J \ (+ \text{Bal} \ [+ \text{BHi} \ + \text{Bald}]^n)$$

The optional periphery is followed by the obligatory balance tagmeme manifested by types from classes C<sub>0</sub>, K<sub>10</sub>, S<sub>20</sub>, or by C<sub>11</sub>, K<sub>4</sub>, S<sub>14</sub>, or S<sub>32</sub> (see 9.3.13), followed by the obligatory balance hinge tagmeme manifested by the relators lo<sup>2</sup> 'and' or loʔo<sup>1</sup> 'with' (see 9.3.14), followed by the obligatory balanced tagmeme manifested by types from classes C<sub>0</sub> or K<sub>0</sub>, or by C<sub>11</sub>, K<sub>11</sub>, S<sub>2</sub>, S<sub>11</sub>, S<sub>14</sub>, or S<sub>21</sub> (see 9.3.15).

There are ten co-occurrence subtypes. Subtypes (i) - (viii) are classified according to certain manifestations of the balanced tagmeme, subtype (ix) according to a certain manifestation of the balance tagmeme, and in subtype (x) the type manifested in the balance tagmeme is repeated in the balanced tagmeme. S<sub>15</sub> occurs most commonly in the subtype (x) form. Subtype (i): The balance tagmeme may be manifested by C<sub>2</sub>, C<sub>4</sub>, C<sub>11</sub>, K<sub>11</sub>, K<sub>12</sub>, or S<sub>32</sub> when the balanced tagmeme is manifested by C<sub>1</sub>. Subtype (ii): The balance tagmeme may be manifested by C<sub>1</sub>, C<sub>11</sub>, or K<sub>4</sub> when the balanced tagmeme is manifested by C<sub>2</sub>. Subtype (iii): The balance tagmeme may be manifested by C<sub>1</sub>, S<sub>21</sub>, or S<sub>23</sub> when the balanced tagmeme is manifested by C<sub>11</sub>. Subtype (iv):

The balance tagmeme may be manifested by  $C_1$ ,  $C_3$ , or  $C_{11}$  when the balanced tagmeme is manifested by  $K_{11}$ . Subtype (v): The balance tagmeme is manifested by  $S_{21}$  when the balanced tagmeme is manifested by  $C_5$ . Subtype (vi): The balance tagmeme is manifested by  $C_3$  when the balanced tagmeme is manifested by  $S_2$ . Subtype (vii): The balance tagmeme is manifested by  $S_{22}$  or  $S_{23}$  when the balanced tagmeme is manifested by  $S_{11}$ . Subtype (viii): The balance tagmeme is manifested by  $C_1$  when the balanced tagmeme is manifested by  $K_4$ . Subtype (ix): When the balance tagmeme is manifested by  $C_2$ , the balanced tagmeme may be further manifested by  $K_2$ ,  $K_3$ , or  $S_{21}$ . Subtype (x): Both balance and balanced tagmemes may be manifested in a given sentence by  $C_1$ ,  $C_2$ ,  $C_4$ ,  $C_5$ ,  $C_{11}$ , or  $S_{14}$ . Examples of  $S_{15}$  follow with constituent tagmemes indicated.

subtype (i)

$n\phi^2$   $tyu^{43}$  .  $la^2$   $kwa^3$   $lo^2$   
 $S_{15} =$  Bal:  $C_{11}$  BH*i*  
 I will-stand-I, dir. towards there and

$kuta^{32}$   $ska^3$   $hu\phi wa^{34}$   $\phi y\phi^{21}$   
 Bal:  $C_1$   
 will-give-you one banana to-me

subtype (ii) and (x)

$wa^2$   $ngudyi^1$   $ska^3$   $libru^{34}$   $\phi y\phi^{21}$   $ni^2$   $lo^2$   
 $S_{15} =$  Bal:  $C_{11}$  BH*i*  
 completion finished, dir. one book to-me now and

$nu\phi w\phi^{32}$   $sa^3$   $yu\phi we^2$   $ti^3$   $libru^{34}$   $ndiya^{21}$   $lo^2$   
 Bal:  $C_2$  BH*i*  
 you-familiar one piece only book is-there and

siya<sup>1</sup> ngusnyi<sup>32</sup> ti<sup>3</sup> o<sup>2</sup> libru<sup>34</sup> lo<sup>1</sup>o<sup>1</sup>  
 Bald<sup>2</sup>:C<sub>11</sub>  
 one-time took only we-inclusive book with  
 I have finished my book now and you are only half-way  
 through, even though we both took our books at the same time.

subtype (ii)

wa<sup>2</sup> tihyu<sup>1</sup> ngly<sup>32</sup> lo<sup>2</sup> ti<sup>2</sup> ngwo<sup>1</sup>o<sup>3</sup>  
 S<sub>15</sub> = Bal:C<sub>1</sub> BHi Bald:C<sub>2</sub>  
 completion far going-he and still was-adjoining

tiru<sup>4</sup> ʔi<sup>2</sup>

bullet pronoun

He had gone quite a distance and still the bullet hit him.

subtype (iii)

k<sup>1</sup>o<sup>2</sup> ndukwa<sup>43</sup> yu<sup>2</sup> k<sup>1</sup>o<sup>2</sup>  
 S<sub>15</sub> = Bal:S<sub>21</sub> [ER Comt:K<sub>11</sub> <Ax:C<sub>2</sub>  
 that's-the-one is-on man that-particular

nu<sup>1</sup>ʔu<sup>1</sup> ti<sup>2</sup> yu<sup>3</sup> bra<sup>3</sup> k<sup>1</sup>o<sup>2</sup> lo<sup>2</sup> kwi<sup>1</sup> tyu<sup>3</sup> yu<sup>3</sup>  
 Elb:S<sub>32</sub>>] BHi Bald:C<sub>11</sub>  
 with-me ten man then and same will-stand, dir. man

tš<sup>1</sup>u<sup>2</sup>ʔ<sup>23</sup> nu<sup>3</sup> ha<sup>4</sup> kwlyo<sup>1</sup>o<sup>2</sup> ʔa<sup>3</sup> bra<sup>3</sup> k<sup>1</sup>o<sup>2</sup>

behind which negation spouse more then

That's the place where those men are sitting, ten men will  
 sit with me and in the same way the unmarried men will stand  
 behind.

subtype (iv)

kuhw<sup>1</sup>i<sup>32</sup> ʔni<sup>3</sup> nde<sup>3</sup> lo<sup>2</sup> kye<sup>1</sup>ʔ<sup>32</sup> ʔi<sup>1</sup> ʔi<sup>3</sup>  
 S<sub>15</sub> = Bal:C<sub>11</sub> BHi Bald:K<sub>11</sub> [Ax:C<sub>1</sub>  
 will-kill animal here and will-cook to pronoun

kuʔni<sup>43</sup> kalu<sup>4</sup> ʔi<sup>1</sup> ʔi<sup>3</sup>  
 Elb:C<sub>1</sub>]

will-make-you soup to pronoun

Kill this animal and cook it to make soup.



## subtype (v)

lo<sup>2</sup> nu<sup>3</sup> kuliya<sup>32</sup> ko<sup>2</sup>  
 S<sub>15</sub> = Bal: S<sub>21</sub> [J Top: P<sub>1</sub> ER  
 and the-particular rich that's-the-one

ndu<sup>1</sup> ska<sup>3</sup> wta<sup>34</sup> lo<sup>2</sup> kuliya<sup>32</sup> yu<sup>3</sup>  
 Comt: C<sub>1</sub>] BHI Bald: C<sub>5</sub>  
 standing one cow and rich man

Where the cow is standing -- that's the rich man, and he is a rich man.

## subtype (vi)

ʔni<sup>3</sup> tsu<sup>32</sup> lka<sup>4</sup> ko<sup>2</sup> lo<sup>2</sup> ʔni<sup>3</sup> nu<sup>3</sup> nq<sup>2</sup>  
 S<sub>15</sub> = Bal: C<sub>3</sub> BHI Bald: S<sub>2.1</sub> [Sub<sub>1</sub>: P<sub>1</sub>  
 animal good is that-particular and animal which name

sne<sup>12</sup> tše<sup>2</sup> nyo<sup>2</sup> ko<sup>43</sup> ko<sup>2</sup> ša<sup>3</sup> nyo<sup>2</sup>  
 Exn: K<sub>1</sub> <Sta: C<sub>1</sub> Sta: C<sub>1</sub>  
 toad bad looking, dir. that-particular different looking, dir.

ko<sup>2</sup> tše<sup>2</sup> nyo<sup>2</sup> ko<sup>43</sup> ko<sup>2</sup>  
 Sta: C<sub>1</sub>>  
 that-particular bad looking, dir. that-particular

That one is a good animal, but the animal called a toad looks different and unsightly.

## subtype (vii)

ni<sup>3</sup> tša<sup>32</sup> la<sup>2</sup> ʔa<sup>1</sup> ngiyo<sup>32</sup> lo<sup>2</sup>  
 S<sub>15</sub> = Bal: S<sub>23</sub> [Itg IS: C<sub>11</sub>] BHI  
 what thing fierce very coming-you, dir. and

ha<sup>4</sup> lka<sup>4</sup> tša<sup>32</sup> tša<sup>2</sup> kyō<sup>32</sup> tsō<sup>23</sup> ni<sup>2</sup>  
 Bald: S<sub>11</sub> [Set: C<sub>3</sub> PHI Pur: C<sub>11</sub>]  
 negation is thing in-order-that will-come-you, dir. day now

Why have you come when you are so cross, as there is no reason for you to come today?

subtype (viii)

ngudih<sub>1</sub><sup>32</sup> ne<sup>3</sup> lo<sup>2</sup> ykwi<sup>32</sup>  
 S<sub>15</sub> = Bal: C<sub>1</sub> BHi Bald: K<sub>4</sub> [Pred: C<sub>1</sub>  
 passed person and spoke-he

mdo<sup>o</sup><sup>1</sup> tnyo<sub>2</sub><sup>32</sup> ʔ<sub>1</sub><sup>2</sup> tsa<sup>43</sup>  
 Dev: K<sub>3</sub> <Ant Cons>]  
 emerged work pronoun will-go-you  
 He went by and told you to leave your work and go.

subtype (ix)

ndiya<sup>21</sup> tu<sup>3</sup>wa<sup>3</sup> tšku<sup>1</sup> bra<sup>3</sup> ko<sup>2</sup>ʔ<sup>2</sup> lo<sup>2</sup> tšy<sup>23</sup> tšku<sup>1</sup>  
 S<sub>15</sub> = Bal: C<sub>2</sub> BHi Bald: S<sub>21</sub> [Top: P<sub>3</sub>  
 is-belonging mouth-of river then and back-of river

ko<sup>2</sup>ʔ<sup>2</sup> ndiya<sup>21</sup> kontra<sup>4</sup> ʔ<sub>1</sub><sup>1</sup> rey<sup>34</sup> bra<sup>3</sup> ko<sup>2</sup>ʔ<sup>2</sup>  
 ER Comt: C<sub>2</sub>]  
 that's-the-one is-belonging against to king then  
 He was there on the river bank, and on the other side of the  
 river were those who were against the king.

subtype (x)

ngata<sup>32</sup> ndla<sup>4</sup> lo<sup>2</sup> ngate<sup>23</sup> ko<sup>2</sup> lo<sup>2</sup> ngate<sup>23</sup> kyo<sup>3</sup> lo<sup>2</sup>  
 S<sub>15</sub> = Bal: C<sub>5</sub> BHi Bald<sup>1</sup>: C<sub>5</sub> BHi Bald<sup>2</sup>: C<sub>5</sub> BHi  
 black storm-cloud and white cloud and white rain and

ngate<sup>23</sup> kyo<sup>3</sup> kye<sup>3</sup>  
 Bald<sup>3</sup>: C<sub>5</sub>  
 white rain stone

Storm clouds are black but fog is white, rain is white, and  
 hail is white.

8.3. The symbiotic sentences of class S<sub>20</sub> are structurally independent, but are symbiotic in that they may refer to preceding or following context. Symbiotic sentences never occur initially in a narrative or conversation. Unlike some types in class S<sub>10</sub> the tagmeme order is fixed. These types occur with the optional periphery except for S<sub>23</sub>.

8.3.1.  $S_{21}$ , the comment sentence, consists of three nuclear tagmemes, of which one is optional, and the periphery. If the topic tagmeme is not manifested in a given example, the emphatic referent refers back to the preceding context, even to the preceding paragraph. This sentence type is often used in teaching. The emphatic reference and comment tagmemes may be repeated as a unit an indefinite number of times. An aspect sequence of completive-completive never occurs. Very rarely does the manifestation of the comment tagmeme occur in the completive aspect and the topic tagmeme never.  $S_{21}$  may be graphically represented thus:

$$S_{21} = \pm J \ (\pm \text{Top} \ [+ \text{ER} \ + \text{Comt}]^n)$$

The optional periphery is followed by the optional topic tagmeme manifested by  $P_1$ ,  $P_2$ ,  $C_{11}$ ,  $K_{11}$ ,  $S_2$ ,  $S_{32}$ , or by types from classes  $C_0$  or  $K_0$  (see 9.4.1), followed by the obligatory emphatic reference tagmeme manifested by the relator  $ko^?2$  'that's-the-one' (see 9.4.2), followed by the obligatory comment tagmeme manifested by types from classes  $C_0$ ,  $C_{10}$ , or by  $P_6$ ,  $C_{21}$ ,  $K_4$ ,  $K_{12}$ , or  $s_{01}$  (see 9.4.3).

There are eleven co-occurrence subtypes of  $S_{21}$ , which are classified according to the various manifestations of the comment tagmeme. Subtype (i): The topic tagmeme may be absent or manifested by  $P_1$ ,  $C_1$ ,  $C_2$ ,  $K_1$ ,  $K_3$ , or  $K_{11}$  when the comment tagmeme is manifested by  $C_1$ . Subtype (ii): The topic tagmeme may be absent or manifested by  $P_{1.3}$ ,  $C_2$ ,  $C_5$ , or  $K_2$  when the comment tagmeme is manifested by  $C_2$ . Subtype (iii): The topic tagmeme may be absent or manifested by  $P_1$ ,  $C_1$ , or  $C_5$  when the comment tagmeme is manifested by  $C_{11}$ . Subtype (iv): The topic tagmeme may be manifested by  $C_{11}$  or  $K_1$  when the comment tagmeme is manifested by  $C_3$ . Subtype (v): The topic tagmeme may be manifested by  $P_2$  or  $C_2$  when the comment tagmeme is manifested by  $C_4$ . Subtype (vi): The topic tagmeme may be absent or manifested by  $P_1$  or  $C_2$  when the comment tagmeme is manifested by  $P_6$ . Sub-



subtype (iii)

$k_0\eta^2$                        $ngwi\eta ya^{43}$                        $\check{s}a^2$                        $bra^3 k_0\eta^2$   
 $S_{21} = ER$                       Comt:  $C_{11}$   
 that's-the-one descended, dir. brightness then  
 At that very time dawn came.

subtype (iv)

$\check{s}no^1$                        $lo\eta o^1$   $yu^3$   $nu^3$                        $kw_0\eta^1 k_0\eta^2$   
 $S_{21} = Top: C_{11}$                       ER  
 will-run, dir. with man the-particular female that's-the-one  
  
 $ika^4$   $tiye^{32}$                        $yu^3$   $bra^3 k_0\eta^2$   
 Comt:  $C_3$   
 is stomach-of man then  
 The very thing that would please the man was for the  
 woman to run away with him.

subtype (v)

$kalu^4$   $kwityi\eta^{32}$   $k_0\eta^2$                        $yku^{32}$   $iomsa^{34}$                        $nte^{34}$   
 $S_{21} = Top: P_2$                       ER                      Comt:  $C_4$   
 soup frog that's-the-one ate breakfast-of people  
 Frog soup is the very thing the people ate for their breakfast.

subtype (vi)

$wta^{34}$   $nu^3$                        $ndiya^1$                        $snye\eta^{32}$   $k_0\eta^2$   
 $S_{21} = Top: P_{1.3}$                       ER  
 cow which bearing-it, dir. child-of that's-the-one  
  
 $wta^{34}$   $ngi\eta ni^1$   $kwinyi^3$   $wta^{34}$   $nu^3$                        $tsu\eta we^{32}$   
 Comt:  $P_6$  [TopH:  $P_{1.2}$  App:  $P_{1.3}$ ]  
 cow making fertile cow which good  
 A cow which bears offspring is one which is a good, fertile cow.

subtype (vii)

$k_0\eta^2$                        $ngusi\eta ya^{32}$   $ne\eta^2$                        $\eta^1$   $kwilyo\eta o^{32}$   $ne\eta^2$   
 $S_{21} = ER$                       Comt:  $K_{12}$  [Sit:  $C_1$ ]  
 that's-the-one called person to spouse-of person

ngiy<sup>32</sup>                      bra<sup>3</sup> ko<sup>2</sup>

Res: C<sub>11</sub>]

coming-she, dir.            then

At that very time he had called to his wife and she came in then.

subtype (viii)

lo<sup>2</sup> kwi<sup>1</sup> nu<sup>3</sup>                      ndaha<sup>32</sup> ko<sup>2</sup>  
S<sub>21</sub> = J    Top: C<sub>5</sub>                      ER  
and same the-particular lazy      that's-the-one

nu<sup>3</sup>                      ngi<sup>1</sup>ni<sup>1</sup> kun<sup>2</sup>      ko<sup>2</sup>                      nu<sup>3</sup>  
Comt<sup>1</sup>: s<sub>01</sub> [Itr Term: C<sub>1</sub>]      ER                      Comt<sup>2</sup>: s<sub>01</sub> [Itr  
which                      making robbery that's-the-one which

nduhwi<sup>32</sup> wta<sup>34</sup> ʔ<sub>i</sub><sup>1</sup> ne<sup>3</sup>      tša<sup>2</sup>                      ndihi<sup>1</sup>              tny<sup>34</sup>  
Term: S<sub>11</sub> <Set: C<sub>1</sub>                      PHI                      Pur: C<sub>1</sub>>]  
selling-he cow to person in-order-that gaining-he money

ʔ<sub>i</sub><sup>2</sup>                      ko<sup>2</sup>                      nu<sup>3</sup>                      nduhwi<sup>32</sup> kwlyu<sup>34</sup> ʔ<sub>i</sub><sup>1</sup>  
ER                      Comt<sup>3</sup>: s<sub>01</sub> [Itr Term: S<sub>11</sub> <Set: C<sub>1</sub>  
pronoun that's-the-one which                      selling-he mule to

ne<sup>3</sup>                      tša<sup>2</sup>                      ndihi<sup>1</sup>              tny<sup>34</sup> ʔ<sub>i</sub><sup>2</sup>  
PHI                      Pur: C<sub>1</sub>>]  
person in-order-that gaining-he money pronoun

It is the same with a lazy person; he is the one who will commit robbery, the one who will sell other people's cattle to gain money, the one who will sell other people's mules for his own gain.

subtype (ix)

ha<sup>4</sup>                      ka<sup>2</sup>yu<sup>1</sup> yih<sup>3</sup>      ndo<sup>0</sup>o<sup>1</sup>              yu<sup>3</sup>      ngiya<sup>43</sup>      yu<sup>2</sup>  
S<sub>21</sub> = Top: K<sub>3</sub> [Ant: C<sub>1</sub>                      Cons: C<sub>1</sub>]  
negation five              year emerging man going man

ko<sup>2</sup>                      ndyukwa<sup>32</sup> ʔ<sub>i</sub><sup>2</sup>                      ʔaymo<sup>4</sup> šiya<sup>2</sup>      bra<sup>3</sup> ko<sup>2</sup>  
ER                      Comt: C<sub>12</sub>  
that's-the-one is-on, dir. pronoun spirit again then

It was not five years before emerging the man went out, and that is the one whom the spirit met again then.

subtype (x)

loga<sup>4</sup> se<sup>?</sup>e<sup>3</sup> nu<sup>3</sup> ndškwī<sup>?</sup>32 ne<sup>?</sup>2 lo<sup>?</sup>o<sup>1</sup> laha<sup>32</sup> yu<sup>2</sup>  
 S<sub>21</sub> = Top: S<sub>2.2</sub> [Sub<sub>2</sub>: P<sub>6</sub>  
 place place which speaking person with-it empty ground

tšku<sup>1</sup> kwityi<sup>?</sup>32 ndškwī<sup>?</sup>32 ne<sup>?</sup>2 kɔ<sup>?</sup>2  
 Exn: C<sub>1</sub>] ER  
 spring frog speaking person that's-the-one

lka<sup>4</sup> ngudhi<sup>?</sup>32 ne<sup>?</sup>2  
 Comt: K<sub>4</sub> [Pred: C<sub>3</sub> Dev: C<sub>1</sub>]  
 is-it passed person

The place which people say is a village which they call  
 Frog Spring, that is the very place which he passed.

subtype (xi)

ndiya<sup>21</sup> yhwī<sup>?</sup>1 kɔ<sup>?</sup>2  
 S<sub>21</sub> = Top: S<sub>32</sub> [Quot: S<sub>31</sub> QT: C<sub>21</sub>] ER  
 is-belonging said-he that's-the-one

yhwī<sup>?</sup>32 ne<sup>?</sup>2 ngwa<sup>4</sup> tyi<sup>2</sup>  
 Comt: C<sub>21</sub>  
 said person was, dir. own

"There is" he said, that is what the inhabitant there said.

8.3.2. S<sub>22</sub>, the alternative sentence, like S<sub>21</sub> consists of three nuclear tagmemes, of which one is optional, and the periphery. If the proposition tagmeme is not manifested in a given example, the alternative referent nevertheless implies a proposition inherent in the preceding context, either linguistic or behavioural. As well as alternative, this referent usually has an interrogative implication. There is no repetition of tagmemes in this sentence type, and no restriction of the aspect sequence that may occur. S<sub>22</sub> may be graphically represented thus:

S<sub>22</sub> = ± J (± Prop + AR + Alt)

The optional periphery is followed by the optional proposition tagmeme manifested by P<sub>1</sub>, p<sub>04</sub>, C<sub>1</sub>, K<sub>3</sub>, S<sub>2</sub>, or S<sub>23</sub> (see

9.4.4), followed by the obligatory alternative reference tagmeme manifested by the relator  $ta^3$  'or-interrogative' (see 9.4.5), followed by the obligatory alternate tagmeme manifested by  $C_1$ ,  $C_3$ ,  $C_5$ ,  $C_{11}$ ,  $C_{12}$ ,  $K_4$ ,  $S_{11}$ ,  $S_{14}$ ,  $S_{15}$ , or  $S_{24}$  (see 9.4.6).

There are five subtypes of  $S_{22}$ . Subtypes (i) - (iv) are classified according to certain manifestations of the alternate tagmeme. The remaining manifestations of this tagmeme occur only in the absence of the proposition tagmeme and comprise subtype (v). Subtype (i): The proposition tagmeme may be manifested by  $p_{04}$ ,  $C_1$ ,  $K_3$ , or it may be absent when the alternate tagmeme is manifested by  $C_3$ . Subtype (ii): The proposition tagmeme may be manifested by  $P_1$ ,  $S_{23}$ , or it may be absent when the alternate tagmeme is manifested by  $C_{11}$ . Subtype (iii): The proposition tagmeme may be manifested by  $S_2$  or it may be absent when the alternate tagmeme is manifested by  $C_1$ . Subtype (iv): The proposition tagmeme may be manifested by  $P_1$  or it may be absent when the alternate tagmeme is manifested by  $S_{11}$ . Subtype (v): When the proposition tagmeme is absent, the alternate tagmeme may be further manifested by  $C_5$ ,  $C_{12}$ ,  $K_4$ ,  $S_{14}$ ,  $S_{15}$ , or  $S_{24}$ . Examples of  $S_{22}$  follow with constituent tagmemes indicated.

subtype (i)

$tsa^3$	$\eta^4$	$tsa^{43}$	$no^3$	$\eta^{43}$	$ta^3$
$S_{22} =$ Prop:	$K_3$ [Ant:	$C_1$ Cons:	$C_1$ ]	AR	
will-go-I		will-go	seeing-I	or-interrogative	
$\eta^4$	$ty^3$	$ka^4$	$kitye^{32}$	$ndukwa^{43}$	$kwa^2$
Alt:	$C_3$				
negation	resinous	will-be	pitch-pine	is-on	there
I am going to see whether that pine over there is resinous or not.					

subtype (ii)

$ni^3$	$nd\check{s}ka^4$	$ti^3$	$rant\check{s}u^4$	$ta^3$
$S_{22} =$ Prop:	$S_{23}$ [Itg	IS]	AR	
what	want-you, dir.	ranch	or-interrogative	



ndška<sup>4</sup> tiʔ<sup>32</sup> tiyeta<sup>4</sup>

Alt: C<sub>11</sub>

want-you shop

What do you want, a ranch or a shop?

subtype (iii)

nɔ<sup>2</sup> ngusiʔi<sup>1</sup> kuweʔ<sup>32</sup> kuneʔ<sup>1</sup> ʔi<sup>1</sup> neʔ<sup>3</sup>  
S<sub>22</sub> = Prop: S<sub>2</sub> [Sub<sub>1</sub>: P<sub>1.2</sub> Exn: P<sub>4</sub>]

thing bought-he pig young to person

ta<sup>3</sup> nɔ<sup>2</sup> nguda<sup>43</sup> šuʔwe<sup>32</sup> ti<sup>2</sup> neʔ<sup>3</sup> ʔi<sup>2</sup>

AR

Alt: C<sub>1</sub>

or-interrogative thing gave free only person pronoun

Did he buy his piglet, or did they give it to him as a present?

subtype (iv)

ta<sup>3</sup> ndiya<sup>21</sup> ska<sup>3</sup> kyha<sup>3</sup> ʔi<sup>2</sup>  
S<sub>22</sub> = AR Alt: S<sub>11</sub> [Set: K<sub>12</sub> <Sit: C<sub>2</sub>]

or-interrogative is-belonging one tortilla pronoun

kuta<sup>32</sup> ku<sup>2</sup> ɔ<sup>2</sup> tša<sup>2</sup>

Res: K<sub>12</sub> (Sit Res) > PHI

will-give-you will-eat we-inclusive in-order-that

tyiʔi<sup>43</sup> ɔ<sup>3</sup>

Pur: C<sub>12</sub>]

will-live, dir. we-inclusive

Don't you have a tortilla or something to give us to eat so that we can all go on living?

subtype (v)

ta<sup>3</sup> nɔʔ<sup>2</sup> nɔʔɔ<sup>43</sup> ndu<sup>1</sup>  
S<sub>22</sub> = AR Att: K<sub>4</sub> [Dev: K<sub>4</sub> <Pred Dev>

or-interrogative I seeing-I standing-you

skyeʔ<sup>3</sup> tiʔ<sup>32</sup>

Pred: C<sub>1</sub>]

will-think-you

Or will you think that I saw you standing there?

8.3.3.  $S_{23}$ , the interrogative sentence, consists of two nuclear tagmemes, one obligatory and one optional, without the periphery. This sentence type is symbiotic with the reply to such an inquiry, and such a reply is usually a simple sentence from class  $S_0$  that occurs in the following context.  $S_{23}$  may be graphically represented thus:

$$S_{23} = (+ \text{Itg} \quad \underline{+ \text{IS}})$$

The obligatory interrogation tagmeme manifested by  $P_{34}$  or the particles  $ni^3$  'what?' and  $ti^3$  'who?' from subclass  $W_{14.4}$  (see 9.4.7) is followed by the optional inquiry statement tagmeme manifested by types from classes  $C_0$ ,  $C_{10}$ ,  $K_0$ ,  $K_{10}$ , or by  $S_{11}$  or  $S_{15}$  (see 9.4.8). There are no subtypes of  $S_{23}$ . Examples of  $S_{23}$  follow with constituent tagmemes indicated.

- (a)  $lo^3 \quad ya^{32} \quad ndi^2 \quad \gamma_i^{23} \quad ne^2 \quad ni^3$   
 $S_{23} = \text{Itg}: P_{34} \quad \text{IS}: C_2$   
 where is-living person now  
 Where does he live now?

- (b)  $ni^3 \quad bra^{34} \quad lka^4 \quad ni^2$   
 $S_{23} = \text{Itg}: W_{14.4} \quad \text{IS}: C_3$   
 what hour is now  
 What time is it now?

- (c)  $ni^3 \quad t\check{s}a^2 \quad la^2 \quad \gamma_a^1 \quad ngiyo^2$   
 $S_{23} = \text{Itg}: P_{34} \quad \text{IS}: C_{11}$   
 what thing fierce very coming-you, dir.  
 Why are you coming here when you are so cross?

- (d)  $ni^3 \quad tnyo^2 \quad ndukwa^{32} \quad \gamma_i^2 \quad \gamma_{ni}^{43} \quad nde^2$   
 $S_{23} = \text{Itg}: P_{34} \quad \text{IS}: K_2 [\text{Act} \quad \text{Inst}]$   
 what work is-on pronoun making here  
 What are you doing sitting here?

- (e)  $ni^3 \quad ngwa^2 \quad mdukwa^1 \quad yu^3 \quad yku^2 \quad yu^3 \quad kyha^3$   
 $S_{23} = \text{Itg}: P_{34} \quad \text{IS}: K_{11} [\text{Ax} \quad \text{Elb}]$   
 when were-on man ate man tortilla  
 When were the men here and ate their meal?

(f)      ni<sup>3</sup>    tša<sup>32</sup>    ndo<sup>32</sup>    tškw<sup>43</sup>    tša<sup>2</sup>  
 S<sub>23</sub> = Itg:P<sub>34</sub>      IS:S<sub>11</sub> [Set      PHi  
           what thing    walking metal    in-order-that

nsu<sup>43</sup>wa<sup>43</sup>    nu<sup>2</sup>      tsa<sup>43</sup>      no<sup>1</sup>      ɣ<sub>i</sub><sup>3</sup>  
 Pur]

putting    which will-go look-for pronoun

Why are the bells ringing to send out whoever will go  
 to look for them?

(g)      ni<sup>3</sup>    ngwa<sup>43</sup>  
 S<sub>23</sub> = Itg:P<sub>34</sub>      (without IS)  
           when?  
           When?

8.3.4. S<sub>24</sub>, the inquiry sentence, consists of two obligatory nuclear tagmemes and the periphery. Like S<sub>23</sub> this type is symbiotic with the reply to its query. S<sub>24</sub> may be graphically represented thus:

S<sub>24</sub> = + J (+ QSt + qmr)

The optional periphery is followed by the obligatory question statement tagmeme manifested by types from class C<sub>0</sub> or by C<sub>11</sub>, K<sub>4</sub>, K<sub>12</sub>, S<sub>11</sub>, or S<sub>22</sub> (see 9.4.9), followed by the obligatory question marker tagmeme manifested by the minor word ɣa<sup>4</sup> ~ a<sup>4</sup> 'question-indicator' (see 9.4.10). There are two subtypes of S<sub>24</sub>. Subtype (i): When the question statement tagmeme is manifested by a clause, the question marker tagmeme may precede the post-peripheral time clause-level tagmeme, and/or replaces the post-peripheral boundary clause-level tagmeme. Subtype (ii): When the question statement tagmeme is manifested by a colon, the question marker tagmeme acts as the termination marker of the sentence. From the paucity of examples encountered, it is not yet known whether a third subtype is formed when the question statement tagmeme is manifested by a sentence. Such examples are therefore included in subtype (ii). Examples of S<sub>24</sub> follow with constituent tagmemes indicated.

## subtype (i)

- (a) ha<sup>4</sup> tukwi<sub>t</sub><sup>2</sup> ngudih<sub>t</sub><sup>32</sup> nde<sup>3</sup> ?a<sup>4</sup> ni<sup>2</sup>  
 S<sub>24</sub> = QSt:C<sub>1</sub> qmr T  
 nobody passed here question-indicator now  
 Has anybody passed by here today?

- (b) š<sub>i</sub>?ya<sup>1</sup> ni<sup>2</sup> ?a<sup>4</sup>  
 S<sub>24</sub> = QSt:C<sub>11</sub> qmr  
 will-shout-you, dir. now question-indicator  
 Will that make you shout now?

## subtype (ii)

- (a) kuta<sup>32</sup> kwi?yo<sub>o</sub><sup>43</sup> ni<sup>2</sup> ?a<sup>4</sup>  
 S<sub>24</sub> = QSt:K<sub>12</sub> [St Res] qmr  
 will-give-you will-carry-I now question-indicator  
 Will you give it to me to carry now?

- (b) wa<sup>2</sup> no?o<sub>o</sub><sup>43</sup> tša<sub>a</sub>?<sup>2</sup>  
 S<sub>24</sub> = QSt:S<sub>11</sub> [Set Phi]  
 completion seeing-I to-the-effect-that
- kyo<sub>o</sub><sup>43</sup> lo?o<sup>1</sup> ?<sub>t</sub><sup>1</sup> yu<sup>3</sup> ?a<sup>4</sup>  
 Pur] qmr  
 will-come-I, dir. with-you to man question-indicator  
 I saw that I am to come with you to the man?

8.4. The two quotation sentence types in class S<sub>30</sub> describe direct quotations, but indirect quotation, which is seldom used, occurs as C<sub>1</sub>, C<sub>11</sub>, or K<sub>4</sub>. The periphery does not occur with the types in class S<sub>30</sub>. The minimum of these types is the simplest and the maximum the most complex of all the sentence types as these two include all other types.

8.4.1. S<sub>31</sub>, the address sentence, consists of three optional nuclear tagmemes, of which one of the first two must occur; the subject addressed and vocative address tagmemes may not both occur without the address tagmeme between them. S<sub>31</sub> may be graphically represented thus:

$$S_{31} = (+ [\underline{+} \text{SAd } \underline{+} \text{Ads}] \underline{+} \text{VAd})$$

The optional subject addressed tagmeme, manifested by  $P_5$ , or a noun from class  $W_2$  (see 9.5.1), is followed by the optional address tagmeme manifested by almost any phrase, clause, colon, or sentence type, or by a single clause- or sentence-level tagmeme, or by an onomatopoetic word<sup>27</sup> (see 9.5.2); followed by the optional vocative address tagmeme manifested by  $P_5$ , or a noun from class  $W_2$  (see 9.5.3). Examples of  $S_{31}$  follow with constituent tagmemes indicated.

SAd: $P_5$  ta<sup>32</sup> šu<sup>2</sup> 'Father aged' (Grandfather); Ads: $P_1$  ska<sup>3</sup> wta<sup>34</sup> tlyu<sup>2</sup> 'one cow big' (a big cow); Ads: $P_{12}$  la<sup>3</sup> kwa<sup>3</sup> la<sup>3</sup> tši<sup>1</sup> 'towards there more a-little' (That way a little more.); Ads: $P_{32}$  ti<sup>1</sup> šno<sup>1</sup> lo<sup>2</sup> ko<sup>12</sup> 'ten another-three in month' (the 13th of the month); Ads: $p_{04}$  ʔa<sup>4</sup> ska<sup>2</sup> 'negation one' (none); Ads: $C_3$  lka<sup>4</sup> msu<sup>34</sup> ʔyo<sup>21</sup> 'is-he servant to-me' (He is my servant.); Ads: $C_{11}$  kya<sup>43</sup> tyo<sup>43</sup> tnyi<sup>34</sup> ʔi<sup>2</sup> 'tomorrow will-give-I, dir. money pronoun' (I will pay you tomorrow.); Ads: $C_{22}$  šnyi<sup>32</sup> tu<sup>32</sup> 'will-take-you, dir. for-sure' (Take it.); Ads: $C_{31}$  bra<sup>34</sup> wa<sup>2</sup> tla<sup>4</sup> ti<sup>3</sup> 'hour completion night only' (just at night);

(a) kuta<sup>32</sup> hakwa<sup>3</sup> pšu<sup>34</sup> ndška<sup>4</sup> ti<sup>1</sup>ʔ<sup>43</sup>  
 $S_{31} =$  Ads: $K_4$  [Dev Pred]  
 will-give-you four pesos want-I, dir.  
 I want you to give me four pesos.

(b) kuta<sup>32</sup> ska<sup>2</sup> kwiʔyo<sup>43</sup>  
 $S_{31} =$  Ads: $K_{12}$  [Sit Res]  
 will-give-you one will-carry-I  
 You give me one and I will carry it.

(c) we<sup>3</sup> ni<sup>2</sup> tsa<sup>43</sup> nu<sup>1</sup>ʔu<sup>1</sup>  
 $S_{31} =$  Ads: $S_1$  [J Epn: $C_1$ ]  
 good now will-go-you with-me  
 All right, you go with me now.

<sup>27</sup> Onomatopoetic words have not yet been classified under the system described in 1.0.

- (d) ndi<sup>2</sup> ʔa<sup>4</sup> šīʔya<sup>32</sup> ʔba<sup>3</sup> si<sup>1</sup>  
 S<sub>31</sub> = Ads:S<sub>14</sub> [In] CnHi  
 little-while will-shout-you, dir. to-we-exclusive if  
 nsuʔwi<sup>32</sup> tiʔa<sup>2</sup>  
 Cond]  
 there-is water  
 If you find water in a minute shout to us.
- (e) ta<sup>3</sup> koʔo<sup>32</sup> si<sup>1</sup> tsa<sup>43</sup> ʔyo<sup>43</sup>  
 S<sub>31</sub> = Ads:S<sub>22</sub> [AR Alt:S<sub>14</sub> <Inj CnHi Cond>]  
 or-interrogative will-drink-you if will-go carry-I  
 Or will you drink it if I bring some?
- (f) nu<sup>3</sup> ndiya<sup>21</sup> tu<sup>3</sup> nōʔo<sup>3</sup> kušīʔ<sup>2</sup> snyeʔ<sup>43</sup>  
 S<sub>31</sub> = Ads:s<sub>01</sub> [Itr Term] VAd:W<sub>2.2</sub>  
 which is-belonging door blue Child  
 Where the blue door is, Son.
- (g) sno<sup>1</sup> yla<sup>3</sup> nsuʔwi<sup>32</sup> ti<sup>1</sup> tše<sup>32</sup>  
 S<sub>31</sub> = Ads:c<sub>04</sub> VAd:P<sub>5</sub>  
 three score there-is ten Friend  
 Seventy, Friend.
- (h) nō<sup>32</sup> ha<sup>4</sup> ndiʔi<sup>32</sup> yhwī<sup>32</sup> neʔ<sup>2</sup> ʔyo<sup>21</sup>  
 S<sub>31</sub> = SAd:P<sub>5</sub> Ads:S<sub>32</sub> [Quot QT]  
 mother negation is-living-he said person to-me  
 Mother, he isn't there, they told me.
- (i) ni<sup>2</sup> bi<sup>3</sup>  
 S<sub>31</sub> = Ads:T (time clause-level tagmeme) VAd:W<sub>2.2</sub>  
 now You  
 Now!
- (j) wau<sup>23</sup> wau<sup>23</sup>, wau<sup>23</sup> wau<sup>23</sup>  
 S<sub>31</sub> = Ads:onomatopoetic word  
 the sound made by a coyote howling
- (k) škwe<sup>2</sup> ʔo<sup>4</sup> ha<sup>4</sup> šīʔya<sup>32</sup> tše<sup>32</sup>  
 S<sub>31</sub> = SAd:P<sub>5</sub> Ads:C<sub>11</sub> VAd:P<sub>5</sub>  
 Friend Coyote negation will-shout-you, dir. Friend  
 Friend Coyote, don't make yourself howl, Friend.

8.4.2.  $S_{32}$ , the quotative sentence, consists of two obligatory nuclear tagmemes. This type occurs only in narrative.  $S_{32}$  may be graphically represented thus:

$$S_{32} = (+ \text{Quot} + \text{QT})$$

The obligatory quotation tagmeme manifested by  $S_{31}$  (see 9.5.4) is followed by the obligatory quotation termination tagmeme manifested by  $C_{21}$ ,  $K_1$ , or  $K_{11}$  (see 9.5.5). The minimum manifestation of  $S_{32}$  consists of two words only as shown in the following examples.

- (a)       $t\check{s}o\text{?}^{32}$      $yhw\check{i}^1$   
 $S_{32} = \text{Quot}:S_{31}$      $\text{QT}:C_{21}$   
             Friend    said-she  
             "Friend" she said (woman speaking to woman).

- (b)       $t\check{s}a\text{?}^{\text{43}}$      $yhw\check{i}^1$   
 $S_{32} = \text{Quot}:S_{31}$      $\text{QT}:C_{21}$   
             will-go-I    said-he  
             "I'll go" he/she said.

- (c)       $we^3$      $ni^2$      $\text{?}ni^{32}$   
 $S_{32} = \text{Quot}:S_{31}$      $\text{QT}:C_{21}$   
             good    now    makes-he  
             "All right" he said.

A complex example of  $S_{32}$  follows with constituent tagmemes indicated.

- $ta^3$                                $ndiya^{21}$                $kasiyu^4$      $t\check{s}a\text{?}^2$   
 $S_{32} = \text{Quot}:S_{31}$  [Ads: $S_{22}$  <AR    Alt: $S_{11}$  (Set: $C_2$               PHI  
             or-interrogative              is-belonging    occasion    in-order-that
- $ku^2$                $\text{?}ni^3$                $nde^3$      $\text{?}yo^{21}$      $t\check{s}e^{32}$      $kwit\check{s}i^3$      $yhw\check{i}^{32}$   
             Pur: $C_1$ )>                              VAd: $P_5$ ]              QT: $C_{21}$   
             will-eat    animal    this    of-me    Friend    rabbit    said

nu<sup>3</sup>                      buru<sup>2</sup>    ʔ<sub>1</sub><sup>1</sup> nu<sup>3</sup>                      kwitš<sup>3</sup> bra<sup>3</sup> koʔ<sup>2</sup>

the-particular donkey to the-particular rabbit      then  
Or do you think there is reason for this animal to eat me,  
Friend Rabbit? said the donkey to the rabbit then.

8.5. From data analysed to date, only one minor sentence type has been encountered. Like the minor clauses and minor phrases, this minor sentence may manifest a phrase-level tagmeme, the description post-peripheral tagmeme in P<sub>1.3</sub> (see 3.1.12). This type may also manifest a subject or object clause-level tagmeme, and occurs without the sentence periphery.

s<sub>01</sub>, the relative minor sentence, consists of two obligatory nuclear tagmemes, and the tagmeme order is fixed. s<sub>01</sub> may be graphically represented thus:

s<sub>01</sub> = (+ Itr + Term)

The obligatory introducer tagmeme manifested by a relator particle from subclass W<sub>14.4</sub> or by W<sub>02.2</sub> (see 9.6.1) is followed by the obligatory terminator tagmeme manifested by types from C<sub>0</sub>, C<sub>10</sub>, K<sub>10</sub>, or by K<sub>1</sub>, K<sub>4</sub>, or S<sub>11</sub> (see 9.6.2). Examples of s<sub>01</sub> follow with constituent tagmemes indicated.

(a)      nu<sup>3</sup>                      ya<sup>43</sup>    nʔʔ<sup>2</sup>    loʔo<sup>1</sup>    nʔ<sup>2</sup>    kwinyi<sup>3</sup>    ʔ<sub>1</sub><sup>1</sup>    yu<sup>3</sup>  
s<sub>01</sub> = Itr:W<sub>02.2</sub>    Term:C<sub>1</sub>  
which      went house with thing fertile to man  
...who went to the house with the man's fertile animal.

(b)      ni<sup>3</sup>                      tsʔ<sup>23</sup>    ndiya<sup>21</sup>                      kwintu<sup>34</sup>    kwa<sup>2</sup>  
s<sub>01</sub> = Itr:W<sub>14.4</sub>    Term:C<sub>2</sub>  
what      day is-belonging story      there  
...when that story took place

(c)      nu<sup>3</sup>                      lye<sup>32</sup>    kyo<sup>2</sup>    kw<sub>1</sub>ʔ<sub>1</sub><sup>3</sup>  
s<sub>01</sub> = Itr:W<sub>02.2</sub>    Term:C<sub>13</sub>  
which      much rain wind  
...when the wind is driving the rain



(d)      nu<sup>3</sup>            ngudiya<sup>21</sup>            kye<sup>3</sup>    ngudiya<sup>21</sup>            kitu<sup>2</sup>  
 s<sub>01</sub> = Itr:w<sub>02</sub>.2    Term:K<sub>1</sub> [Sta            Sta]  
           which        was-belonging stone was-belonging gun  
                          . . .who had stones and guns

(e)      nu<sup>3</sup>            kuʔni<sup>32</sup>            kuʔu<sup>1</sup>            kuw1ʔ<sup>32</sup> ʔ<sub>1</sub><sup>1</sup> neʔ<sup>3</sup>  
 s<sub>01</sub> = Itr:w<sub>02</sub>.2    Term:K<sub>12</sub> [Sit    Res]  
           which        will-make-he will-live baby    to person  
                          . . .who will do something so that their baby will live

## 9. Sentence-Level Tagmemes

The manifestations of sentence tagmemes range from a minor word to a complex sentence.

9.1. At the sentence syntactic level, the periphery is very limited. The periphery, common to all sentence types that may occur with a periphery, consists of one tagmeme which always occurs initially. One further peripheral tagmeme occurs in  $S_{14}$ .

9.1.1. Junction. This tagmeme is manifested by a limited number of forms demonstrating continuation of a narrative, conversation, etc. These forms include the conjunction  $lo^2$  'and' from subclass  $W_{14.2}$ , the temporal nouns  $ni^2$  'now',  $kya^{43}$  'tomorrow' from subclass  $W_{3.1}$ , or phrases including these nouns such as  $wo^3 ni^2$  'or now', (a pause filler), or  $la^3 kya^{43}$  'towards tomorrow' (tomorrow) of the  $P_{12}$  type, and short clauses expressing agreement or a contraction of such a clause of the  $C_3$  or  $C_5$  types.  $J:C_5$   $tsu^?we^{32} ?i^2 ni^2$  'is-good pronoun now' (It/you is/are all right now);  $J:C_5$   $we^3 ni^2$  'is-good (contraction) now' (All right);  $J:C_3$   $ka^4 no^2$  'will-be thing' (That's how it is, so). The junction tagmeme occurs infrequently, but marks sentence-level constructions. It may occur in  $S_1$ ,  $S_2$ ,  $S_{11}$ ,  $S_{12}$ ,  $S_{13}$ ,  $S_{14}$ ,  $S_{15}$ ,  $S_{21}$ ,  $S_{22}$ , or  $S_{24}$ .

9.1.2. Focus. This tagmeme is manifested by  $P_1$  and its function appears to be to focus the attention on the sentence following.  $F:P_1$   $ska^3 t\check{s}a^{?32}$  'one word' (I am giving you a word of warning...),  $nu^3 kun\check{o}^2 i^3$  'the-particular robber pronoun' (This is what a robber is like...) The focus tagmeme occurs only in  $S_{14}$ .

9.2. There are only three tagmemes comprising the nuclei of the two simple sentences in class  $S_0$ .

9.2.1. Expression. This tagmeme is manifested by any clause type in classes  $C_0$ ,  $C_{10}$ , or  $C_{20}$ , or by any colon type in classes  $K_0$  or  $K_{10}$ .

Epn:  $C_1$  nsta<sup>1</sup> ne<sup>3</sup> yu<sup>3</sup> ša<sup>2</sup> kita<sup>32</sup> ne<sup>2</sup> no<sup>2</sup> kwinyi<sup>3</sup> 'breaking-up person ground light will-plant person thing fertile' (They break up the ground when they are going to plant seeds.); Epn:  $C_2$  ndiya<sup>21</sup> ska<sup>3</sup> nu<sup>3</sup> kwitš<sup>3</sup> 'is-belonging one the-particular rabbit' (There was a particular rabbit.); Epn:  $C_3$  ska<sup>3</sup> lka<sup>4</sup> kye<sup>32</sup> ngwiyu<sup>23</sup> kwa<sup>2</sup> 'one is flower spider mauve' (One is the mauve spider flower.); Epn:  $C_4$  ha<sup>4</sup> šo<sup>2</sup> libru<sup>34</sup> nde<sup>2</sup> no<sup>3</sup> ni<sup>2</sup> 'negation will-change book here to-we-inclusive now' (We will not exchange these books of ours now.); Epn:  $C_5$  tlyu<sup>3</sup> a<sup>1</sup> kun<sup>1</sup> yhwi<sup>1</sup> ne<sup>3</sup> kwa<sup>3</sup> 'big very snake killed person there' (The snake that those people killed was very big.); Epn:  $C_{11}$  ndyo<sup>1</sup> kw<sup>3</sup> kwitš<sup>3</sup> bra<sup>3</sup> ko<sup>2</sup> 'emerging, dir. heavens rabbit then' (The rabbit was made to jump then.); Epn:  $C_{12}$  ndyu<sup>1</sup> wi<sup>43</sup> lyo<sup>2</sup> se<sup>3</sup> nga<sup>1</sup> 'there-is, dir. knowledge-you Joe red' (You know Red Joe.); Epn:  $C_{13}$  lye<sup>32</sup> ndška<sup>43</sup> ti<sup>23</sup> ka<sup>3</sup> si<sup>2</sup> 'much is, dir. thunder yesterday evening' (It really thundered last evening.); Epn:  $C_{21}$  yhwi<sup>32</sup> nu<sup>3</sup> kun<sup>1</sup> tlyu<sup>3</sup> i<sup>1</sup> la<sup>3</sup> ku<sup>2</sup> bra<sup>3</sup> ko<sup>2</sup> 'said the-particular snake big to alligator then' (The big snake said (that) to the alligator then.); Epn:  $C_{22}$  hyo<sup>43</sup> tu<sup>43</sup> 'will-return-I for-sure-I' (I will certainly come back.);

- (a) ki<sup>2</sup> loyu<sup>21</sup> ndiya<sup>21</sup> ki<sup>2</sup> tša<sup>32</sup> ndiya<sup>21</sup>  
 Epn =  $K_1$  [Sta Sta]  
 many country is-belonging many word is-belonging  
 There are many countries and many languages.
- (b) hyo<sup>32</sup> nu<sup>3</sup> wo<sup>1</sup> ndiya<sup>21</sup> kwitu<sup>23</sup>  
 Epn =  $K_2$  [Act Inst]  
 will-return the-particular coyote is-belonging chicken  
 The coyote will return because the chickens are there.

- (c) ndo<sup>o1</sup> ngiya<sup>43</sup> nu<sup>2</sup> ngate<sup>23</sup> bra<sup>3</sup> ko<sup>o2</sup>  
 Epn = K<sub>3</sub> [Ant Cons]  
 emerging going the-particular white then  
 Emerging the white one left then.
- (d) ti<sup>o1</sup> kuwe<sup>o32</sup> tsu<sup>o32</sup> nyo<sup>o43</sup> sa<sup>3</sup> kuwe<sup>o32</sup> tihyo<sup>23</sup>  
 Epn = K<sub>5</sub> [The Athe]  
 heavy pig good looking, dir. light pig bone  
 A healthy pig is heavy but a bony pig is light.
- (e) šnyo<sup>43</sup> ska<sup>2</sup> nte<sup>34</sup> tnu<sup>3</sup>  
 Epn = K<sub>11</sub> [Ax  
 will-shake, dir. one person great  
 šnyo<sup>32</sup> ti<sup>3</sup> bra<sup>3</sup> ko<sup>o2</sup>  
 Elb]  
 will-shake-he, dir. rope then  
 A great man will shake it, he will shake the rope then.
- (f) škwa<sup>32</sup> kyha<sup>3</sup> ku<sup>2</sup> yo<sup>o1</sup> ndre<sup>4</sup>  
 Epn = K<sub>12</sub> [Sit Res]  
 will-make-you, dir. tortilla will-eat mother-of Andrés  
 You will make tortillas for Andrew's mother to eat.
- (g) ni<sup>2</sup> kustu<sup>43</sup> msn<sup>o34</sup> yo<sup>o21</sup>  
 Epn = K<sub>13</sub> [Init  
 now will-pluck-I apple to-me  
 kya<sup>43</sup> tsa<sup>43</sup> hwi<sup>o43</sup> lo<sup>2</sup> kiya<sup>o3</sup>  
 Seq]  
 tomorrow will-go sell-I in market  
 I will pick my apples today and tomorrow I will go and  
 sell them in the market.

The expression tagmeme occurs only in S<sub>1</sub>.

9.2.2. Substance. This tagmeme has two allotagmas and the substance<sub>1</sub> allotagma is manifested by P<sub>1</sub> whereas the substance<sub>2</sub> allotagma is manifested by P<sub>6</sub>. Sub<sub>1</sub>:P<sub>1.3</sub> ?ni<sup>3</sup> nu<sup>3</sup> no<sup>2</sup> kwityi<sup>o32</sup> 'animal which is-name frog' (the animal called frog...), Sub<sub>2</sub>:P<sub>6</sub> ska<sup>3</sup> ne<sup>o3</sup> ska<sup>3</sup> ne<sup>o3</sup> ša<sup>o3</sup> 'one

person one person different' (a person, a gentleman). The substance tagmeme occurs only in  $S_2$ .

9.2.3. Explanation. This tagmeme is manifested by  $P_4$ ,  $C_1$ ,  $K_1$ , or  $K_{12}$  in data so far analysed. Exn: $P_4$  kuwe<sup>32</sup> kune<sup>1</sup>  $\eta_1^1$  ne<sup>3</sup> 'pig young to person' (his piglet); Exn: $C_1$  tšku<sup>1</sup> kwityi<sup>32</sup> ndškw<sup>32</sup> ne<sup>2</sup> 'spring frog saying person' (They call it Frog Spring).

(a)      nte<sup>34</sup>    ku<sup>2</sup>ni<sup>43</sup>    kuno<sup>34</sup>    lka<sup>4</sup> ko<sup>2</sup>  
Exn =  $K_1$  [Sta  
          people will-make robbery is    that-one

          nte<sup>34</sup>    ku<sup>2</sup>ni<sup>43</sup>    še<sup>2</sup>o<sup>34</sup>    lka<sup>4</sup> ko<sup>2</sup>  
          Sta]  
          people will-make wicked is    that-particular

          They are people who commit robbery, people who do  
          wicked things.

(b)      ngu<sup>2</sup>ni<sup>1</sup> ne<sup>3</sup>    kalu<sup>4</sup> nguda<sup>1</sup> ne<sup>3</sup>    yk<sup>1</sup>  
Exn =  $K_{12}$  [Sit: $C_1$                             Res: $K_{12}$  <Sit    Res>]  
          made person soup gave person ate-I  
          They made soup, gave it to me and I ate it.

The explanation tagmeme occurs only in  $S_2$ .

9.3. Class  $S_{10}$ , comprising hinge sentences, is the largest sentence class, and each type in it is composed of three obligatory nuclear tagmemes.

9.3.1. Setting. This tagmeme is manifested by  $C_1$ ,  $C_2$ ,  $C_3$ ,  $C_4$ ,  $C_{11}$ ,  $K_1$ ,  $K_2$ ,  $K_3$ ,  $K_{11}$ ,  $K_{12}$ ,  $K_{13}$ ,  $S_{14}$ ,  $S_{15}$ ,  $S_{22}$ , or  $S_{23}$ .

Set: $C_1$  ha<sup>4</sup> ko<sup>2</sup>o<sup>32</sup> mškal<sup>4</sup>yu<sup>4</sup> ni<sup>2</sup> 'negation will-drink-he mezcal now' (He will not drink mezcal now...); Set: $C_2$  tukwa<sup>1</sup> nu<sup>3</sup> tsa<sup>43</sup>  $\eta$ ya<sup>32</sup> ka<sup>2</sup><sup>12</sup> 'will-be-on which will-go carry coffin' (There will be those who are going to carry the coffin.); Set: $C_3$  ha<sup>4</sup> lka<sup>4</sup> tša<sup>2</sup><sup>32</sup> 'negation is thing' (It isn't a reason...); Set: $C_4$  wa<sup>2</sup> ngite<sup>2</sup> ste<sup>3</sup> ba<sup>2</sup> tlya<sup>4</sup> ni<sup>2</sup> 'com-

pletion washing clothes-of we-exclusive early now' (We washed our clothes early today.); Set: C<sub>11</sub> nt<sub>2</sub><sup>3</sup> ti<sup>3</sup> ty<sub>2</sub><sup>2</sup> o<sub>2</sub><sup>2</sup> 'sloping only will-stand, dir. we-inclusive' (We will all stand leaning forwards.);

- (a) wa<sup>2</sup> ngudiyo<sub>2</sub><sup>1</sup> kandore<sup>4</sup> wa<sup>2</sup> ngudiyo<sub>2</sub><sup>1</sup> muska<sup>4</sup>  
 Set = K<sub>1</sub> [Sta Sta]  
 completion returned cantor completion returned music  
 The cantor had returned, and so had the band...

- (b) ky<sub>2</sub><sup>32</sup> lya<sup>1</sup> ns<sup>1</sup>ya<sup>1</sup> ne<sup>3</sup> ʔ<sub>2</sub><sup>2</sup>  
 Set = K<sub>2</sub> [Act Inst]  
 will-come-you, dir. immediately calling person pronoun  
 Come in right away because they are calling you.

- (c) ndo<sup>2</sup>o<sup>1</sup> yu<sup>3</sup> ngiya<sup>43</sup> yu<sup>2</sup>  
 Set = K<sub>3</sub> [Ant Cons]  
 emerging man going man  
 Emerging the man went.

- (d) tihyu<sup>2</sup> ko<sub>2</sub><sup>2</sup> ška<sup>1</sup> tšalyu<sup>21</sup> lka<sup>4</sup> ko<sub>2</sub><sup>2</sup>  
 Set = K<sub>11</sub> [Ax Elb]  
 far that-particular another world is that-particular  
 That place is very far away, it is another world there.

- (e) ha<sup>4</sup> ndiya<sup>21</sup> kyha<sup>3</sup> kuta<sup>32</sup> ska<sup>3</sup>  
 Set = K<sub>12</sub> [Sit Res: K<sub>12</sub> <Sit]  
 negation is-belonging tortilla will-give-you one  
 ku<sup>2</sup> o<sub>2</sub><sup>2</sup>  
 Res>]  
 will-eat we-inclusive  
 Don't you have a tortilla you will give us to eat?

- (f) nšo<sup>1</sup> ti<sub>2</sub>ʔ<sub>2</sub><sup>32</sup> ne<sup>2</sup> siya<sup>32</sup> ʔ<sub>2</sub><sup>1</sup> ne<sup>3</sup>  
 Set = K<sub>13</sub> [Init]  
 collecting, dir. will-live person sheep to person

nsuʔwa<sup>43</sup> neʔ<sup>2</sup> niʔ<sup>3</sup> lyoʔo<sup>32</sup>

Seq]

putting person inside inside-corral

They are collecting their sheep together and putting them inside the corral.

(g) si<sup>1</sup> tyukwa<sup>43</sup> snadadu<sup>4</sup> ʔi<sup>2</sup>

Set = S<sub>14</sub> [CnHI Cond

if will-be-on, dir. soldier pronoun

ha<sup>4</sup> šno<sup>1</sup>

Inj]

negation will-run-you, dir.

If the soldiers are there in charge of you, don't run away.

(h) hwaki<sup>32</sup> lo<sup>2</sup> hwaki<sup>43</sup>

Set = S<sub>16</sub> [Bal BHI Bald]

will-pull-you and will-pull-I

You pull and I'll pull...

(i) ta<sup>3</sup> tšanyi<sup>2</sup>

Set = S<sub>22</sub> [AR Alt]

or-interrogative true

Or is it true...?

(j) la<sup>3</sup> ka<sup>4</sup> ndukwa<sup>32</sup> ni<sup>2</sup>

Set = S<sub>23</sub> [Itg IS]

where will-be is-on-you now

Where will you be seated?

The setting tagmeme occurs only in S<sub>11</sub>.

9.3.2. Purpose Hinge. This tagmeme is manifested by the conjunction tšaʔ<sup>2</sup> 'in-order-that/to-the-effect-that' from subclass W<sub>14.2</sub> and acts as the hinge on which the relationship between the setting and purposive tagmemes depends in S<sub>11</sub>. The purpose hinge tagmeme occurs only in S<sub>11</sub>.

9.3.3. Purposive. This tagmeme is manifested by C<sub>1</sub>,

C<sub>2</sub>, C<sub>3</sub>, C<sub>11</sub>, C<sub>12</sub>, K<sub>2</sub>, K<sub>3</sub>, K<sub>4</sub>, K<sub>11</sub>, K<sub>12</sub>, or S<sub>14</sub>. It is the manifestations of this tagmeme which determine eight of the nine co-occurrence subtypes of S<sub>11</sub>.

Pur: C<sub>1</sub> ha<sup>4</sup> nyo<sup>2</sup> ne<sup>2</sup> ʔ<sub>i</sub><sup>3</sup> 'negation looking, dir. person pronoun' (They will not see you.); Pur: C<sub>2</sub> ha<sup>4</sup> tukwi<sup>2</sup> ndiya<sup>21</sup> ʔyo<sup>21</sup> 'nobody is-belonging to-me' (I have no relatives.); Pur: C<sub>3</sub> no<sup>2</sup> lko<sup>1</sup> 'I am-I' (It is I.); Pur: C<sub>11</sub> ʃu<sup>32</sup> wo<sup>2</sup> 'will-fight, dir. you-pl.' (You will all fight with each other.); Pur: C<sub>12</sub> tyukwa<sup>32</sup> s1<sup>2</sup> snye<sup>232</sup> reyi<sup>4</sup> bra<sup>3</sup> ko<sup>2</sup> 'will-be-on-it, dir. waist-her child-of king then' (It will be round the king's daughter's waist then.);

(a) kaha<sup>43</sup> no<sup>2</sup> ko<sup>2</sup>ʔo<sup>32</sup> kuwi<sup>232</sup> ʔ<sub>i</sub><sup>1</sup> ne<sup>23</sup>  
 Pur = K<sub>2</sub> [Act Inst]  
 will-obtain-he thing will-drink baby to person  
 He will get something for their baby to drink.

(b) kyo<sup>32</sup> ku<sup>32</sup> tiya<sup>32</sup>  
 Pur = K<sub>3</sub> [Ant Cons]  
 will-come-he, dir. will-eat dinner-his  
 He will come in and eat his dinner.

(c) taka<sup>4</sup> ʔ<sub>i</sub><sup>2</sup> kulo<sup>32</sup> ti<sup>2</sup>a<sup>3</sup>  
 Pur = K<sub>4</sub> [Dev: K<sub>4</sub> <Pred Dev>  
 will-be, dir. to-you will-draw-out-you water

ka<sup>4</sup> ʔ<sub>i</sub><sup>2</sup>  
 Pred: C<sub>3</sub>]   
 will-be to-you  
 You will be able to find water.

(d) no<sup>2</sup> taka<sup>4</sup> ʔ<sub>i</sub><sup>2</sup>  
 Pur = K<sub>11</sub> [Ax  
 thing will-be, dir. pronoun  
 kulo<sup>32</sup> ti<sup>2</sup>a<sup>3</sup> kitše<sup>3</sup> bra<sup>3</sup> ko<sup>2</sup>  
 Elb]  
 will-draw-out-he water town then  
 The thing he could do was to find water in the town then.



- (e)           wa<sup>2</sup>                   kiʔny<sup>2</sup> ʔa<sup>1</sup>   ngulu<sup>32</sup> ʔi<sup>2</sup>  
 Pur = K<sub>12</sub> [Sit  
 completion deep    very dug-he pronoun  
  
 ngulihy<sup>32</sup> kw<sup>1</sup> tu<sup>3</sup> ndsko<sup>2</sup>   bra<sup>3</sup> ko<sup>2</sup>ʔ<sup>2</sup>  
 Res]  
 lacked    same earhole-his   then  
 He had dug it very deep, right up to his earholes in fact.
- (f)           kaha<sup>43</sup>                   kaʔ<sup>12</sup>   si<sup>1</sup>   kwa<sup>3</sup>  
 Pur = S<sub>14</sub> [Inj                                    CnHi   Cond]  
 will-obtain-he coffin if    there  
 ...he will have a coffin if that's all.

The purposive tagmeme occurs only in S<sub>11</sub>.

9.3.4. Reason. This tagmeme is manifested by C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>5</sub>, C<sub>11</sub>, C<sub>12</sub>, C<sub>31</sub>, K<sub>1</sub>, K<sub>4</sub>, or S<sub>14</sub>.

Rea:C<sub>1</sub> ngiya<sup>43</sup> kwe<sup>2</sup> lo<sup>2</sup> lambre<sup>4</sup> 'going-it loudly in wire' (The wire hums loudly.); Rea:C<sub>2</sub> nsuʔwi<sup>32</sup> ndla<sup>4</sup> lo<sup>3</sup> kutš<sup>2</sup> 'there-is cloud on sun' (There is a cloud over the sun.); Rea:C<sub>3</sub> no<sup>2</sup> ndšku<sup>32</sup> nte<sup>34</sup> lka<sup>4</sup> 'thing eating people is' (It is a thing that people eat.); Rea:C<sub>5</sub> šeʔo<sup>34</sup> nuʔwi<sup>2</sup> 'wicked you-familiar' (You are wicked.); Rea:C<sub>11</sub> lye<sup>32</sup> ʔa<sup>1</sup> nškwa<sup>43</sup> tyiʔi<sup>2</sup> o<sup>3</sup> 'much very lying, dir. smell them' (Their odour is very fragrant/strong.); Rea:C<sub>12</sub> ndyi<sup>2</sup> ʔi<sup>32</sup> kw<sup>1</sup> ʔi<sup>3</sup> ʔi<sup>1</sup> o<sup>3</sup> 'is-living, dir. wind to them' (The wind is blowing them.); Rea:C<sub>31</sub> ša<sup>2</sup> nu<sup>3</sup> šlyu<sup>32</sup> neʔ<sup>2</sup> mo<sup>2</sup> kino<sup>4</sup> su<sup>2</sup> lambre<sup>4</sup> 'light which will-turn, dir. person machine base wire' (When they turn the machine at the base of the (telegraph) wire...);

- (a)           nguhwi<sup>32</sup> yʔo<sup>1</sup>                   nguhwi<sup>32</sup> sti<sup>32</sup>  
 Res = K<sub>1</sub> [Sta                                    Sta]  
 died    mother-my died    father-my  
 My mother and father are dead.

- (b) tsu<sup>ʔ</sup>we<sup>32</sup> ndšku<sup>32</sup>  
 Rea = K<sub>4</sub> [Pred Dev]  
 good eating  
 It is good to eat.

- (c) kuhw<sup>1</sup>32 ʔ<sub>i</sub><sup>1</sup> nte<sup>3</sup>4 si<sup>1</sup> tškw<sup>1</sup>ʔ32 ne<sup>ʔ</sup>2 lo<sup>ʔ</sup>o<sup>1</sup>  
 Rea = S<sub>14</sub> [Inj CnHi Cond]  
 will-kill-he to people if will-speak person with-him  
 He will kill people if they speak to him.

The reason tagmeme occurs only in S<sub>12</sub>.

9.3.5. Reason Hinge. This tagmeme is manifested by the particular example of the stative clause (C<sub>5</sub>) ko<sup>ʔ</sup>2 tša<sup>ʔ</sup>2 'that-particular thing' (that's why), and acts as the hinge on which the relationship between the reason and outcome tagmemes depends in S<sub>12</sub>. The reason hinge tagmeme occurs only in S<sub>12</sub>.

9.3.6. Outcome. This tagmeme is manifested by C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>5</sub>, K<sub>2</sub>, K<sub>11</sub>, or S<sub>11</sub>. It is certain manifestations of this tagmeme which determine three of the four subtypes of S<sub>12</sub>. The remaining manifestations of the outcome tagmeme occur only when the reason tagmeme is manifested by C<sub>1</sub>, and comprise subtype (iv):

Out: C<sub>1</sub> ndšku<sup>3</sup>2 w<sup>ʔ</sup>2 ʔ<sub>i</sub><sup>3</sup> 'eating you-pl./respectful pronoun' (...you eat it); Out: C<sub>3</sub> ha<sup>4</sup> lka<sup>4</sup> tsu<sup>ʔ</sup>we<sup>3</sup>2 ʔ<sub>i</sub><sup>2</sup> 'negation is good pronoun' (It is not any good to you.); Out: C<sub>5</sub> ha<sup>4</sup> tikye<sup>ʔ</sup>2 kw<sup>ʔ</sup>3 'negation hot heavens' (The sun is not hot.);

- (a) yne<sup>3</sup>2 ytsu<sup>1</sup> t<sup>1</sup>ʔyu<sup>2</sup>3  
 Out = K<sub>2</sub> [Act Inst]  
 sounded-it erupted thunder  
 ...the thunder roared

- (b) tʔno<sup>2</sup> ʔa<sup>1</sup> ndiʔi<sup>43</sup> sko<sup>43</sup> ti<sup>2</sup> nskwo<sup>43</sup> tiʔi<sup>32</sup>  
 Out = K<sub>11</sub> [Ax Elb]  
 poor very is-living-I one-I only lying-I will-be-living  
 I am so poorly off and lie here all alone.

- (c) ndiya<sup>21</sup> siye<sup>ʔ32</sup> tša<sup>ʔ2</sup>  
 Out = S<sub>11</sub> [Set PHI]  
 is-belonging nose-his in-order-that  
 kiti<sup>ʔ2</sup> ni<sup>3</sup> tyiʔi<sup>3</sup> ndška<sup>43</sup> no<sup>2</sup>  
 Pur]  
 will-detect-he what smell is, dir. thing  
 People have noses so that they will distinguish the  
 odours of things.

The outcome tagmeme occurs only in S<sub>12</sub>.

9.3.7. Suggestion. This tagmeme is manifested by C<sub>1</sub>, C<sub>11</sub>, C<sub>12</sub>, K<sub>4</sub>, S<sub>14</sub>, or S<sub>31</sub> in data so far encountered.

Sug: C<sub>1</sub> ha<sup>4</sup> ku<sup>2</sup> no<sup>2</sup> la<sup>2</sup> lo<sup>3</sup> kuwi<sup>ʔ32</sup> ʔyo<sup>21</sup> 'negation will-eat-you thing fierce with baby to-me' (Don't eat piquant things in front of my baby.); Sug: C<sub>11</sub> šuʔwa<sup>32</sup> tiʔ<sup>32</sup> ʔyo<sup>21</sup> 'will-remember-you, dir. to-me' (You will remember me.); Sug: C<sub>12</sub> nde<sup>3</sup> ʔwo<sup>3</sup> tyiʔi<sup>43</sup> ba<sup>3</sup> šiʔi<sup>1</sup> 'here to-you-pl. will-be-living, dir. we-exclusive little-while' (We will stay here at your place for a little while.);

- (a) wa<sup>2</sup> lka<sup>4</sup> nyo<sup>ʔ43</sup> no<sup>2</sup> ska<sup>3</sup> ʔni<sup>3</sup>  
 Sug = K<sub>4</sub> [Pred Dev]  
 completion is kind-of name one animal  
 It was that one animal was named that way...
- (b) si<sup>1</sup> tyukwa<sup>32</sup> sndadu<sup>4</sup> ʔi<sup>2</sup> ha<sup>4</sup>  
 Sug = S<sub>14</sub> [CnHi Cond Inj: S<sub>11</sub> <Set]  
 if will-be-on, dir. soldier pronoun negation

šno <sub>ç</sub> <sup>32</sup>	tša <sup>2</sup>	ku <sup>43</sup>	ne <sup>2</sup>	ʔi <sup>3</sup>
	PHi	Pur>]		

will-run-he, dir. in-order-that will-shoot person pronoun  
 If the soldiers catch him he must not try to run away or  
 they will shoot him.

(c) ha<sup>4</sup> ši<sup>2</sup>ya<sup>43</sup> tše<sup>32</sup>  
 Sug = S<sub>31</sub> [Ads VAd]  
 negation will-shout-you, dir. Friend  
 Don't shout, Friend!

The suggestion tagmeme occurs only in S<sub>13</sub>.

9.3.8. Cause Hinge. This tagmeme is manifested by the conjunction *si<sup>2</sup>ya<sup>1</sup>* 'because/since' from subclass W<sub>14.2</sub> and acts as the hinge on which the relationship between the suggestion and cause tagmemes depends in S<sub>13</sub>. The cause hinge tagmeme occurs only in S<sub>13</sub>.

9.3.9. Cause. This tagmeme is manifested by C<sub>1</sub> and once by C<sub>13</sub> in data so far encountered.

Cau: C<sub>1</sub> yku<sup>2</sup> kuwi<sup>32</sup> ʔyo<sup>21</sup> pastiya<sup>4</sup> 'ate baby of-mine pill' (My baby has taken some pills.); Cau: C<sub>13</sub> su<sup>2</sup>wa<sup>43</sup> nyo<sup>2</sup>ʔo<sup>43</sup> ʔni<sup>3</sup> ʔi<sup>3</sup> 'same looking, dir. animal pronoun' (The animal looks the same as it.)

The cause tagmeme occurs only in S<sub>13</sub>.

9.3.10. Injunction. This tagmeme is manifested by C<sub>1</sub>, C<sub>3</sub>, C<sub>5</sub>, C<sub>11</sub>, K<sub>4</sub>, K<sub>11</sub>, K<sub>12</sub>, or S<sub>11</sub>.

Inj: C<sub>1</sub> kaha<sup>43</sup> nte<sup>34</sup> 'will-die people' (People will die.);  
 Inj: C<sub>3</sub> tsu<sup>2</sup>we<sup>32</sup> lka<sup>4</sup> tnyo<sup>32</sup> ku<sup>2</sup>ni<sup>32</sup> 'good is work will-make-you' (It will be a good work that you are doing.);  
 Inj: C<sub>5</sub> la<sup>3</sup> ko<sup>2</sup> ʔ<sup>2</sup> 'fierce that-particular' (That one/those are dangerous.);  
 Inj: C<sub>11</sub> ha<sup>4</sup> ki<sup>2</sup>ya<sup>1</sup> kwinta<sup>34</sup> 'negation will-descend-you, dir. account' (Don't take any notice.);

- (a) ha<sup>4</sup> ka<sup>4</sup> hlyo<sup>32</sup> t1<sup>32</sup> nyo<sup>43</sup> ku<sup>ni32</sup>  
 Inj = K<sub>4</sub> [Pred Dev]  
 negation will-be will-know-you kind-of will-make-you  
 You are not able to know what to do.
- (b) ha<sup>4</sup> kusu<sup>wa32</sup> ki<sup>ya2</sup> yo<sup>21</sup>  
 Inj = K<sub>11</sub> [Ax]  
 negation will-put-you sin to-me
- ha<sup>4</sup> tyo<sup>o1</sup> ki<sup>ya2</sup> yo<sup>21</sup>  
 Elb]  
 negation will-emerge, dir. sin to-me  
 Don't charge me with the sin, it won't be blamed on me.
- (c) ha<sup>4</sup> tsu<sup>we32</sup> lka<sup>4</sup> tiye<sup>32</sup> ne<sup>2</sup> ku<sup>2</sup> ne<sup>3</sup>  
 Inj = K<sub>12</sub> [Sit Res]  
 negation good is stomach-of person will-eat person  
 It does not please them to eat.
- (d) ha<sup>4</sup> šno<sup>32</sup> tša<sup>2</sup>  
 Inj = S<sub>11</sub> [Set PHI]  
 negation will-run-he, dir. in-order-that
- ku<sup>43</sup> ne<sup>2</sup> i<sup>3</sup>  
 Pur]  
 will-shoot person pronoun  
 He must not run away or they will shoot him.

The injunction tagmeme occurs only in S<sub>14</sub>.

9.3.11. Condition Hinge. This tagmeme is manifested by a conjunction borrowed from Spanish *si*<sup>1</sup> 'if' from subclass W<sub>14.2</sub>, and acts as the hinge on which the relationship between the injunction and condition tagmemes depends in S<sub>14</sub>. The condition hinge tagmeme occurs only in S<sub>14</sub>.

9.3.12. Condition. This tagmeme is manifested by C<sub>1</sub>, C<sub>2</sub>, C<sub>5</sub>, C<sub>11</sub>, C<sub>12</sub>, C<sub>13</sub>, K<sub>2</sub>, S<sub>32</sub>, P<sub>4</sub>, or P<sub>11.2</sub>. It is certain manifestations of this tagmeme that determine six of the seven subtypes of S<sub>14</sub>. The remaining manifestations of the

condition tagmeme occur only when the injunction tagmeme is manifested by  $C_1$  and comprise subtype (vii).

Cond:  $C_1$  ku<sup>2</sup> ne<sup>3</sup> ʔ<sub>i</sub><sup>2</sup> 'will-eat person pronoun' (They will eat it.); Cond:  $C_2$  tsu<sup>3</sup>we<sup>32</sup> nsu<sup>3</sup>wi<sup>32</sup> tiye<sup>32</sup> nte<sup>34</sup> ʔ<sub>i</sub><sup>2</sup> 'good there-is stomach-of people pronoun' (People are happy with you.); Cond:  $C_5$  kwa<sup>3</sup> 'there' (...that's all/that); Cond:  $C_{11}$  ha<sup>4</sup> tukwi<sup>2</sup> šu<sup>32</sup> lo<sup>3</sup>o<sup>1</sup> ʔ<sub>i</sub><sup>3</sup> 'nobody will-fight, dir. with pronoun' (No one will fight with them/you/him.); Cond:  $C_{12}$  tyukwa<sup>32</sup> sndadu<sup>4</sup> ʔ<sub>i</sub><sup>3</sup> 'will-be-on, dir. soldier pronoun' (The soldiers will-catch him.); Cond:  $C_{13}$  ndška<sup>32</sup> ʔ<sub>i</sub><sup>1</sup> rey<sup>34</sup> ʔ<sub>i</sub><sup>2</sup> 'is-you, dir. to king pronoun' (The king wants you.);

(a) kaha<sup>32</sup> ku<sup>32</sup> ʔ<sub>i</sub><sup>1</sup> ʔ<sub>i</sub><sup>3</sup>  
 Cond =  $K_2$  [Act Inst]  
 will-die-you will-eat-you to pronoun  
 You will die (if) you eat it.

(b) šiya<sup>43</sup> ʔ<sub>i</sub><sup>2</sup> nu<sup>3</sup> ndška<sup>32</sup> ti<sup>32</sup> tiye<sup>43</sup>  
 Cond =  $S_{32}$  [Quot  
 will-want, dir. pronoun which want-It, dir. stomach-my  
 yhw<sub>i</sub><sup>32</sup> nu<sup>3</sup> ngiy<sub>o</sub><sup>32</sup> te<sub>e</sub><sup>1</sup> ʔwo<sup>3</sup>  
 QT]  
 said which coming, dir. will-be-staying to-you-pl.  
 "You will want what my heart wants" said the one who  
 is coming to fetch you.

Cond:  $P_4$  nu<sup>3</sup> ku<sup>3</sup>ʔtsi<sup>2</sup> ʔ<sub>i</sub><sup>3</sup> 'the-particular yellow pronoun' (...the yellow one among them); Cond:  $P_{11.2}$  ha<sup>4</sup> lo<sup>3</sup>o<sup>1</sup> mo<sub>k</sub>ino<sup>4</sup> ʔba<sup>3</sup> 'negation with machine to-we-exclusive' (...without our machine).

The condition tagmeme occurs only in  $S_{14}$ .

9.3.13. Balance. This tagmeme is manifested by  $C_1$ ,  $C_2$ ,  $C_3$ ,  $C_4$ ,  $C_5$ ,  $C_{11}$ ,  $K_4$ ,  $K_{11}$ ,  $K_{12}$ ,  $S_{14}$ ,  $S_{21}$ ,  $S_{22}$ ,  $S_{23}$ , or  $S_{32}$ . The manifestation of this tagmeme determines subtype (ix) of  $S_{15}$ .

Bal:C<sub>1</sub> kuta<sup>32</sup> libru<sup>34</sup> nu<sup>3</sup> kwa<sup>3</sup> ʔ<sub>i</sub><sup>2</sup> ʔyo<sup>21</sup> 'will-give-you book the-particular there pronoun to-me' (You give that book of yours to me.); Bal:C<sub>2</sub> ndiya<sup>21</sup> tuʔwa<sup>3</sup> tšku<sup>1</sup> bra<sup>3</sup> ko<sup>2</sup> 'is-belonging mouth river then' (He arrived on the bank of the river then.); Bal:C<sub>3</sub> ʔni<sup>3</sup> tsuʔwe<sup>32</sup> lka<sup>4</sup> ko<sup>2</sup> 'animal good is that-particular' (That one is a good animal.); Bal:C<sub>4</sub> wa<sup>2</sup> ngudyi<sup>1</sup> ska<sup>3</sup> libru<sup>34</sup> ʔyo<sup>21</sup> ni<sup>2</sup> 'completion finished, dir. one book to-me now' (I have finished one of my books now.); Bal:C<sub>5</sub> tiya<sup>2</sup> ʔa<sup>1</sup> ša<sup>2</sup> ngudiy<sup>32</sup> o<sup>2</sup> 'cold very light returned we-inclusive' (It was very cold when we came.); Bal:C<sub>11</sub> nde<sup>3</sup> štya<sup>32</sup> kye<sup>2</sup> 'here will-put-you, dir. head-your' (Put your head here.);

- (a) ndška<sup>32</sup> ti<sup>43</sup> ku<sup>32</sup> ska<sup>3</sup> ndyukwa<sup>43</sup> ti<sup>2</sup>  
 Bal = K<sub>4</sub> [Pred Dev]  
 want-I, dir. will-drink-I one meaning-uncertain only

tiʔa<sup>3</sup>

water

I want to drink just a tiny little bit of water.

- (b) wa<sup>2</sup> ngits<sup>43</sup> ʔ<sub>i</sub><sup>2</sup> wa<sup>2</sup> ykw<sup>1</sup> io<sup>2</sup>  
 Bal = K<sub>11</sub> [Ax Elb]  
 completion telling-I pronoun completion said-I with-you  
 I've told you and told you.

- (c) nde<sup>3</sup> tiʔ<sup>32</sup> kye<sup>32</sup> no<sup>2</sup> ku<sup>32</sup>  
 Bal = K<sub>12</sub> [Sit Res]  
 here will-adjoin-you, dir. will-cook-you thing will-eat

o<sup>2</sup> ni<sup>2</sup>

we-inclusive now

You stay here now and cook our meal for us.

- (d) si<sup>1</sup> ʔa<sup>4</sup> la<sup>2</sup> klio<sup>2</sup> laha<sup>1</sup> bra<sup>3</sup> ko<sup>2</sup>  
 Bal = S<sub>14</sub> [CnHi Cond Inj]  
 if negation fierce eye-his sleeping-he then  
 If his eyes don't look dangerous, then he's sleeping.

- (e)  $k\phi^2$  ndukwa<sup>1</sup> yu<sup>3</sup>  $k\phi^2$   
 Bal = S<sub>21</sub> [ER Comt: K<sub>11</sub> <Ax  
 that's-the-one is-on man that-particular  
 nu<sup>1</sup> ti<sup>1</sup> yu<sup>3</sup> bra<sup>3</sup>  $k\phi^2$   
 Elb>]  
 with-me ten man then  
 There where those men are sitting, those ten men who  
 are with me.
- (f)  $se\phi^3$  ta<sup>3</sup> ndiya<sup>21</sup> kasiyu<sup>4</sup>  
 Bal = S<sub>22</sub> [Prop: P<sub>1</sub> AR Alt: S<sub>11</sub> <Set  
 place or-interrogative is-belonging occasion  
 tša<sup>2</sup> ku<sup>43</sup> yu<sup>2</sup> nde<sup>3</sup>  $\phi^3$   
 PHI Pur>]  
 in-order-that will-eat man this to-me  
 Is there a place or opportunity for this man (alligator)  
 to eat me?
- (g) ni<sup>3</sup> tša<sup>32</sup> la<sup>2</sup>  $\phi^1$  ngtyo<sup>32</sup>  
 Bal = S<sub>23</sub> [Itg IS]  
 what thing fierce very coming-you, dir.  
 Why are you coming here so cross?
- (h) tsu $\phi^3$  lye<sup>32</sup> yhw<sup>32</sup> ne<sup>3</sup> ngwa<sup>4</sup> ty<sup>2</sup>  
 Bal = S<sub>32</sub> [Quot QT]  
 good very said person was, dir. own  
 "All right" said the inhabitant there.

The balance tagmeme occurs only in S<sub>15</sub>.

9.3.14. Balance Hinge. This tagmeme is manifested by the particles lo<sup>2</sup> 'and' from subclass W<sub>14.2</sub> or lo $\phi^1$  'with' from subclass W<sub>14.1</sub>, and acts as the hinge on which the balanced relationship between the balance and the balanced tagmemes depends in S<sub>15</sub>. The balance hinge tagmeme occurs only in S<sub>15</sub>.

9.3.15. Balanced. This tagmeme is manifested by C<sub>1</sub>,



C<sub>2</sub>, C<sub>4</sub>, C<sub>5</sub>, C<sub>11</sub>, K<sub>2</sub>, K<sub>3</sub>, K<sub>4</sub>, K<sub>11</sub>, S<sub>2</sub>, S<sub>11</sub>, S<sub>14</sub>, or S<sub>21</sub>. Certain manifestations of this tagmeme determine subtypes (i) - (ix) of S<sub>15</sub>.

Bald: C<sub>1</sub> ndšga<sup>3</sup> ndiʔo<sup>32</sup> tiʔa<sup>3</sup> ša<sup>2</sup> ngiti<sup>ʔ1</sup> tiʔ<sup>32</sup> 'every drinking water light thirsty-he' (Everyone drinks water when he is thirsty.); Bald: C<sub>2</sub> no<sup>2</sup> kwinyi<sup>3</sup> ʔ<sub>i</sub><sup>1</sup> yu<sup>3</sup> mdiya<sup>21</sup> bra<sup>3</sup> ko<sup>ʔ2</sup> 'thing fertile to man was-belonging then' (The man's animal was there then.); Bald: C<sub>4</sub> ha<sup>4</sup> ya<sup>ʔ1</sup> tyi<sup>1</sup> libru<sup>34</sup> ʔ<sub>i</sub><sup>2</sup> 'negation time will-finish, dir. book pronoun' (You have not yet finished your book.); Bald: C<sub>5</sub> ngate<sup>23</sup> kyo<sup>3</sup> 'white rain' (Rain is white.); Bald: C<sub>11</sub> kwi<sup>ʔ1</sup> tyu<sup>3</sup> yu<sup>3</sup> tšy<sup>ʔ23</sup> nu<sup>3</sup> ha<sup>4</sup> kwilyoʔo<sup>2</sup> ʔa<sup>3</sup> bra<sup>3</sup> ko<sup>ʔ2</sup> 'same will-stand, dir. man behind which negation spouse more then' (In the same way the single men will stand at the back.);

- (a) ha<sup>4</sup> ndška<sup>32</sup> tyi<sup>1</sup> ngusoʔo<sup>ʔ1</sup> kitu<sup>ʔ3</sup>  
 Bald = K<sub>2</sub> [Act: K<sub>4</sub> <Pred Dev> Inst: C<sub>1</sub>]  
 negation is, dir. will-finish-it, dir. filled pot

The pot is filled so it won't be finished (what is in the bottle).

- (b) ndyoʔo<sup>32</sup> kuno<sup>1</sup> ku<sup>32</sup> ʔwo<sup>3</sup>  
 Bald = K<sub>3</sub> [Ant Cons]

emerging, dir. snake will-eat to-you-pl.

The snake will be caused to come out and eat you all.

- (c) ykwi<sup>ʔ32</sup> mdoʔo<sup>1</sup> tnyo<sup>32</sup> ʔ<sub>i</sub><sup>2</sup> tsa<sup>43</sup>  
 Bald = K<sub>4</sub> [Pred: C<sub>1</sub> Dev: K<sub>3</sub> <Ant Cons>]

spoke-he emerged work pronoun will-go-you

He told you to leave your work and go.

- (d) ni<sup>2</sup> ha<sup>4</sup> nduʔu<sup>32</sup> ʔa<sup>3</sup> snye<sup>ʔ32</sup> ʔ<sub>i</sub><sup>2</sup>  
 Bald = K<sub>11</sub> [Ax: S<sub>1</sub> <J Epn>]

now negation conceiving more child-of pronoun

ha<sup>4</sup> ndška<sup>43</sup> ʔa<sup>3</sup> kuʔu<sup>32</sup> snye<sup>ʔ32</sup>  
 Elb: K<sub>4</sub> <Pred Dev>]

negation is-being, dir. more will-conceive-she child-of

ʔ<sub>i</sub><sup>2</sup>

pronoun

Now she isn't producing any more children (calves),  
she is unable to produce more.

- (e) ʔni<sup>3</sup> nu<sup>3</sup> no<sup>2</sup> sne<sup>12</sup> tše<sup>2</sup> nyo<sup>ʔo</sup><sup>43</sup>  
Bald = S<sub>2.1</sub> [Sub<sub>1</sub> Exn]  
animal which name toad bad looking, dir.

ko<sup>ʔ2</sup> ša<sup>ʔ3</sup> nyo<sup>ʔo</sup><sup>43</sup> ko<sup>ʔ2</sup>

that-particular different looking, dir. that-particular

tše<sup>2</sup> nyo<sup>ʔo</sup><sup>43</sup> ko<sup>ʔ2</sup>

bad looking, dir. that-particular

The animal called Toad has a bad and different appearance.

- (f) ha<sup>4</sup> lka<sup>4</sup> tša<sup>ʔ32</sup> tša<sup>ʔ2</sup> ky<sup>ʔo</sup><sup>32</sup>  
Bald = S<sub>11</sub> [Set PHI Pur]  
negation is thing in-order-that will-come-you, dir.

ts<sup>ʔo</sup><sup>23</sup> ni<sup>2</sup>

day now

There is no reason for you to come here today.

- (g) s<sup>1</sup> kwityi<sup>ʔ32</sup> kilo<sup>2</sup> ʔ<sub>i</sub><sup>3</sup> ʔa<sup>4</sup> ndi<sup>ʔi</sup><sup>23</sup> ti<sup>ʔ32</sup>  
Bald = S<sub>14</sub> [CnHi Cond Inj]  
if blind eye-of pronoun negation feel-he

bra<sup>3</sup> ko<sup>ʔ2</sup>

then

If his eyes are shut, he is not aware of you then.

- (h) tšy<sup>ʔ23</sup> tšku<sup>1</sup> ko<sup>ʔ2</sup> ndiya<sup>21</sup> kontra<sup>4</sup> ʔ<sub>i</sub><sup>1</sup>  
Bald = S<sub>21</sub> [Top ER Comt]  
back-of river that's-the-one is-belonging against to

reyi<sup>4</sup> bra<sup>3</sup> ko<sup>2</sup>

king then

On the other side of the river, that's where the enemies  
of the king are.

The balanced tagmeme occurs only in S<sub>15</sub>.

9.4. Each of the symbiotic sentence types of class S<sub>20</sub> are composed of two obligatory nuclear tagmemes, except S<sub>23</sub>, which consists of one obligatory and one optional nuclear tagmeme; in addition, S<sub>21</sub> and S<sub>22</sub> each have an optional nuclear tagmeme.

9.4.1. Topic. This tagmeme is manifested by P<sub>1</sub>, P<sub>2</sub>, C<sub>1</sub>, C<sub>2</sub>, C<sub>5</sub>, C<sub>11</sub>, K<sub>1</sub>, K<sub>2</sub>, K<sub>3</sub>, K<sub>11</sub>, S<sub>2</sub>, or S<sub>32</sub>. Its function is similar to that of the substance tagmeme in S<sub>2</sub>.

Top: P<sub>1.3</sub> nte<sup>34</sup> nu<sup>3</sup> ku<sup>2</sup>u<sup>3</sup> 'people which mute' (mutes);  
Top: P<sub>2</sub> kuno<sup>2</sup> wta<sup>34</sup> 'meat cow' (beef); Top: C<sub>1</sub> ndo<sup>2</sup>o<sup>32</sup>  
nu<sup>3</sup> šni<sup>2</sup> 'emerging the-particular dog lazy' (The  
lazy dog was coming out.); Top: C<sub>2</sub> bitriyu<sup>4</sup> ndukwa<sup>32</sup> tu<sup>3</sup>  
ku<sup>2</sup> yka<sup>3</sup> lambre<sup>4</sup> 'glass is-on tip wood wire' (the glass  
insulator on the top of the telegraph pole); Top: C<sub>5</sub> kw<sup>1</sup> '1  
nu<sup>3</sup> ndaha<sup>2</sup> 'same the-particular lazy' (the very same lazy  
person); Top: C<sub>11</sub> šno<sup>32</sup> lo<sup>2</sup>o<sup>1</sup> yu<sup>3</sup> nu<sup>3</sup> kw<sup>2</sup>o<sup>1</sup> 'will-run,  
dir. with man the-particular female' (The woman is going  
to run away with the man.);

(a) ne<sup>2</sup> ša<sup>3</sup> ndukwa<sup>43</sup> hwinka<sup>4</sup> ki<sup>2</sup>ya<sup>23</sup>

Top = K<sub>1</sub> [Sta: K<sub>4</sub> <Dev  
person different is-on coffee-ranch mountain

kitu<sup>2</sup> lka<sup>4</sup> ne<sup>2</sup> ne<sup>2</sup> ša<sup>3</sup> ndukwa<sup>43</sup>  
Pred> Sta: K<sub>4</sub> <Dev  
cooking-pot is person person different is-on

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hwinka<sup>4</sup> ki<sup>?</sup>ya<sup>23</sup> kitu<sup>?</sup> ika<sup>4</sup> ne<sup>?</sup>  
Pred>]

coffee-ranch mountain cooking-pot is person  
He is the Mexican who has Cooking-Pot Coffee Ranch.

- (b) ?ni<sup>3</sup> tšku<sup>1</sup> tšku<sup>1</sup> ya<sup>43</sup> ba<sup>3</sup> yhwí<sup>32</sup> ?i<sup>?</sup>  
Top = K<sub>2</sub> [Act:K<sub>3</sub> <Ant Cons>  
animal spring spring went we-exclusive killed pronoun

?ba<sup>3</sup> ?ni<sup>3</sup> ndšku<sup>1</sup> nte<sup>34</sup> ika<sup>4</sup> ?i<sup>?</sup>  
Inst:C<sub>3</sub>]

to-we-exclusive animal eating people is pronoun  
It is a spring animal and we went to the spring and  
killed it for ourselves because it is an animal that people  
eat.

- (c) ndo<sup>?</sup>o<sup>32</sup> ne<sup>?</sup> ?ya<sup>1</sup> ne<sup>?</sup> ?aymo<sup>4</sup>  
Top = K<sub>3</sub> [Ant Cons]  
emerging person carrying person dead-person/spirit  
He went out carrying the dead person.

- (d) ko<sup>?</sup> nda<sup>43</sup> ne<sup>?</sup> nda<sup>32</sup>  
Top = K<sub>11</sub> [Ax:S<sub>21</sub> <ER Comt> Elb:K<sub>4</sub> <Pred:C<sub>1</sub>  
that's-the-one giving person giving

ngusu<sup>?</sup>wa<sup>43</sup> nkye<sup>?</sup> ti<sup>3</sup> kalu<sup>4</sup>  
Dev:K<sub>2</sub> (Act Inst)>]

put cooking only soup  
That's what they gave having put it cooked in the soup.

- (e) loga<sup>4</sup> se<sup>?</sup>?e<sup>3</sup> nu<sup>3</sup> ndškwí<sup>?</sup> ne<sup>?</sup> lo<sup>?</sup>o<sup>1</sup> laha<sup>32</sup> yu<sup>2</sup>  
Top = S<sub>2.2</sub> [Sub<sub>2</sub>:P<sub>6</sub>  
place place which speaking person with empty earth

tšku<sup>1</sup> kwityí<sup>?</sup> ndškwí<sup>?</sup> ne<sup>?</sup>  
Exn:C<sub>1</sub>]

spring frog speaking person  
The place which people say is inhabited, which they  
call Frog Spring.

- (f) ndiya<sup>21</sup> yhw<sub>i</sub><sup>1</sup>  
 Top = S<sub>32</sub> [Quot QT]  
 is-belonging said-he  
 "There is some" he said.

The topic tagmeme occurs only in S<sub>21</sub>.

9.4.2. Emphatic Reference. This tagmeme is manifested by the relator k<sub>o</sub>?<sup>2</sup> 'that's-the-one-emphatic' from subclass W<sub>14.3</sub> which is an emphatic referent, referring to the topic tagmeme or to a topic included in the preceding context and linking it emphatically to the following comment tagmeme. The emphatic reference tagmeme occurs only in S<sub>21</sub>.

9.4.3. Comment. This tagmeme is manifested by P<sub>6</sub>, C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub>, C<sub>11</sub>, C<sub>12</sub>, C<sub>21</sub>, K<sub>4</sub>, K<sub>12</sub>, or s<sub>01</sub>. It is the manifestations of this tagmeme which determine the co-occurrence subtypes of S<sub>21</sub>.

Comt:P<sub>6</sub> wta<sup>34</sup> ngi?ni<sup>1</sup> kwinyi<sup>3</sup> wta<sup>34</sup> nu<sup>3</sup> tsu?we<sup>32</sup>  
 'cow making fertile cow which good' (A fertile cow is a good cow.); Comt:C<sub>1</sub> kun<sub>o</sub>?<sup>1</sup> nu<sup>3</sup> tsu?we<sup>32</sup> nsu?wa<sup>32</sup> ne?<sup>2</sup>  
 tehe?<sup>2</sup> 'meat which good putting person salt' (People rub salt into the good meat.); Comt:C<sub>2</sub> ndiya<sup>21</sup> se?e?<sup>3</sup> su<sup>32</sup> ska<sup>3</sup>  
 tškw<sub>o</sub><sup>43</sup> yka<sup>3</sup> 'is-belonging place lying one metal wood'  
 (There is the place where an axe is lying.); Comt:C<sub>3</sub> n<sub>o</sub>?<sup>2</sup>  
 lka<sup>4</sup> šiya?<sup>23</sup> hruta<sup>4</sup> 'thing is flavouring fruit' (The thing is a flavouring for fruit.); Comt:C<sub>4</sub> kalu<sup>4</sup> yku<sup>32</sup> lomsa<sup>34</sup> nte?<sup>34</sup>  
 'soup ate breakfast-of people' (They ate soup for their breakfast.); Comt:C<sub>11</sub> ngwi?ya<sup>1</sup> ša<sup>3</sup> bra<sup>3</sup> k<sub>o</sub>?<sup>2</sup> 'descended,  
 dir. light then' (Day dawned then.); Comt:C<sub>12</sub> ndyukwa<sup>32</sup>  
 ?i<sub>i</sub><sup>1</sup> ?aymo?<sup>4</sup> šiya?<sup>2</sup> bra<sup>3</sup> k<sub>o</sub>?<sup>2</sup> 'is-on-he, dir. to spirit  
 again then' (He sat on the spirit's back again then.); Comt:  
 C<sub>21</sub> yhw<sub>i</sub><sup>32</sup> ne?<sup>2</sup> ngwa<sup>4</sup> tyi<sup>2</sup> 'said person was own' (said  
 the inhabitant there);

- (a)           ngite<sup>1</sup> ti<sup>32</sup> ne<sup>2</sup>   ku<sup>32</sup>       lomsa<sup>34</sup>       ne<sup>3</sup>  
 Comt = K<sub>4</sub> [Pred                   Dev]  
 is-hungry   person will-eat breakfast-of person  
 He is hungry for his breakfast.
- (b)           ngusi<sup>1</sup>ya<sup>1</sup> ne<sup>3</sup>   ʔ<sub>i</sub><sup>1</sup> kwilyo<sup>2</sup>o<sup>2</sup> ne<sup>3</sup>  
 Comt = K<sub>12</sub> [Sit  
 called       person to spouse-of person  
  
 ngfy<sub>o</sub><sup>43</sup>                   bra<sup>3</sup> ko<sup>2</sup>  
 Res]  
 coming-she, dir.   then  
 He called to his wife and she came then.
- (c)           nu<sup>3</sup>       nduhwi<sup>32</sup> kwlyu<sup>34</sup> ʔ<sub>i</sub><sup>1</sup> ne<sup>3</sup>   tša<sup>2</sup>  
 Comt = s<sub>01</sub> [Itr   Term:S<sub>11</sub> <Set                   PHI  
 which selling mule to person in-order-that  
  
 ndih<sup>32</sup> tny<sup>34</sup> ʔ<sub>i</sub><sup>2</sup>  
 Pur>]  
 gaining money pronoun  
 ...who sell people's mules to get money for themselves

The comment tagmeme occurs only in S<sub>21</sub>.

9.4.4. Proposition. This tagmeme is manifested by P<sub>1</sub>, P<sub>04</sub>, C<sub>1</sub>, K<sub>3</sub>, S<sub>2</sub>, or S<sub>23</sub>.

Prop:P<sub>1</sub> n<sub>o</sub><sup>2</sup> s<sup>2</sup>n<sub>o</sub><sup>2</sup> 'thing scarce' (something rare);  
 Prop:p<sub>04</sub> ha<sup>4</sup> tukwi<sub>i</sub><sup>2</sup> ʔa<sup>3</sup> 'nobody more' (no one else); Prop:  
 C<sub>1</sub> ngule<sup>2</sup>e<sup>32</sup> ʔ<sub>i</sub><sup>2</sup> 'licked pronoun' (It licked it.);

- (a)           tsa<sup>32</sup>       tsa<sup>43</sup>       n<sub>o</sub><sup>2</sup>ʔ<sub>o</sub><sup>43</sup>  
 Prop = K<sub>3</sub> [Ant    Cons]  
 will-go-I will-go seeing-I  
 (I will go and see.)
- (b)           n<sub>o</sub><sup>2</sup>       ngusi<sup>1</sup>ʔ<sub>i</sub><sup>32</sup>   kuwe<sup>32</sup>   kune<sup>1</sup> ʔ<sub>i</sub><sup>1</sup> ne<sup>3</sup>  
 Prop = S<sub>2</sub> [Sub                   Exn]  
 thing bought-he pig   young to person  
 The thing he bought was someone's young pig.

- (c)           ni<sup>3</sup>   tša<sup>32</sup> ngusnyi<sup>32</sup>  
 Prop = S<sub>23</sub> [Itg       IS]  
           what thing took-you  
           Why did you take? . . .

The proposition tagmeme occurs only in S<sub>22</sub>.

9.4.5. Alternative Reference. This tagmeme is manifested by the relator ta<sup>3</sup> 'or-interrogative' from subclass W<sub>14.3</sub> which is an alternative referent referring to the proposition tagmeme or to a proposition included in the preceding context and linking it interrogatively (and sometimes giving what follows a negative implication) to the following alternate tagmeme. The alternative reference tagmeme occurs only in S<sub>22</sub>.

9.4.6. Alternate. This tagmeme is manifested by C<sub>1</sub>, C<sub>3</sub>, C<sub>5</sub>, C<sub>11</sub>, C<sub>12</sub>, K<sub>4</sub>, S<sub>11</sub>, S<sub>14</sub>, S<sub>15</sub>, or S<sub>24</sub>. It is certain manifestations of this tagmeme that determine four of the five co-occurrence subtypes of S<sub>22</sub>. The remaining manifestations occur only in the absence of the proposition tagmeme and are therefore alternatives to propositions found in the preceding context.

Alt:C<sub>1</sub> ʔa<sup>4</sup> kya<sup>32</sup> loʔo<sup>1</sup> wo<sup>3</sup> 'negation will-go-he with you-pl./respectful' (He will not go with you?); Alt:C<sub>3</sub> ʔa<sup>4</sup> tyʔe<sup>3</sup> yka<sup>4</sup> kitye<sup>32</sup> ndukwa<sup>43</sup> kwa<sup>2</sup> 'negation resinous wood pitch-pine is-on there' (The pitch pine standing over there isn't resinous?); Alt:C<sub>5</sub> tšanyi<sup>2</sup> 'is-true'; Alt:C<sub>11</sub> ndška<sup>32</sup> tiʔ<sup>32</sup> tiyeta<sup>4</sup> 'want-you, dir. shop' (You want a shop?); Alt:C<sub>12</sub> tyuʔwi<sup>1</sup> lyo<sup>3</sup> ʔi<sup>1</sup> o<sup>3</sup> 'there-will-be, dir. knowledge to them' (. . . you recognise them?);

- (a)           no<sup>2</sup>ʔ<sup>2</sup> no<sup>2</sup>ʔo<sup>43</sup>           ndu<sup>1</sup>           skye<sup>ʔ3</sup> tiʔ<sup>32</sup>  
 Alt = K<sub>4</sub> [Dev:K<sub>4</sub> <Pred Dev>           Pred:C<sub>1</sub>]  
           I   seeing-I   standing-you think-you  
           You will think I see you standing.

- (b) ndiya<sup>21</sup> ska<sup>3</sup> kyha<sup>3</sup> ʔi<sup>2</sup> kuta<sup>32</sup> ku<sup>32</sup>  
 Alt = S<sub>11</sub> [Set:K<sub>12</sub> <Sit:C<sub>2</sub> Res:K<sub>12</sub> (Sit Res)>  
 is-belonging one tortilla pronoun will-give-you will-eat

o<sup>2</sup> tša<sup>ʔ2</sup> tyi<sup>ʔ143</sup> o<sup>3</sup>  
 PHI Pur:C<sub>12</sub>]  
 we-inclusive in-order-that will-live, dir. we-inclusive  
 Do you have a tortilla to give us to eat so that we will  
 not starve?

- (c) koʔo<sup>32</sup> si<sup>1</sup> tsa<sup>43</sup> ʔyo<sup>43</sup>  
 Alt = S<sub>14</sub> [Inj CnHi Cond]  
 will-drink-you if will-go will-carry-I  
 You will drink it if I go and fetch it.

- (d) no<sup>2</sup> ndiya<sup>21</sup> nde<sup>3</sup> lo<sup>2</sup> siʔi<sup>1</sup> no<sup>2</sup> ʔi<sup>2</sup> ika<sup>4</sup>  
 Alt = S<sub>15</sub> [Bal:C<sub>2</sub> BHi Bald:K<sub>4</sub> <Dev Pred>]  
 thing is-belonging here and is-not thing pronoun is  
 The thing that is here and not something of yours?

- (e) suʔwa<sup>1</sup> ka<sup>4</sup> tiʔi<sup>2</sup> ʔa<sup>4</sup>  
 Alt = S<sub>24</sub> [QSt qmr]  
 same will-be-it heavy question-indicator  
 Will it be the same weight?

The alternate tagmeme occurs only in S<sub>22</sub>.

9.4.7. Interrogation. This tagmeme is manifested by P<sub>34</sub> or the particles ni<sup>3</sup> 'what?' and ti<sup>3</sup> 'who?' from subclass W<sub>14.4</sub>. As this is the only obligatory tagmeme in S<sub>23</sub> it comprises the complete inquiry when occurring alone. ni<sup>3</sup> tša<sup>ʔ32</sup> 'what thing?' (why?), la<sup>3</sup> ya<sup>3</sup> 'where (direction)?', lo<sup>3</sup> ya<sup>3</sup> 'where (location)?', ni<sup>3</sup> ngwa<sup>ʔ43</sup> 'when?'. The following manifestations of this tagmeme occur only when the inquiry statement tagmeme is also manifested: ti<sup>3</sup> 'who?', ni<sup>3</sup> 'what?' (except for the combinations of ni<sup>3</sup> in P<sub>34</sub> listed above). The interrogation tagmeme occurs only in S<sub>23</sub>.

9.4.8. Inquiry Statement. This tagmeme is manifested



by C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>4</sub>, C<sub>5</sub>, C<sub>11</sub>, C<sub>12</sub>, C<sub>13</sub>, K<sub>1</sub>, K<sub>2</sub>, K<sub>3</sub>, K<sub>4</sub>, K<sub>11</sub>, K<sub>12</sub>, K<sub>13</sub>, or by the nuclear forms of S<sub>11</sub>, or S<sub>15</sub>.

IS: C<sub>1</sub> lye<sup>32</sup> sa<sup>2</sup>a<sup>1</sup> ndo<sup>2</sup>o<sup>1</sup> tškw<sup>2</sup>o<sup>43</sup> 'much very walking metal' (The bell is ringing a lot.); IS: C<sub>2</sub> ndi<sup>2</sup>i<sup>23</sup> ne<sup>2</sup> ni<sup>3</sup> 'is-living person now' (They are there now.); IS: C<sub>3</sub> nte<sup>34</sup> lka<sup>4</sup> 'people is' (They are people.); IS: C<sub>4</sub> ndšku<sup>1</sup> tlya<sup>32</sup> wo<sup>3</sup> 'eating dinner-of you-pl./respectful' (You are eating your dinner.); IS: C<sub>5</sub> tsu<sup>2</sup>we<sup>32</sup> la<sup>2</sup> 'good more' (That is better.); IS: C<sub>11</sub> la<sup>2</sup> ʔa<sup>1</sup> ngiy<sup>2</sup>o<sup>32</sup> 'fierce very coming-you, dir.' (You are coming when you are very cross.); IS: C<sub>12</sub> tyukwa<sup>43</sup> ne<sup>2</sup> kwiyu<sup>34</sup> ʔi<sup>3</sup> 'will-be-on, dir. person mule pronoun' (He will be riding your mule.); IS: C<sub>13</sub> ngwa<sup>1</sup> kw<sup>2</sup>i<sup>2</sup>ʔi<sup>3</sup> 'was, dir. wind pronoun' (The wind was blowing it.);

- (a) ndi<sup>2</sup>ʔi<sup>23</sup> nu<sup>3</sup> kw<sup>2</sup>o<sup>2</sup>ʔi<sup>23</sup> nu<sup>3</sup>  
 IS = K<sub>1</sub> [Sta Stal  
 is-living the-particular female is-living the-particular

klʔyu<sup>1</sup>

male

The woman is in and the man is in.

- (b) tny<sup>2</sup>o<sup>32</sup> ndukwa<sup>32</sup> ʔi<sup>2</sup> ʔni<sup>43</sup> nde<sup>2</sup>  
 IS = K<sub>2</sub> [Act Inst]  
 work is-on pronoun making here  
 You are sitting here doing work.

- (c) ndo<sup>2</sup>o<sup>32</sup> ne<sup>2</sup> ngiya<sup>1</sup> ne<sup>2</sup>  
 IS = K<sub>3</sub> [Ant Cons]  
 emerging they going they  
 They went out and away.

- (d) kite<sup>2</sup>ʔi<sup>1</sup> ti<sup>2</sup>ʔ<sup>32</sup> wo<sup>3</sup>  
 IS = K<sub>4</sub> [Pred  
 will-be-hungry you-pl./respectful

ku<sup>32</sup> kyha<sup>3</sup> ʔwo<sup>3</sup>  
 Dev]  
 will-eat tortilla to-you-pl./respectful  
 You will be hungry to eat your meal.

(e) ndukwa<sup>1</sup> yu<sup>3</sup> yku<sup>2</sup> yu<sup>3</sup> kyha<sup>3</sup>  
 IS = K<sub>11</sub> [Ax Elb]  
 were-on man ate man tortilla  
 The men were here and ate their meal.

(f) klla<sup>43</sup> ne<sup>ʔ2</sup> ku<sup>ʔni</sup><sup>1</sup> tnyo<sup>ʔ</sup><sup>32</sup> šiya<sup>ʔ</sup><sup>1</sup>  
 IS = K<sub>12</sub> [Sit Res]  
 will-arrive person will-make work again  
 They will arrive and do it again.

(g) msko<sup>ʔ</sup><sup>1</sup> tukwi<sup>1</sup> ne<sup>ʔ3</sup> ʔi<sup>2</sup>  
 IS = K<sub>13</sub> [Init  
 tied will-be-up person pronoun  
 tukwa<sup>32</sup> ne<sup>ʔ3</sup> ti<sup>1</sup> yni<sup>2</sup>  
 Seq]  
 will-be-on person rope neck-it  
 They tied it up and put a rope round its neck.

(h) ndo<sup>ʔo</sup><sup>1</sup> tškwō<sup>43</sup> tša<sup>ʔ2</sup> nsu<sup>ʔwa</sup><sup>43</sup> nu<sup>2</sup> tsa<sup>43</sup>  
 IS = S<sub>11</sub> [Set PHI Pur]  
 walking metal in-order-that putting which will-go  
 no<sup>1</sup> ʔi<sup>2</sup>

looking-for pronoun

The bell was ringing in order to send out those who were to look for them.

(i) ngiya<sup>1</sup> ne<sup>ʔ3</sup> lo<sup>2</sup> ngyo<sup>43</sup> ne<sup>ʔ2</sup>  
 IS = S<sub>15</sub> [Bal BHI Bald]  
 going person and coming person  
 They are coming and going.

The inquiry statement tagmeme occurs only in S<sub>23</sub>.

9.4.9. Question Statement. This tagmeme is manifested by  $C_1$ ,  $C_2$ ,  $C_3$ ,  $C_5$ ,  $C_{11}$ ,  $K_4$ ,  $K_{12}$ ,  $S_{11}$ , or  $S_{22}$ .

QSt: $C_1$  ha<sup>4</sup> tukwi<sub>2</sub><sup>2</sup> ngudihi<sub>2</sub><sup>32</sup> nde<sup>3</sup> 'nobody passed here' (No one passed by here.); QSt: $C_2$  ndiya<sup>21</sup> to<sub>2</sub><sup>2</sup> ?i<sub>2</sub><sup>3</sup> 'is-belonging lard pronoun' (You have some ointment.); QSt: $C_3$  su?wa<sup>1</sup> ka<sup>4</sup> ti<sub>2</sub>?i<sub>2</sub><sup>2</sup> 'same will-be-it heavy' (It will be the same weight.); QSt: $C_5$  ha<sup>4</sup> tsu?we<sup>32</sup> 'negation good' (It is not good.); QSt: $C_{11}$  ši?ya<sup>1</sup> ni<sup>2</sup> 'will-shout-you, dir. now' (You will be caused to shout now.);

(a)      n<sub>0</sub>?<sup>2</sup> msi?yo<sub>2</sub><sup>32</sup> ?i<sub>2</sub><sup>2</sup>      skye?<sup>1</sup> ti?<sup>32</sup>  
 QSt =  $K_4$  [Dev                      Pred]  
           I    called-I pronoun will-think-you  
           You will think that I called you.

(b)      kuta<sup>32</sup>                      kwi?yo<sub>2</sub><sup>43</sup>                      ni<sup>2</sup>  
 QSt =  $K_{12}$  [Sit                      Res]  
           will-give-you will-carry-I now  
           You give it to me and I will carry it.

(c)      wa<sup>2</sup>                      n<sub>0</sub>?<sub>0</sub><sup>43</sup>                      tša?<sup>2</sup>  
 QSt =  $S_{11}$  [Set                      PHI  
           completion seeing-I to-the-effect-that  
  
           ky<sub>0</sub><sup>43</sup>                      lo?o<sup>1</sup>                      ?i<sub>1</sub><sup>1</sup> yu<sup>3</sup>  
           Pur]  
           will-come-I, dir. with-you to man  
           I saw that I am to come with you to the man.

(d)      ta<sup>3</sup>                      n<sub>0</sub>?<sup>2</sup> lk<sub>0</sub><sup>43</sup>      nskye?<sup>32</sup> ti?<sup>32</sup>  
 QSt =  $S_{22}$  [AR                      Alt: $K_4$  <Dev Pred>]  
           or-interrogative I    am-I    thinking-you  
           Or do you think it is I?

The question statement tagmeme occurs only in  $S_{24}$ .

9.4.10. Question Marker. This tagmeme is manifested by the minor word ?a<sup>4</sup> ~ a<sup>4</sup> 'question-indicator' from subclass  $w_{03} \cdot 4$ . The question marker tagmeme occurs only in  $S_{24}$ .

9.5. In the quotational sentence class  $S_{30}$ ,  $S_{32}$  consists of two obligatory nuclear tagmemes, but  $S_{31}$  is unique in that it consists only of three optional nuclear tagmemes and no obligatory tagmemes.

9.5.1. Subject Addressed. This tagmeme is manifested by  $P_5$ , a personal name from subclass  $W_{2.1}$ , or a vocative term from subclass  $W_{2.2}$  excluding  $bi^3$  'You'.  $SAd:P_5$   $t\check{s}e^{32}$   $buru^2$  'Friend Donkey',  $t\check{s}o^{32}$  'Friend' (between women);  $SAd:W_{2.1}$   $ndiyu^{32}$  'Antonio';  $SAd:W_{2.2}$   $ti^{32}$  'small boy' (within the consanguineal group). The subject addressed tagmeme occurs only in  $S_{31}$ .

9.5.2. Address. This tagmeme is manifested by any phrase type except  $P_5$  and  $p_{01}$ , any clause type except the minor clauses  $c_{01}$ ,  $c_{02}$ , and  $c_{03}$ , any colon type, any sentence type except  $S_{31}$ , any peripheral tagmeme from the clause or sentence level, or by an onomatopoetic word.<sup>28</sup> Greater variety is found in the manifestations of this tagmeme than in any other analysed in the syntax of Chatino. The address tagmeme occurs only in  $S_{31}$ .

9.5.3. Vocative Address. This tagmeme is manifested by  $P_5$ , or nouns from subclasses  $W_{2.1}$  or  $W_{2.2}$ .  $VAd:P_5$   $nq^{32}$   $\check{s}u^{32}$  'Mother aged' (Grandmother);  $VAd:W_{2.1}$   $liya^4$  'Maria';  $VAd:W_{2.2}$   $snye^{43}$  'child-my' (my child [used by parents and godparents]),  $bi^3$  'You-emphatic'. The vocative address tagmeme occurs only in  $S_{31}$ .

9.5.4. Quotation. This tagmeme is manifested by  $S_{31}$ . A minimum example of Quot:  $tsu^{32}$  'good'.

A complex example of Quot: $S_{31}$  [ $Ads:S_{15}$ ]

<sup>28</sup> See footnote 27

seʔe<sup>3</sup> ta<sup>3</sup> ndiya<sup>21</sup> kasiyu<sup>4</sup>  
 Quot = S<sub>15</sub> [Bal: S<sub>22</sub> <Prop: P<sub>1</sub> AR Alt: S<sub>11</sub> (Set: C<sub>2</sub>  
 place or-interrogative is-belonging occasion

tša<sup>2</sup> ku<sup>43</sup> yu<sup>2</sup> nde<sup>3</sup> ʔyo<sup>21</sup> lo<sup>2</sup> kuʔni<sup>1</sup>  
 PHI Pur: C<sub>1</sub>> BHI Bald: S<sub>11</sub> <Set: C<sub>1</sub>  
 in-order-that will-eat man here to-me and will-make-you

tša<sup>2</sup> tsuʔwe<sup>32</sup> tša<sup>2</sup> kya<sup>32</sup> nuʔu<sup>2</sup> ʔi<sup>1</sup> yu<sup>3</sup>  
 thi PHI Pur: C<sub>11</sub>>]  
 thing good to-the-effect-that will-go with-me to man  
 Is there a place or is there opportunity for this man  
 (alligator) to eat me, and would you please go with me to him?

The quotation tagmeme occurs only in S<sub>32</sub>.

9.5.5. Quotation Termination. This tagmeme is manifested by C<sub>21</sub>, K<sub>1</sub>, or K<sub>11</sub>.

QT: C<sub>21</sub> yhw<sub>i</sub><sup>32</sup> nu<sup>3</sup> kun<sub>o</sub><sup>1</sup> tnu<sub>3</sub><sup>3</sup> ʔi<sub>i</sub><sup>1</sup> neʔ<sup>3</sup> kwa<sup>3</sup> 'said the-particular snake great to person there' (the great snake said to them...); QT: C<sub>21</sub> ʔni<sup>3</sup> nu<sup>3</sup> luwe<sup>2</sup> ti<sup>3</sup> ʔi<sub>i</sub><sup>1</sup> yu<sup>3</sup> ša<sup>3</sup> bra<sup>3</sup> ko<sub>o</sub><sup>2</sup> 'making the-particular small only to man different then' (the child said to the gentleman then...);

(a) yhw<sub>i</sub><sup>32</sup> nu<sup>3</sup> kw<sub>o</sub><sup>2</sup> ʔi<sub>i</sub><sup>1</sup> tyi<sup>2</sup> škwa<sup>3</sup> ʔi<sub>i</sub><sup>1</sup> neʔ<sup>3</sup>  
 QT = K<sub>1</sub> [Sta  
 said the-particular female cook to person

ša<sup>3</sup> yhw<sub>i</sub><sup>32</sup> nu<sup>3</sup> kw<sub>o</sub><sup>2</sup> ʔi<sub>i</sub><sup>1</sup> tyi<sup>2</sup> škwa<sup>3</sup> ʔi<sub>i</sub><sup>1</sup>  
 Sta]  
 different said the-particular female cook to

patru<sup>4</sup> ʔi<sub>i</sub><sup>3</sup>

master pronoun

the woman who was cook said to the Mexican her master

(b) yhw<sub>i</sub><sup>32</sup> nu<sup>3</sup> kw<sub>o</sub><sup>2</sup> ʔi<sub>i</sub><sup>1</sup> yhw<sub>i</sub><sup>32</sup> tyi<sup>2</sup> škwa<sup>3</sup> ʔi<sub>i</sub><sup>1</sup> neʔ<sup>3</sup>  
 QT = K<sub>11</sub> [Ax Elb]  
 said the-particular female said cook to person  
 said the woman who was cook to him

The quotation termination tagmeme occurs only in  $S_{32}$ .

9.6. As the relative minor sentence is the unique member of class  $s_{00}$ , its two obligatory nuclear tagmemes are the only ones to be described in this subsection.

9.6.1. Introducer. This tagmeme is manifested by relative-interrogative particles from subclass  $W_{14.4}$ :  $ni^3$  'what',  $ti^3$  'who',  $lo^3$  'where?',  $la^3$  'where (direction)'; or by the minor word  $nu^3$  'which/who' from subclass  $w_{02.2}$ . The introducer tagmeme occurs only in  $s_{01}$ .

9.6.2. Terminator. This tagmeme is manifested by  $C_1$ ,  $C_2$ ,  $C_3$ ,  $C_5$ ,  $C_{11}$ ,  $C_{12}$ ,  $C_{13}$ ,  $K_1$ ,  $K_4$ ,  $K_{11}$ ,  $K_{12}$ , or  $S_{11}$  in data analysed to date.

Term:  $C_1$   $tu^2kw_i^{21}$   $t_{sa}^{43}$   $ne^2$   $kwa^3$  'road will-go person there' (...the road will they go by?); Term:  $C_2$   $ndukwa^{43}$   $nu^2$   $kwit_{\check{s}}i^3$  'is-on the-particular rabbit' (...the rabbit is sitting); Term:  $C_3$   $no^2$   $lka^4$  'thing is' (...thing it is); Term:  $C_5$   $\check{s}e^{32}$   $la^2$  'wide more' (It is wider.); Term:  $C_{11}$   $wa^2$   $ndyi^1$   $s^2ni^3$  'completion finishing, dir. distant' (was finished completely); Term:  $C_{12}$   $ndyukwa^{32}$   $lo^3$   $yka^2$  'is-on, dir. on wood' (is sitting on the wood); Term:  $C_{13}$   $tyi^2i^3$   $nd\check{s}ka^{23}$   $no^2$  'smell is, dir. thing' (...the smell a thing has);

(a)  $wa^2$   $nghwi^{32}$   $y^2o^1$   $wa^2$   $nghwi^{32}$   
 Term =  $K_1$  [Sta Sta]  
 completion died mother-his completion died

$sti^2$

father-his

His mother and father died.

(b)  $nd\check{s}ka^{43}$   $ti^2^{32}$   $wo^3$   $hyo^{32}$   $wo^3$   $nde^3$   
 Term =  $K_4$  [Pred Dev]  
 wanting, dir. you-pl. will-return you here  
 You want to return here.

- (c)     ngiʔni<sup>1</sup>   yu<sup>3</sup>   kuʔno<sub>t</sub><sup>34</sup>   nsiʔyu<sup>1</sup>   yka<sup>3</sup>   tnu<sub>t</sub><sup>3</sup>  
        Term = K<sub>11</sub> [Ax   Elb]  
            making man slashing cutting-he tree great  
            The man is chopping down a great tree.
- (d)     kuʔni<sup>32</sup>             kuʔu<sup>1</sup>             kuwiʔ<sup>32</sup> ʔi<sub>t</sub><sup>1</sup>   neʔ<sup>3</sup>  
        Term = K<sub>12</sub> [Sit   Res]  
            will-make-he will-live baby   to person  
            He will do something so that their baby will live.
- (e)     nduhwiʔ<sup>32</sup>   wta<sup>34</sup> ʔi<sub>t</sub><sup>1</sup>   neʔ<sup>3</sup>   tʃaʔ<sup>2</sup>  
        Term = S<sub>11</sub> [Set   PHI  
            selling-he cow   to person in-order-that  
  
            ndih<sup>1</sup>             tnyi<sup>34</sup> ʔi<sub>t</sub><sup>2</sup>  
            Pur]  
            gaining-he money pronoun  
            He sells (other) people's cattle (stolen) in order to  
            gain money.

The terminator tagmeme occurs only in s<sub>01</sub>.

## 10. *Analysed Text*

The following text was related by Vicente, a native Chatino of Yaitepec who is a respected elderly member of the community. He reported this as historical fact.

In the following text sentences are numbered and paragraphs are indicated by indentation. The word by word translation is in single quotation marks and follows each sentence. A free translation of the whole text is given in 10.2. The detailed analysis in 10.3 proceeds sentence by sentence in chart form. Word classes, phrase, clause, colon, and sentence types are indicated, and the various levels of structural layering. These charts demonstrate how even the highest level unit, the sentence, may on occasion manifest a phrase-level tagmeme, and conversely how even a single word may manifest a sentence-level tagmeme.

### 10.1. A Chatino text.

(1) tškwĩ<sup>?</sup>1 no<sup>?</sup>2 nu<sup>3</sup> nkwa<sup>4</sup> ʔi<sup>1</sup> ska<sup>3</sup> nte<sup>34</sup> 'will-say-I thing which was to one person' (2) loga<sup>4</sup> kwi<sup>?</sup>1 ti<sup>3</sup> tsa<sup>43</sup> lka<sup>4</sup> loga<sup>4</sup> 'place same only will-go is place' (3) loga<sup>4</sup> se<sup>?</sup>e<sup>3</sup> ndi<sup>?</sup>1 nte<sup>34</sup> nu<sup>3</sup> ndi<sup>?</sup>1 loga<sup>4</sup> tsa<sup>43</sup> lka<sup>4</sup> kwi<sup>?</sup>1 ti<sup>2</sup> nde<sup>3</sup> 'place place is-living people which is-living place will-go is same only here' (4) hlyo<sup>2</sup> ti<sup>?</sup>32 ne<sup>?</sup>2 ndšku<sup>1</sup> ne<sup>?</sup>3 ʔni<sup>3</sup> nu<sup>3</sup> ndškwĩ<sup>?</sup>32 ne<sup>?</sup>2 lo<sup>?</sup>o<sup>1</sup> kwityi<sup>?</sup>32 'know person eating person animal which speaking person with frog' (5) ʔni<sup>3</sup> nu<sup>3</sup> no<sup>?</sup>2 kwityi<sup>?</sup>32 ʔi<sup>2</sup> tšku<sup>1</sup> ndyukwa<sup>32</sup> ko<sup>?</sup>2 'animal which name frog pronoun spring is-on, dir. that-particular' (6) tšku<sup>1</sup> ndyo<sup>?</sup>o<sup>?</sup>32 no<sup>?</sup>1 ne<sup>?</sup>3 ko<sup>?</sup>2 'spring walking, dir. look-for person that-particular' (7) tla<sup>4</sup> ndyo<sup>?</sup>o<sup>?</sup>32 ne<sup>?</sup>2 tšku<sup>1</sup> ndi<sup>?</sup>32 ko<sup>?</sup>2 ʔi<sup>1</sup> ne<sup>?</sup>3 nšnyi<sup>32</sup> ne<sup>?</sup>2 ko<sup>?</sup>2 'night walking, dir. person spring gaining that-particular to person grabbing, dir. person that-particular' (8) ʔni<sup>3</sup> tsu<sup>?</sup>we<sup>32</sup>



lka<sup>4</sup> ko<sup>2</sup> 'animal good is that-particular' (9) ndšku<sup>1</sup> ne<sup>3</sup> ʔi<sup>2</sup> ndšku<sup>32</sup> tsu<sup>7</sup>we<sup>32</sup> ndšku<sup>32</sup> ko<sup>2</sup> 'eating person pronoun eating good eating that-particular' (10) ʔni<sup>3</sup> šu<sup>4</sup> lka<sup>4</sup> ko<sup>2</sup> ʔni<sup>3</sup> tsu<sup>7</sup>we<sup>32</sup> lka<sup>4</sup> ko<sup>2</sup> 'animal tasty is that-particular animal good is that-particular' (11) kalu<sup>4</sup> ndška<sup>43</sup> ko<sup>2</sup> ʔni<sup>3</sup> tsu<sup>7</sup>we<sup>32</sup> lka<sup>4</sup> ko<sup>2</sup> 'soup is, dir. that-particular animal good is that-particular' (12) lye<sup>32</sup> ʔa<sup>1</sup> ndšku<sup>1</sup> nte<sup>34</sup> ko<sup>2</sup> ʔni<sup>3</sup> tsu<sup>7</sup>we<sup>32</sup> lka<sup>4</sup> ko<sup>2</sup> 'much very eating people that-particular animal good is that-particular' (13) lo<sup>2</sup> ndiya<sup>21</sup> kalu<sup>4</sup> ko<sup>2</sup> ndiya<sup>21</sup> kalu<sup>4</sup> nkye<sup>23</sup> ko<sup>2</sup> ʔi<sup>1</sup> nte<sup>34</sup> 'and is-belonging soup that-particular is-belonging soup cooking that-particular to people' (14) ndiya<sup>21</sup> kalu<sup>4</sup> nkye<sup>23</sup> ko<sup>2</sup> ʔi<sup>1</sup> nte<sup>34</sup> ko<sup>2</sup> kalu<sup>4</sup> yku<sup>32</sup> lomsa<sup>34</sup> nte<sup>34</sup> 'is-belonging soup cooking that-particular to people that-particular soup ate breakfast-of people' (15) kalu<sup>4</sup> kwityi<sup>32</sup> ko<sup>2</sup> yku<sup>32</sup> lomsa<sup>34</sup> nte<sup>34</sup> 'soup frog that's-the-one ate breakfast-of people' (16) ndiya<sup>21</sup> kalu<sup>4</sup> ko<sup>2</sup> ʔi<sup>1</sup> ne<sup>3</sup> 'is-belonging soup that-particular to person.

(17) ko<sup>2</sup> ngudihi<sup>32</sup> ska<sup>3</sup> ne<sup>3</sup> ska<sup>3</sup> ne<sup>3</sup> ša<sup>3</sup> ndukwa<sup>43</sup> ne<sup>2</sup> kwiyu<sup>34</sup> 'that's-the-one passed one person one person different is-on person mule' (18) ngite<sup>71</sup> ti<sup>32</sup> ne<sup>2</sup> ku<sup>12</sup> ne<sup>3</sup> kyha<sup>3</sup> ngite<sup>71</sup> ti<sup>32</sup> ne<sup>2</sup> ku<sup>32</sup> lomsa<sup>34</sup> ne<sup>3</sup> 'is-hungry person will-eat person tortilla is-hungry person will-eat breakfast-of person' (19) ngudihi<sup>32</sup> ne<sup>3</sup> se<sup>7</sup>e<sup>3</sup> ngo<sup>7</sup>o<sup>32</sup> ska<sup>3</sup> nte<sup>34</sup> nu<sup>3</sup> ne<sup>3</sup> to<sup>2</sup> 'passed person place is-adjoining one people the-particular person lard'<sup>29</sup> (20) loga<sup>4</sup> se<sup>7</sup>e<sup>3</sup> nu<sup>3</sup> ndškw<sup>7</sup>32 ne<sup>2</sup> lo<sup>7</sup>o<sup>1</sup> laha<sup>32</sup> yu<sup>2</sup> tšku<sup>1</sup> kwityi<sup>32</sup> ndškw<sup>7</sup>32 ne<sup>2</sup> ko<sup>2</sup> lka<sup>4</sup> ngudihi<sup>32</sup> ne<sup>2</sup> 'place place which speaking person with empty ground spring frog speaking person that's-the-one is passed person' (21) ne<sup>3</sup> ša<sup>3</sup>

<sup>29</sup> ne<sup>3</sup> to<sup>2</sup> 'person lard' is used to refer to a mestizo rather than a Chatino. Lard is an expensive commodity only used by richer families for cooking except on special occasions. Are mestizos considered to be those rich enough to use lard perhaps? yka<sup>3</sup> to<sup>2</sup> 'tree lard' (oak) would not seem to fit this explanation however. ne<sup>3</sup> ša<sup>3</sup> 'person different' (mestizo) refers to an unknown mestizo.

ndukwa<sup>43</sup> kwiyu<sup>34</sup> ko<sup>2</sup> ngite<sup>1</sup> ti<sup>32</sup> ne<sup>2</sup> ku<sup>32</sup> lomsa<sup>34</sup>  
 ne<sup>3</sup> 'person different is-on mule that-particular is-hungry  
 person will-eat breakfast-of person' (22) ʔa<sup>4</sup> ska<sup>2</sup> no<sup>2</sup>  
 ndiya<sup>21</sup> ʔi<sup>3</sup> kuhwi<sup>32</sup> ka<sup>4</sup> lomsa<sup>34</sup> ʔyo<sup>21</sup> yhwí<sup>1</sup> '—negative  
 one thing is-belonging pronoun will-sell-you will-be  
 breakfast-of to-me —said he' (23) ndiya<sup>21</sup> yhwí<sup>1</sup> ko<sup>2</sup>  
 yhwí<sup>32</sup> ne<sup>2</sup> ngwa<sup>4</sup> tyi<sup>2</sup> '—is-belonging —said-he that's-  
 the-one said person was, dir. own' (24) ndiya<sup>21</sup> kalu<sup>4</sup> yhwí<sup>32</sup>  
 ne<sup>2</sup> '—is-belonging soup —said person' (25) ʔni<sup>3</sup> nu<sup>3</sup>  
 ndškwí<sup>32</sup> ne<sup>2</sup> lo<sup>2</sup> ʔo<sup>1</sup> kwityi<sup>32</sup> ko<sup>2</sup> kalu<sup>4</sup> ndiya<sup>21</sup> ʔba<sup>3</sup>  
 '—animal which speaking person with frog that's-the-one  
 soup is-belonging to-we-exclusive' (26) ʔni<sup>3</sup> luwe<sup>2</sup> ti<sup>3</sup>  
 lka<sup>4</sup> ʔi<sup>2</sup> 'animal small only is pronoun' (27) ndšku<sup>32</sup> nte<sup>34</sup>  
 ʔi<sup>1</sup> ʔi<sup>3</sup> šu<sup>4</sup> ʔni<sup>3</sup> lka<sup>4</sup> ʔi<sup>2</sup> 'eating people to pronoun tasty  
 animal is pronoun' (28) ʔni<sup>3</sup> tšku<sup>1</sup> tšku<sup>1</sup> ya<sup>43</sup> ba<sup>3</sup> yhwí<sup>32</sup>  
 ʔi<sup>2</sup> ʔba<sup>3</sup> ʔni<sup>3</sup> ndšku<sup>1</sup> nte<sup>34</sup> lka<sup>4</sup> ʔi<sup>2</sup> ko<sup>2</sup> kalu<sup>4</sup> ndiya<sup>21</sup>  
 ʔba<sup>3</sup> 'animal spring spring went we-exclusive killed pronoun  
 to-we-exclusive animal eating people is pronoun that's-the-  
 one soup is-belonging to-we-exclusive' (29) ha<sup>4</sup> ndiya<sup>21</sup>  
 kalu<sup>4</sup> nu<sup>3</sup> tsu<sup>2</sup>we<sup>32</sup> la<sup>3</sup> ha<sup>4</sup> ndiya<sup>21</sup> kun<sup>2</sup>ʔ<sup>1</sup> nu<sup>3</sup> tsu<sup>2</sup>we<sup>32</sup>  
 la<sup>3</sup> '—negation is-belonging soup which good more negation  
 is-belonging meat which good more—' (30) ka<sup>4</sup> tu<sup>32</sup> ko<sup>2</sup>  
 kuhwi<sup>32</sup> ku<sup>32</sup> yhwí<sup>32</sup> ne<sup>3</sup> ša<sup>3</sup> ko<sup>2</sup> '—will-be for-sure  
 that's-the-one will-sell-you will-eat-I —said person  
 different that-particular' (31) ndšga<sup>3</sup> no<sup>2</sup> ndšku<sup>1</sup> nte<sup>34</sup>  
 tsu<sup>2</sup>we<sup>32</sup> ndšku<sup>32</sup> 'every thing eating people good eating'  
 (32) tsu<sup>2</sup>we<sup>32</sup> ndšku<sup>32</sup> lo<sup>2</sup> ko<sup>2</sup> tša<sup>2</sup> ndšku<sup>32</sup> wo<sup>2</sup> ʔi<sup>3</sup> no<sup>2</sup>  
 ndšku<sup>32</sup> nte<sup>34</sup> lka<sup>4</sup> ko<sup>2</sup> tša<sup>2</sup> ndšku<sup>32</sup> wo<sup>2</sup> ʔi<sup>3</sup> 'good eating  
 and that's why eating you-pl./respectful pronoun thing  
 eating people is that's-why eating you-pl./respectful  
 pronoun' (33) ka<sup>4</sup> tu<sup>32</sup> ko<sup>2</sup> kuhwi<sup>32</sup> ku<sup>32</sup> 'will-be for-  
 sure that-particular will-sell-you will-eat-I' (34) ngite<sup>1</sup>  
 sa<sup>2</sup> ʔa<sup>2</sup> ti<sup>2</sup> ʔ<sup>43</sup> ku<sup>32</sup> loms<sup>2</sup> ʔ<sup>43</sup> ngite<sup>1</sup> sa<sup>2</sup> ʔa<sup>2</sup> ti<sup>2</sup> ʔ<sup>43</sup> ku<sup>32</sup> kyha<sup>3</sup>  
 yhwí<sup>1</sup> '—hungry very I will-eat-I breakfast-my hungry  
 very I will-eat-I tortilla —said he' (35) tsu<sup>2</sup>we<sup>32</sup> lye<sup>32</sup>  
 yhwí<sup>32</sup> ne<sup>3</sup> ngwa<sup>4</sup> tyi<sup>2</sup> lo<sup>2</sup> yhwí<sup>32</sup> ne<sup>3</sup> kalu<sup>4</sup> kwityi<sup>32</sup>

lo<sup>2</sup> yku<sup>2</sup> ne<sup>3</sup> '—good very —said person was, dir. own and sold person soup frog and ate person' (36) tsu<sup>2</sup>we<sup>32</sup> yu<sup>2</sup>wi<sup>43</sup> šiy<sup>23</sup> kalu<sup>4</sup> kwityi<sup>32</sup> tsu<sup>2</sup>we<sup>32</sup> yu<sup>2</sup>wi<sup>43</sup> mši<sup>4</sup> lo<sup>2</sup> o<sup>3</sup> 'good there—was, dir. flavouring soup frog good there—was tomato in it' (37) ngudiya<sup>21</sup> ti<sup>32</sup> ne<sup>2</sup> ša<sup>3</sup> no<sup>2</sup> yku<sup>2</sup> ne<sup>3</sup> 'liked person different thing ate person' (38) yku<sup>2</sup> ne<sup>3</sup> kwityi<sup>32</sup> yku<sup>2</sup> ne<sup>3</sup> kye<sup>2</sup> kwityi<sup>32</sup> yku<sup>2</sup> ne<sup>3</sup> ti<sup>2</sup> nyo<sup>2</sup>o<sup>43</sup> kwityi<sup>32</sup> tsu<sup>2</sup>we<sup>32</sup> yu<sup>2</sup>wi<sup>43</sup> kwityi<sup>32</sup> ni<sup>2</sup> ki<sup>2</sup>no<sup>3</sup> yku<sup>2</sup> ne<sup>3</sup> 'ate person frog ate person head-of frog ate person towards kind-of (body-of) frog good there—was, dir. frog inside plate ate he' (39) ngudiya<sup>43</sup> ti<sup>32</sup> ne<sup>2</sup> šu<sup>2</sup>nd<sup>3</sup>sku<sup>32</sup> yku<sup>2</sup> ne<sup>3</sup> 'liked person tasty eating ate he' (40) ko<sup>2</sup>nu<sup>3</sup> mdyi<sup>1</sup> yku<sup>32</sup> ti<sup>3</sup> ne<sup>3</sup> ŋi<sup>2</sup> mdo<sup>2</sup>o<sup>1</sup> ne<sup>3</sup> ŋiya<sup>43</sup> ne<sup>2</sup> ndo<sup>2</sup>o<sup>1</sup> ne<sup>3</sup> mdiya<sup>21</sup> tukwa<sup>32</sup> ne<sup>2</sup> kwiyu<sup>34</sup> ŋi<sup>1</sup> ne<sup>3</sup> ndo<sup>2</sup>o<sup>1</sup> ŋiya<sup>43</sup> ne<sup>2</sup> bra<sup>3</sup> ko<sup>2</sup> 'that's—the-one which finished, dir. ate only person pronoun emerged person going person emerging person was—belonging will-be-on person mule to person emerging going person then'

(41) ko<sup>2</sup>nu<sup>3</sup> ŋila<sup>23</sup> ne<sup>2</sup> se<sup>2</sup>ŋe<sup>3</sup> nu<sup>3</sup> ki<sup>2</sup>ya<sup>23</sup> kitu<sup>3</sup> bra<sup>3</sup> ko<sup>2</sup> 'that's—the-one which arriving person place the-particular mountain cooking-pot then' (42) ne<sup>3</sup> ša<sup>3</sup> ndukwa<sup>43</sup> hwinka<sup>4</sup> ki<sup>2</sup>ya<sup>23</sup> kitu<sup>3</sup> lka<sup>4</sup> ne<sup>3</sup> ne<sup>3</sup> ša<sup>3</sup> ndukwa<sup>43</sup> hwinka<sup>4</sup> ki<sup>2</sup>ya<sup>23</sup> kitu<sup>3</sup> lka<sup>4</sup> ne<sup>3</sup> ko<sup>2</sup> ne<sup>3</sup> ša<sup>3</sup> lka<sup>4</sup> ko<sup>2</sup> ŋila<sup>23</sup> ne<sup>2</sup> 'person different is—on coffee-ranch mountain cooking-pot is person person different is—on coffee-ranch mountain cooking-pot is he that's—the-one person different is that's—the-one arriving person' (43) ne<sup>3</sup> ša<sup>3</sup> ndukwa<sup>43</sup> ki<sup>2</sup>ya<sup>23</sup> kitu<sup>3</sup> lka<sup>4</sup> lo<sup>2</sup> ndiya<sup>21</sup> tyi<sup>2</sup> škwa<sup>3</sup> ŋi<sup>1</sup> ne<sup>3</sup> nu<sup>3</sup> ndikye<sup>32</sup> no<sup>2</sup> nd<sup>3</sup>sku<sup>1</sup> ne<sup>3</sup> 'person different is—on mountain cooking-pot is and is—belonging cook to person which cooking thing eating person'

(44) lo<sup>2</sup> no<sup>2</sup>o<sup>32</sup> ne<sup>2</sup> ndo<sup>2</sup>o<sup>32</sup> ska<sup>3</sup> sne<sup>12</sup> 'and seeing person walking one toad' (45) yhwi<sup>32</sup> ne<sup>2</sup> ŋi<sup>1</sup> tyi<sup>2</sup> škwa<sup>3</sup> ŋi<sup>1</sup> ne<sup>3</sup> 'said person to cook to person' (46) kuhwi<sup>32</sup> ŋni<sup>3</sup> nde<sup>3</sup> yhwi<sup>32</sup> ne<sup>2</sup> '—will-kill-you animal here —said person' (47) kuhwi<sup>32</sup> ŋni<sup>3</sup> nde<sup>3</sup> lo<sup>2</sup> kye<sup>32</sup> ŋi<sup>1</sup> ŋi<sup>3</sup> ku<sup>2</sup>ni<sup>32</sup>

kalu<sup>4</sup> ʔi<sup>1</sup> ʔi<sup>3</sup> tša<sup>2</sup> ku<sup>32</sup> yhw<sup>1</sup> yhw<sup>32</sup> ne<sup>ʔ3</sup> ʔi<sup>1</sup> tyi<sup>2</sup> škwa<sup>3</sup>  
 ʔi<sup>1</sup> ne<sup>ʔ3</sup> yhw<sup>32</sup> ne<sup>ʔ3</sup> ʔi<sup>1</sup> nu<sup>3</sup> kwɔ<sup>ʔ</sup>ɔ<sup>1</sup> ndikye<sup>ʔ32</sup> nɔ<sup>2</sup> ndšku<sup>1</sup>  
 ne<sup>ʔ3</sup> '—will-kill-you animal here and will-cook-you to  
 pronoun will-make-you soup to pronoun in-order-that will-  
 eat-I —said-he said person to cook to person said person  
 to the-particular female cooking thing eating person' (48) ha<sup>4</sup>  
 tškw<sup>ʔ32</sup> ngwɔ<sup>2</sup> ʔɔ<sup>3</sup> yhw<sup>32</sup> nu<sup>3</sup> kwɔ<sup>ʔ</sup>ɔ<sup>1</sup> yhw<sup>32</sup> tyi<sup>2</sup> škwa<sup>3</sup>  
 ʔi<sup>1</sup> ne<sup>ʔ3</sup> '—negation will-speak-you like-that —said the-  
 particular female said cook to person' (49) ha<sup>4</sup> tškw<sup>ʔ32</sup>  
 ngwɔ<sup>2</sup> ʔɔ<sup>3</sup> ʔni<sup>3</sup> la<sup>2</sup> lka<sup>4</sup> nde<sup>3</sup> yhw<sup>1</sup> '—negation will-  
 speak-you like-that animal fierce is here —said-she'  
 (50) ha<sup>4</sup> ndšku<sup>1</sup> nte<sup>34</sup> ʔni<sup>3</sup> nde<sup>3</sup> yhw<sup>1</sup> '—negation eating  
 people animal here —said-she' (51) nde<sup>3</sup> ʔni<sup>3</sup> nu<sup>3</sup> nɔ<sup>2</sup>  
 sne<sup>12</sup> yhw<sup>1</sup> '—here animal which name toad —said-she'  
 (52) ha<sup>4</sup> la<sup>1</sup> ʔa<sup>2</sup> yhw<sup>1</sup> ʔni<sup>3</sup> tsu<sup>ʔwe</sup><sup>32</sup> lka<sup>4</sup> nde<sup>3</sup> yhw<sup>1</sup> nu<sup>3</sup>  
 wa<sup>2</sup> nɔ<sup>ʔ</sup>ɔ<sup>43</sup> ndšku<sup>1</sup> ʔi<sup>1</sup> ʔi<sup>3</sup> yhw<sup>1</sup> šu<sup>ʔ4</sup> ʔa<sup>1</sup> ndšku<sup>32</sup> ʔni<sup>3</sup>  
 nde<sup>3</sup> yhw<sup>1</sup> '—negation fierce much —said-he— animal  
 good is here —said-he— which completion seeing eating-I  
 to pronoun —said-he— tasty much eating animal here  
 —said-he' (53) nde<sup>3</sup> ʔni<sup>3</sup> nguda<sup>1</sup> ne<sup>ʔ3</sup> yku<sup>1</sup> tu<sup>ʔkw</sup><sup>21</sup> nu<sup>3</sup>  
 ngiyo<sup>1</sup> yhw<sup>1</sup> '—here animal gave person ate-I road which  
 I-came, dir. —said-he' (54) ngilo<sup>1</sup> se<sup>ʔe</sup><sup>3</sup> ngɔ<sup>ʔ</sup>ɔ<sup>32</sup> ne<sup>ʔ2</sup>  
 ngite<sup>ʔ1</sup> ti<sup>ʔ32</sup> ku<sup>32</sup> kyha<sup>3</sup> ngite<sup>ʔ1</sup> ti<sup>ʔ32</sup> ku<sup>ʔni</sup><sup>1</sup> lomsa<sup>34</sup> yhw<sup>1</sup>  
 '—arriving-I place is- adjoining person hungry-I will-eat-  
 I tortilla hungry-I will-make breakfast-of —said-he'  
 (55) lo<sup>2</sup> nde<sup>3</sup> ʔni<sup>3</sup> ngu<sup>ʔni</sup><sup>1</sup> ne<sup>ʔ3</sup> kalu<sup>4</sup> nguda<sup>1</sup> ne<sup>ʔ3</sup> yku<sup>1</sup>  
 yhw<sup>1</sup> '—and here animal made person soup gave person  
 ate-I —said-he' (56) šu<sup>ʔ4</sup> ʔa<sup>1</sup> ʔni<sup>3</sup> nde<sup>3</sup> tsu<sup>ʔwe</sup><sup>32</sup> ʔa<sup>1</sup>  
 ndšku<sup>32</sup> ʔni<sup>3</sup> nde<sup>3</sup> yhw<sup>1</sup> '—tasty very animal here good  
 very eating animal here —said-he' (57) si<sup>ʔi</sup><sup>1</sup> ʔni<sup>3</sup> nde<sup>3</sup>  
 lka<sup>4</sup> nɔ<sup>2</sup> ngwɔ<sup>2</sup> ʔɔ<sup>3</sup> yhw<sup>32</sup> tyi<sup>2</sup> škwa<sup>3</sup> yhw<sup>32</sup> nu<sup>3</sup> kwɔ<sup>ʔ</sup>ɔ<sup>1</sup>  
 ndikye<sup>ʔ32</sup> nɔ<sup>2</sup> ndšku<sup>1</sup> ne<sup>ʔ3</sup> '—is-not animal here is thing  
 like that —said cook said the-particular female cooking  
 thing eating person' (58) si<sup>ʔi</sup><sup>1</sup> ʔni<sup>3</sup> nde<sup>3</sup> lka<sup>4</sup> kɔ<sup>ʔ2</sup> yhw<sup>1</sup>  
 ša<sup>ʔ3</sup> nyɔ<sup>ʔ</sup>ɔ<sup>43</sup> kɔ<sup>ʔ2</sup> yhw<sup>1</sup> '—is-not animal here is that-  
 particular —said-she— different looking, dir. that-particular

—said-she' (59) k<sub>o</sub>?<sup>2</sup> ?ni<sup>3</sup> nu<sup>3</sup> n<sub>o</sub>?<sup>2</sup> kwityi<sup>32</sup> yhw<sub>i</sub>?<sup>1</sup> k<sub>o</sub>?<sup>2</sup> nu<sup>3</sup> ?ni<sup>3</sup> ndšku<sup>1</sup> nte<sup>34</sup> yhw<sub>i</sub>?<sup>1</sup> '—that-particular animal which name frog —said-he— that's-the-one which animal eating people —said-she' (60) si?i<sup>1</sup> ?ni<sup>3</sup> nde<sup>3</sup> n<sub>o</sub>?<sup>2</sup> ša?<sup>3</sup> ny<sub>o</sub>?<sub>o</sub>?<sup>43</sup> k<sub>o</sub>?<sup>2</sup> yhw<sub>i</sub>?<sup>1</sup> '—is-not animal this thing different looking, dir. that-particular —said-she' (61) kwi?<sup>1</sup> yhw<sub>i</sub>?<sup>32</sup> ne?<sup>3</sup> ša?<sup>3</sup> kwi?<sup>1</sup> ?ni<sup>3</sup> nde<sup>3</sup> lka<sup>4</sup> ?i?<sup>2</sup> '—same —said person different— same animal here is to-it' (62) n<sub>o</sub>?<sup>2</sup> ngw<sub>o</sub>?<sup>2</sup> ny<sub>o</sub>?<sub>o</sub>?<sup>43</sup> yhw<sub>i</sub>?<sup>1</sup> ngw<sub>o</sub>?<sup>2</sup> ny<sub>o</sub>?<sub>o</sub>?<sup>43</sup> nkye?<sup>32</sup> ?i?<sup>3</sup> yhw<sub>i</sub>?<sup>1</sup> '—thing like looking, dir. —said-he— like looking, dir. cooking pronoun —said-he' (63) si?i<sup>1</sup> ?i?<sup>3</sup> yhw<sub>i</sub>?<sup>1</sup> ša?<sup>3</sup> yi?<sub>o</sub>?<sup>43</sup> k<sub>o</sub>?<sup>2</sup> ša?<sup>3</sup> yi?<sub>o</sub>?<sup>43</sup> k<sub>o</sub>?<sup>2</sup> yhw<sub>i</sub>?<sup>1</sup> '—is-not pronoun —said-she— different looked that-particular different looked that-particular —said-she' (64) lo<sup>2</sup> nde<sup>3</sup> nde<sup>3</sup> ?ni<sup>3</sup> nu<sup>3</sup> n<sub>o</sub>?<sup>2</sup> sne?<sup>12</sup> yhw<sub>i</sub>?<sup>1</sup> tše<sup>2</sup> ny<sub>o</sub>?<sub>o</sub>?<sup>43</sup> nde<sup>3</sup> yhw<sub>i</sub>?<sup>1</sup> tše<sup>2</sup> ny<sub>o</sub>?<sub>o</sub>?<sup>43</sup> nde<sup>3</sup> '—and here here animal which name toad —said-she— bad looking, dir. here —said-she— bad looking, dir. here' (65) ?ni<sup>3</sup> la<sup>2</sup> lka<sup>4</sup> nde<sup>3</sup> yhw<sub>i</sub>?<sup>1</sup> ha<sup>4</sup> ndšku<sup>1</sup> nte<sup>34</sup> nde<sup>3</sup> yhw<sub>i</sub>?<sup>1</sup> kaha<sup>1</sup> nte<sup>34</sup> si<sup>1</sup> ku<sup>2</sup> ne?<sup>3</sup> nde<sup>3</sup> yhw<sub>i</sub>?<sup>1</sup> '—animal fierce is here —said-she— negation eating people here —said-she— will-die people if will-eat person here —said-she' (66) ha<sup>4</sup> kaha<sup>1</sup> ne?<sup>3</sup> yhw<sub>i</sub>?<sup>1</sup> '—negation will-die person —said-he' (67) ?ni<sup>3</sup> tsu?we<sup>32</sup> lka<sup>4</sup> nde<sup>3</sup> yhw<sub>i</sub>?<sup>1</sup> wa<sup>2</sup> n<sub>o</sub>?<sub>o</sub>?<sup>43</sup> ndšku<sup>1</sup> ?i?<sup>3</sup> yhw<sub>i</sub>?<sup>1</sup> '—animal good is here —said-he— completion seeing-I eating-I pronoun —said-he' (68) kye?<sup>32</sup> ku?<sup>32</sup> yhw<sub>i</sub>?<sup>1</sup> '—will-cook-you will-eat-I —said-he' (69) ha<sup>4</sup> kye?<sup>43</sup> yhw<sub>i</sub>?<sup>32</sup> tyi<sup>2</sup> škwa<sup>3</sup> ha<sup>4</sup> kye?<sup>43</sup> yhw<sub>i</sub>?<sup>32</sup> nu<sup>3</sup> kw<sub>o</sub>?<sub>o</sub>?<sup>1</sup> ndikye?<sup>32</sup> n<sub>o</sub>?<sup>2</sup> ndšku<sup>1</sup> ne?<sup>3</sup> '—negation will-cook-I —said cook— negation will-cook-I —said the-particular female cooking thing eating person' (70) n<sub>o</sub>?<sup>2</sup> kaha<sup>32</sup> si<sup>1</sup> ku<sup>32</sup> ?i?<sup>3</sup> yhw<sub>i</sub>?<sup>1</sup> '—thing will-die-you if will-eat-you pronoun —said-she' (71) kye?<sup>32</sup> ku?<sup>32</sup> '—will-cook-you will-eat-I' (72) ha<sup>4</sup> kye?<sup>43</sup> yhw<sub>i</sub>?<sup>32</sup> nu<sup>3</sup> kw<sub>o</sub>?<sub>o</sub>?<sup>1</sup> '—negation will-cook-I —said the-particular female' (73) kye?<sup>32</sup> yhw<sub>i</sub>?<sup>1</sup> '—will-cook-you —said-he' (74) n<sub>o</sub>?<sup>2</sup> ?ni<sup>3</sup> tsu?we<sup>32</sup> n<sub>o</sub>?<sup>2</sup> wa<sup>2</sup> n<sub>o</sub>?<sub>o</sub>?<sup>43</sup> ndšku<sup>1</sup> ?i?<sup>2</sup> yhw<sub>i</sub>?<sup>1</sup> '—thing make good thing completion seeing-I

eating-I pronoun —said-he' (75) ha<sup>4</sup> kye<sup>7</sup>43 no<sup>2</sup> kaha<sup>32</sup> ku<sup>32</sup> ʔi<sup>2</sup> yhw<sup>i</sup>32 nu<sup>3</sup> kw<sup>o</sup>ʔo<sup>1</sup> tyi<sup>2</sup> škwa<sup>3</sup> ʔi<sup>1</sup> ne<sup>7</sup>3 ša<sup>7</sup>3 yhw<sup>i</sup>32 nu<sup>3</sup> kw<sup>o</sup>ʔo<sup>1</sup> tyi<sup>2</sup> škwa<sup>3</sup> ʔi<sup>1</sup> patru<sup>4</sup> ʔi<sup>3</sup> '—negation will-cook-I thing will-die-you will-eat-you pronoun —said the-particular female cook to person different said the-particular female cook to master pronoun' (76) ha<sup>4</sup> kye<sup>7</sup>43 no<sup>2</sup> kaha<sup>32</sup> ku<sup>32</sup> ʔi<sup>2</sup> yhw<sup>i</sup>1 '—negation will-cook-I thing will-die-you will-eat-you pronoun —said-she' (77) kye<sup>7</sup>32 ʔi<sup>1</sup> ʔi<sup>3</sup> yhw<sup>i</sup>1 no<sup>2</sup> ʔni<sup>3</sup> tsu<sup>7</sup>we<sup>32</sup> lka<sup>4</sup> ʔi<sup>3</sup> yhw<sup>i</sup>1 wa<sup>2</sup> no<sup>7</sup>ʔo<sup>43</sup> ndšku<sup>1</sup> ʔi<sup>1</sup> ʔi<sup>3</sup> yhw<sup>i</sup>1 '—will-cook-you to pronoun —said-he— thing make good is pronoun —said-he— completion seeing-I eating-I to pronoun —said-he' (78) wa<sup>2</sup> ngits<sup>o</sup>743 ʔi<sup>2</sup> wa<sup>2</sup> ngits<sup>o</sup>743 ʔi<sup>2</sup> tša<sup>7</sup>2 ʔni<sup>3</sup> la<sup>2</sup> lka<sup>4</sup> ʔi<sup>2</sup> tša<sup>7</sup>2 kaha<sup>32</sup> ku<sup>32</sup> ʔi<sup>1</sup> ʔi<sup>3</sup> '—completion telling-I pronoun completion telling-I pronoun to-the-effect-that animal fierce is pronoun to-the-effect-that will-die-you will-eat-you to pronoun' (79) wa<sup>2</sup> ngits<sup>o</sup>743 ʔi<sup>2</sup> tša<sup>7</sup>2 ha<sup>4</sup> ndšku<sup>1</sup> nte<sup>34</sup> ʔi<sup>1</sup> ʔi<sup>3</sup> '—completion telling-I pronoun that negation eating people to pronoun' (80) ha<sup>4</sup> kusu<sup>7</sup>wa<sup>32</sup> ki<sup>7</sup>ya<sup>2</sup> ʔyo<sup>21</sup> ha<sup>4</sup> tyo<sup>7</sup>o<sup>1</sup> ki<sup>7</sup>ya<sup>2</sup> ʔyo<sup>21</sup> si<sup>1</sup> kaha<sup>32</sup> ku<sup>32</sup> ʔi<sup>1</sup> ʔi<sup>3</sup> '—negation will-put sin to-me negation will-emerge, dir. sin to-me if will-die-you will-eat-you to pronoun' (81) wa<sup>2</sup> ngits<sup>o</sup>743 ʔi<sup>2</sup> tša<sup>7</sup>2 ha<sup>4</sup> kuhwi<sup>1</sup> ʔi<sup>1</sup> ʔi<sup>3</sup> tša<sup>7</sup>2 kaha<sup>32</sup> ku<sup>32</sup> ʔi<sup>1</sup> ʔi<sup>3</sup> tša<sup>7</sup>2 lka<sup>4</sup> ʔni<sup>3</sup> la<sup>2</sup> '—completion telling-I pronoun to-the-effect-that negation will-kill-I to pronoun to-the-effect-that will-die-you will-eat-you to pronoun to-the-effect-that is animal fierce' (82) wa<sup>2</sup> ngits<sup>o</sup>743 ʔi<sup>2</sup> wa<sup>2</sup> ykwi<sup>7</sup>1 lo<sup>7</sup>o<sup>2</sup> lo<sup>2</sup> ha<sup>4</sup> yno<sup>1</sup> tša<sup>7</sup>32 ykwi<sup>7</sup>1 lo<sup>7</sup>o<sup>2</sup> '—completion telling-I pronoun completion said-I with-you and negation heard-you word said-I with-you' (83) kuhwi<sup>1</sup> ʔi<sup>1</sup> ʔi<sup>3</sup> tša<sup>7</sup>2 ku<sup>32</sup> tša<sup>7</sup>2 ... ha<sup>4</sup> yno<sup>1</sup> tša<sup>7</sup>32 ykwi<sup>7</sup>1 lo<sup>7</sup>o<sup>2</sup> '—will-kill-I to pronoun in-order-that will-eat-you to-the-effect-that ... negation heard-you word spoke-I with-you' (84) kuhwi<sup>1</sup> t<sup>u</sup>732 ʔi<sup>1</sup> ʔi<sup>3</sup> ku<sup>32</sup> ha<sup>4</sup> yno<sup>1</sup> tša<sup>7</sup>32 ykwi<sup>7</sup>1 lo<sup>7</sup>o<sup>2</sup> '—will-kill-I for-sure-I to pronoun will-eat-you negation heard-you word spoke-I with-you' (85) yhw<sup>i</sup>32 yhw<sup>i</sup>1 ne<sup>7</sup>3 ša<sup>7</sup>3 yhw<sup>i</sup>32

yhw<sub>i</sub><sup>32</sup> patr<sub>u</sub><sup>4</sup> ʔ<sub>i</sub><sup>3</sup> '—killed —said man different— killed  
 —said master pronoun' (86) n<sub>o</sub><sup>2</sup> ʔ<sub>n</sub><sup>3</sup> tsu<sup>32</sup> lka<sup>4</sup> wa<sup>2</sup>  
 n<sub>o</sub>ʔ<sub>o</sub><sup>43</sup> ndšku<sup>1</sup> ʔ<sub>i</sub><sup>2</sup> yhw<sub>i</sub><sup>1</sup> '—thing make good is completion  
 seeing—I eating—I pronoun —said-he' (87) ngits<sub>o</sub>ʔ<sub>o</sub><sup>43</sup> ʔ<sub>i</sub><sup>2</sup>  
 tša<sup>2</sup> lka<sup>4</sup> ʔ<sub>n</sub><sup>3</sup> la<sup>2</sup> ʔ<sub>i</sub><sup>2</sup> ha<sup>4</sup> yn<sub>o</sub><sup>1</sup> tša<sup>32</sup> ykw<sub>i</sub>ʔ<sup>1</sup> loʔ<sub>o</sub><sup>2</sup>  
 '—telling—I pronoun to-the-effect-that is animal fierce  
 pronoun negation heard-you word spoke-I with-you' (88)  
 yhw<sub>i</sub><sup>1</sup> tyi<sup>2</sup> škwa<sup>3</sup> ʔ<sub>i</sub><sup>2</sup> yhw<sub>i</sub><sup>1</sup> nu<sup>3</sup> kw<sub>o</sub>ʔ<sub>o</sub><sup>1</sup> ndikye<sup>32</sup> n<sub>o</sub><sup>2</sup>  
 ndšku<sup>1</sup> ne<sup>3</sup> 'killed cook pronoun killed the-particular  
 female cooking thing eating he' (89) yhw<sub>i</sub><sup>32</sup> ʔ<sub>i</sub><sup>2</sup> lo<sup>2</sup> nkye<sup>32</sup>  
 ʔ<sub>i</sub><sup>1</sup> ʔ<sub>i</sub><sup>3</sup> ngwa<sup>4</sup> ʔ<sub>i</sub><sup>3</sup> kalu<sup>4</sup> ndšku<sup>1</sup> ne<sup>3</sup> nu<sup>3</sup> lka<sup>4</sup> ska<sup>3</sup> sne<sup>12</sup>  
 ko<sub>o</sub><sup>1</sup> 'killed pronoun and cooking to pronoun was, dir.  
 pronoun soup eating person which is one toad that-particular'  
 (90) ko<sub>o</sub><sup>2</sup> nda<sup>43</sup> ne<sup>2</sup> nda<sup>32</sup> ngusu<sup>32</sup> wa<sup>43</sup> nkye<sup>23</sup> ti<sup>3</sup> kalu<sup>4</sup>  
 ko<sub>o</sub><sup>2</sup> ngusu<sup>32</sup> wa<sup>43</sup> tyi<sup>2</sup> škwa<sup>3</sup> ʔ<sub>i</sub><sup>1</sup> o<sup>3</sup> ni<sup>2</sup> ki<sup>3</sup> no<sub>o</sub><sup>3</sup> 'that's-  
 the-one giving person giving put cooking only soup that's-  
 the-one put cook to it inside plate' (91) nda<sup>32</sup> yku<sup>2</sup> ne<sup>3</sup>  
 'giving ate person' (92) laha<sup>32</sup> ndukwa<sup>43</sup> ne<sup>2</sup> ndšku<sup>1</sup> ne<sup>3</sup>  
 kalu<sup>4</sup> ko<sub>o</sub><sup>2</sup> ʔ<sub>i</sub><sup>2</sup> 'empty is-on person eating person soup that-  
 particular pronoun' (93) bra<sup>34</sup> ngwilyu<sup>32</sup> ne<sup>2</sup> bra<sup>3</sup> ko<sub>o</sub><sup>2</sup>  
 bra<sup>34</sup> nguhi<sup>32</sup> ne<sup>2</sup> 'immediately fell-over person then  
 immediately died person'

(94) la<sup>1</sup> ʔa<sup>2</sup> ʔ<sub>n</sub><sup>3</sup> nu<sup>3</sup> n<sub>o</sub><sup>2</sup> sne<sup>12</sup> ʔ<sub>n</sub><sup>3</sup> la<sup>1</sup> ʔa<sup>2</sup> lka<sup>4</sup> ko<sub>o</sub><sup>2</sup>  
 'fierce very animal which name toad animal fierce very is  
 that-particular' (95) ha<sup>4</sup> su<sup>32</sup> wa<sup>43</sup> ny<sub>o</sub>ʔ<sub>o</sub><sup>43</sup> ʔ<sub>i</sub><sup>2</sup> loʔ<sub>o</sub><sup>1</sup> ʔ<sub>n</sub><sup>3</sup>  
 nu<sup>3</sup> n<sub>o</sub><sup>2</sup> kwityi<sup>32</sup> 'negation will-put looking, dir. pronoun  
 with animal which name frog' (96) ʔ<sub>n</sub><sup>3</sup> nu<sup>3</sup> kwityi<sup>32</sup> ʔ<sub>i</sub><sup>2</sup>  
 ša<sup>3</sup> ny<sub>o</sub>ʔ<sub>o</sub><sup>43</sup> ko<sub>o</sub><sup>2</sup> ʔ<sub>n</sub><sup>3</sup> tsu<sup>32</sup> wa<sup>43</sup> lka<sup>4</sup> ko<sub>o</sub><sup>2</sup> ʔ<sub>n</sub><sup>3</sup> ndšku<sup>1</sup>  
 nte<sup>34</sup> lka<sup>4</sup> ko<sub>o</sub><sup>2</sup> 'animal the-particular frog pronoun different  
 looking, dir. that-particular animal good is that-particular  
 animal eating people is that-particular' (97) ʔ<sub>n</sub><sup>3</sup> tsu<sup>32</sup> wa<sup>43</sup>  
 lka<sup>4</sup> ko<sub>o</sub><sup>2</sup> lo<sup>2</sup> ʔ<sub>n</sub><sup>3</sup> nu<sup>3</sup> n<sub>o</sub><sup>2</sup> sne<sup>12</sup> tše<sup>2</sup> ny<sub>o</sub>ʔ<sub>o</sub><sup>43</sup> ko<sub>o</sub><sup>2</sup> ša<sup>3</sup>  
 ny<sub>o</sub>ʔ<sub>o</sub><sup>43</sup> ko<sub>o</sub><sup>2</sup> tše<sup>2</sup> ny<sub>o</sub>ʔ<sub>o</sub><sup>43</sup> ko<sub>o</sub><sup>2</sup> 'animal good is that-  
 particular and animal which name toad bad looking, dir. that-  
 particular different looking, dir. that-particular bad looking,  
 dir. that-particular' (98) ko<sub>o</sub><sup>2</sup> tša<sup>2</sup> 'that-particular thing'

(99) wa<sup>2</sup> lka<sup>4</sup> nyo<sup>2</sup>ʔo<sup>43</sup> nɔ<sup>2</sup> ska<sup>3</sup> ʔni<sup>3</sup> siʔya<sup>1</sup> suʔwa<sup>43</sup> nyo<sup>2</sup>ʔo<sup>43</sup>  
 ʔni<sup>2</sup> ʔi<sup>3</sup> 'completion is kind-of name one animal because  
 same looking, dir. animal pronoun' (100) siʔi<sup>1</sup> ska<sup>3</sup> ti<sup>3</sup>  
 nyo<sup>2</sup>ʔo<sup>43</sup> nɔ<sup>2</sup> ʔi<sup>3</sup> nda<sup>32</sup> ska<sup>3</sup> yiʔo<sup>43</sup> nɔ<sup>2</sup> ʔi<sup>1</sup> ska<sup>3</sup> ʔni<sup>3</sup> 'is-  
 not one only looking, dir. name pronoun giving one looked  
 name to one animal'

10.2. The free translation of the text 'Toad Soup' follows.

I will tell you about what happened to a man once, at a place where people live near here. Those people know how to eat frogs, the animals which live in springs. They go to the spring at night to catch them. They eat frogs and like them because they are good, tasty animals. They make soup (or stew) out of them and eat them often. They had some frog soup cooked ready for their breakfast one day.

A Mexican on a mule passed by that place. He was hungry for a meal, he wanted breakfast. This Mexican was passing the village which people call Frog Spring. This Mexican on the mule was the one who was hungry for his breakfast. "Don't you have anything you could sell me for breakfast?" he asked.

"We have," said the people who lived there; "We have soup," they said. "The animal which is called frog, that's the kind of soup there is. People eat these little animals and say they are very tasty. They are spring animals and we went to the spring and killed them, then made this soup. We do not have any better soup nor any better meat."

"That is all right. Sell me what you have and I will eat it," said the Mexican. "Anything that people eat is good for eating. It must be good because that's why you eat it. That is all right. I will buy some to eat. I am so hungry for my breakfast, so hungry for a meal!" he said.

"Very good," said the people who lived there. So they sold him some frog soup and he ate it. It was very well



flavoured and they had put plenty of tomato in it. The Mexican liked this dish that those people ate. He ate the frog's head, he ate the whole of the frog's body: they had put plenty of meat in the plate and he ate it all. He really liked this tasty food. When he had finished eating he went out, mounted his mule and left.

Eventually he got home to his coffee ranch, called Cooking-pot Mountain. This Mexican was the owner of Cooking-pot Mountain coffee ranch, and he had a cook there who cooked his food for him. He saw a toad hopping along and said to his cook, "Kill this animal. Kill it and cook it. Make it into soup for me to eat," he said. He said this to his cook, to the woman who cooked his food.

"Don't speak like that," said his cook to him. "Don't speak like that, because this is a dangerous animal," she said. "People don't eat this animal," she said. "This animal is called a toad."

"It is not dangerous," he said. "This is a good animal which I have seen and eaten and it is very tasty," he said. "This is the animal that was given to me to eat on the trail on the way home. When I arrived at the village I was very hungry for a meal, I was hungry for breakfast," he said, "and this is the animal from which they made soup and gave me some to eat," he said. "This animal is very tasty and very good to eat."

"This is not the same animal," said the cook. "This is not the same as that one. It's different looking," she said. "That animal was a frog which is an animal that people eat," she said. "It's not the same as this animal here."

"It is the same," said the Mexican, "this is the very same animal. It looked just like this one. This is the one that was cooked," he said.

"It isn't," she said, "that one was different. That one was different!" she said. "And the animal here is a toad, a bad-looking animal. This is a dangerous animal and people don't eat it," she said. "People die if they eat this one."

"They will not die," he said, "this is a good animal that I have seen and eaten," he said. "Cook it for me to eat."

"I will not cook it," said the cook. "I will not cook it," said the woman who cooked his food. "You will die if you eat it."

"Cook it for me to eat!"

"I will not cook it," said the woman.

"Cook it!" he said. "It is a good animal that I have seen and eaten."

"I will not cook anything which will kill you when you eat it," said the woman who was his cook to the Mexican, her master. "I will not cook anything that would kill you," she said.

"You are to cook it," he said, "because it is a good thing that I have seen and eaten."

"I've told you that this is a dangerous animal and you will die if you eat it. I've told you that people do not eat it. It won't be my fault if you die when you eat it. I have told you that I will not kill it, that you will die if you eat it and that it is a dangerous animal. I've told you and spoken to you but you wouldn't listen to what I said. I will kill it and you can eat it because you didn't listen to what I said. I will certainly kill it for you to eat because you wouldn't listen."

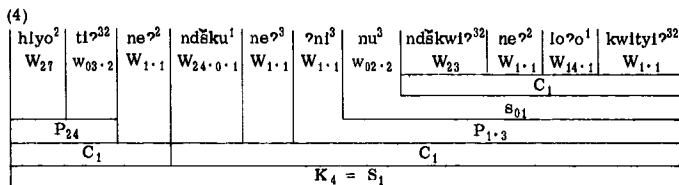
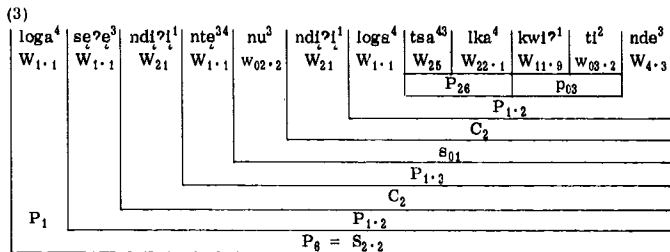
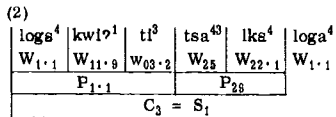
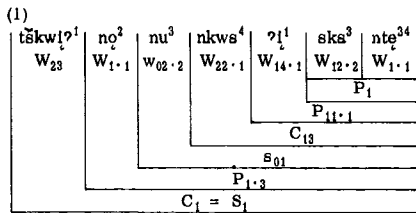
Then the Mexican said, "When it is killed you will see that it is a good animal to eat."

"I've told you that it is a dangerous animal, but you would not listen," said his cook. So she killed and cooked it for him. She made toad soup for him to eat. That is what she cooked for him and put on a plate for him to eat. He ate it all till the plate was empty. Immediately he fell over and immediately was dead.

The toad is a very, very dangerous animal, and it does not look the same as a frog. The frog looks different and is a good animal which people can eat. The frog is a good animal but the toad looks different and is a bad animal. That is how it is. There is one name for one kind of animal since

all of one kind of animal look the same. These (two) do not look the same, so one name is given to just one kind of animal.

10.3. The following charts show the detailed analysis of the text 'Toad Soup'. The number of tagmemes in a particular structural type at any level is indicated by the vertical lines, while the particular level is indicated by the horizontal lines.



(5)

$\text{ʔni}^3$ $W_{1 \cdot 1}$	$\text{nu}^3$ $W_{02 \cdot 2}$	$\text{no}^2$ $W_{22 \cdot 2}$	$\text{kwityi}^{\text{ʔ}32}$ $W_{1 \cdot 1}$	$\text{ʔi}^2$ $W_{4 \cdot 2}$	$\text{tšku}^1$ $W_{1 \cdot 3}$	$\text{ndyukwa}^{32}$ $W_{21}$	$\text{kə}^{\text{ʔ}2}$ $W_{4 \cdot 3}$
$C_2$							
$S_{01}$							
$P_{1 \cdot 3}$							
$C_{12} = S_1$							

(6)

$\text{tšku}^1$ $W_{1 \cdot 3}$	$\text{ndy}^{\text{ʔ}0}^{\text{ʔ}32}$ $W_{23}$	$\text{no}^1$ $W_{23}$	$\text{ne}^{\text{ʔ}3}$ $W_{1 \cdot 1}$	$\text{kə}^{\text{ʔ}2}$ $W_{4 \cdot 3}$
$C_{11}$		$C_1$		
$K_3 = S_1$				

(7)

$\text{tia}^4$ $W_{3 \cdot 1}$	$\text{ndy}^{\text{ʔ}0}^{\text{ʔ}32}$ $W_{23}$	$\text{ne}^{\text{ʔ}2}$ $W_{1 \cdot 1}$	$\text{tšku}^1$ $W_{1 \cdot 3}$	$\text{ndih}^{32}$ $W_{24}$	$\text{kə}^{\text{ʔ}2}$ $W_{4 \cdot 3}$	$\text{ʔi}^1$ $W_{14 \cdot 1}$	$\text{ne}^{\text{ʔ}3}$ $W_{1 \cdot 1}$	$\text{nšny}^{32}$ $W_{23}$	$\text{ne}^{\text{ʔ}2}$ $W_{1 \cdot 1}$	$\text{kə}^{\text{ʔ}2}$ $W_{4 \cdot 3}$
$C_{11}$				$C_1$			$P_4$			
				$K_2$					$C_{11}$	
$K_{13} = S_1$										

(8)

$\text{ʔni}^3$ $W_{1 \cdot 1}$	$\text{tsu}^{\text{ʔ}we}^{32}$ $W_{11 \cdot 3}$	$\text{ika}^4$ $W_{22 \cdot 1}$	$\text{kə}^{\text{ʔ}2}$ $W_{4 \cdot 3}$
$P_{1 \cdot 1}$			
$C_3 = S_1$			

(9)

$\text{ndšku}^1$ $W_{24}$	$\text{ne}^{\text{ʔ}3}$ $W_{1 \cdot 1}$	$\text{ʔi}^2$ $W_{4 \cdot 2}$	$\text{ndšku}^{32}$ $W_{24}$	$\text{tsu}^{\text{ʔ}we}^{32}$ $W_{11 \cdot 3}$	$\text{ndšku}^{32}$ $W_{24}$	$\text{kə}^{\text{ʔ}2}$ $W_{4 \cdot 3}$
$C_1$			$C_1$	$C_1$		
			$K_{11}$			
$K_{11} = S_1$						

(10)

$\text{ʔni}^3$ $W_{1 \cdot 1}$	$\text{š}^{\text{ʔ}4}$ $W_{11 \cdot 3}$	$\text{ika}^4$ $W_{22 \cdot 1}$	$\text{kə}^{\text{ʔ}2}$ $W_{4 \cdot 3}$	$\text{ʔni}^3$ $W_{1 \cdot 1}$	$\text{tsu}^{\text{ʔ}we}^{32}$ $W_{11 \cdot 3}$	$\text{ika}^4$ $W_{22 \cdot 1}$	$\text{kə}^{\text{ʔ}2}$ $W_{4 \cdot 3}$
$P_{1 \cdot 1}$				$P_{1 \cdot 1}$			
$C_3$				$C_3$			
$K_1 = S_1$							

(11)

$\text{kalu}^4$ $W_{1 \cdot 1}$	$\text{ndška}^{43}$ $W_{22 \cdot 1}$	$\text{kə}^{\text{ʔ}2}$ $W_{4 \cdot 3}$	$\text{ʔni}^3$ $W_{1 \cdot 1}$	$\text{tsu}^{\text{ʔ}we}^{32}$ $W_{11 \cdot 3}$	$\text{ika}^4$ $W_{22 \cdot 1}$	$\text{kə}^{\text{ʔ}2}$ $W_{4 \cdot 3}$
		$P_{1 \cdot 1}$				
$C_{13}$			$C_3$			
$K_2 = S_1$						

(12)

lye <sup>32</sup>	ʔa <sup>1</sup>	ndʂku <sup>1</sup>	nte <sup>34</sup>	ko <sup>ʔ2</sup>	ʔni <sup>3</sup>	tsu <sup>ʔwe32</sup>	lka <sup>4</sup>	ko <sup>ʔ2</sup>
W <sub>11·8</sub>	w <sub>21·1</sub>	W <sub>24</sub>	W <sub>1·1</sub>	W <sub>4·3</sub>	W <sub>1·1</sub>	W <sub>11·3</sub>	W <sub>22·1</sub>	W <sub>4·3</sub>
C <sub>6</sub>		C <sub>1</sub>			P <sub>1·1</sub>			
K <sub>4</sub>					C <sub>3</sub>			
K <sub>2</sub> = S <sub>1</sub>								

(13)

lo <sup>2</sup>	ndiya <sup>31</sup>	kalu <sup>4</sup>	ko <sup>ʔ2</sup>	ndiya <sup>21</sup>	kalu <sup>4</sup>	nkye <sup>ʔ23</sup>	ko <sup>ʔ2</sup>	ʔi <sup>1</sup>	nte <sup>34</sup>
W <sub>14·2</sub>	W <sub>21</sub>	W <sub>1·1</sub>	W <sub>4·3</sub>	W <sub>21</sub>	W <sub>1·1</sub>	W <sub>22</sub>	W <sub>4·3</sub>	W <sub>14·1</sub>	W <sub>1·1</sub>
		P <sub>1·1</sub>		P <sub>1·2</sub>		P <sub>4</sub>			
C <sub>2</sub>			C <sub>2</sub>						
K <sub>11</sub>									
S <sub>1</sub>									

(14)

ndiya <sup>21</sup>	kalu <sup>4</sup>	nkye <sup>ʔ23</sup>	ko <sup>ʔ2</sup>	ʔi <sup>1</sup>	nte <sup>34</sup>	ko <sup>ʔ2</sup>	kalu <sup>4</sup>	yku <sup>32</sup>	lomsa <sup>34</sup>	nte <sup>34</sup>
W <sub>21</sub>	W <sub>1·1</sub>	W <sub>22</sub>	W <sub>4·3</sub>	W <sub>14·1</sub>	W <sub>1·1</sub>	W <sub>14·3</sub>	W <sub>1·1</sub>	W <sub>24</sub>	W <sub>1·2</sub>	W <sub>1·1</sub>
P <sub>1·2</sub>		P <sub>4</sub>				P <sub>3</sub>				
C <sub>2</sub>						C <sub>4</sub>				
S <sub>21</sub>										

(15)

kalu <sup>4</sup>	kwityi <sup>ʔ32</sup>	ko <sup>ʔ2</sup>	yku <sup>32</sup>	lomsa <sup>34</sup>	nte <sup>34</sup>
W <sub>1·1</sub>	W <sub>1·1</sub>	W <sub>14·3</sub>	W <sub>24</sub>	W <sub>1·2</sub>	W <sub>1·1</sub>
P <sub>2</sub>		P <sub>3</sub>			
			C <sub>4</sub>		
S <sub>21</sub>					

(16)

ndiya <sup>21</sup>	kalu <sup>4</sup>	ko <sup>ʔ2</sup>	ʔi <sup>1</sup>	ne <sup>ʔ3</sup>
W <sub>21</sub>	W <sub>1·1</sub>	W <sub>4·3</sub>	W <sub>14·1</sub>	W <sub>1·1</sub>
P <sub>1·1</sub>		P <sub>4</sub>		
C <sub>3</sub> = S <sub>1</sub>				

(17)

ko <sup>ʔ2</sup>	ngudih <sup>32</sup>	ska <sup>3</sup>	ne <sup>ʔ3</sup>	eka <sup>3</sup>	ne <sup>ʔ3</sup>	ša <sup>ʔ3</sup>	ndukwa <sup>43</sup>	ne <sup>ʔ2</sup>	kwiyu <sup>34</sup>
W <sub>14·3</sub>	W <sub>23</sub>	W <sub>12·2</sub>	W <sub>1·1</sub>	W <sub>12·2</sub>	W <sub>1·1</sub>	W <sub>11·2</sub>	W <sub>21</sub>	W <sub>1·1</sub>	W <sub>1·1</sub>
		P <sub>1</sub>		P <sub>1·1</sub>					
		P <sub>6</sub>							
C <sub>1</sub>							C <sub>2</sub>		
K <sub>11</sub>									
S <sub>21</sub>									

(18)

ngite <sup>91</sup> W <sub>27</sub>	ti <sup>932</sup> w <sub>03.2</sub>	ne <sup>93</sup> W <sub>1.1</sub>	ku <sup>12</sup> W <sub>24</sub>	ne <sup>93</sup> W <sub>1.1</sub>	kyha <sup>3</sup> W <sub>1.1</sub>	ngite <sup>91</sup> W <sub>27</sub>	ti <sup>932</sup> w <sub>03.2</sub>	ne <sup>92</sup> W <sub>1.1</sub>	ku <sup>32</sup> W <sub>24</sub>	lomsa <sup>34</sup> W <sub>1.2</sub>	ne <sup>93</sup> W <sub>1.1</sub>
P <sub>24</sub>		C <sub>1</sub>			P <sub>24</sub>			C <sub>1</sub>		P <sub>3</sub>	
K <sub>4</sub>					K <sub>4</sub>						
K <sub>11</sub> = S <sub>1</sub>											

(19)

ngudih <sup>32</sup> W <sub>23</sub>	ne <sup>93</sup> W <sub>1.1</sub>	se <sup>9e3</sup> W <sub>1.1</sub>	ngo <sup>9o32</sup> W <sub>21</sub>	ska <sup>3</sup> W <sub>12.2</sub>	nte <sup>34</sup> W <sub>1.1</sub>	nu <sup>3</sup> w <sub>02.2</sub>	ne <sup>93</sup> W <sub>1.1</sub>	to <sup>2</sup> W <sub>1.1</sub>
P <sub>1</sub>				P <sub>1</sub>		P <sub>2</sub>		P <sub>1</sub>
P <sub>6</sub>				C <sub>2</sub>				
P <sub>1.2</sub>								
C <sub>1</sub> = S <sub>1</sub>								

(20)

loga <sup>4</sup> W <sub>1.1</sub>	ee <sup>9e3</sup> W <sub>1.1</sub>	nu <sup>3</sup> w <sub>02.2</sub>	ndškw <sup>1932</sup> W <sub>23</sub>	ne <sup>92</sup> W <sub>1.1</sub>	lo <sup>9o1</sup> W <sub>14.1</sub>	lahs <sup>32</sup> W <sub>11.3</sub>	yu <sup>2</sup> W <sub>1.1</sub>	tšku <sup>1</sup> W <sub>1.3</sub>	kwly <sup>1932</sup> W <sub>1.1</sub>	ndškw <sup>1932</sup> W <sub>23</sub>	ne <sup>92</sup> W <sub>1.1</sub>
C <sub>1</sub>			K <sub>4</sub>				C <sub>5</sub>		C <sub>1</sub>		
S <sub>01</sub>								P <sub>2</sub>			
P <sub>1.3</sub>								P <sub>4</sub>			
S <sub>2.2</sub>										C <sub>1</sub>	

ko <sup>92</sup> W <sub>14.3</sub>	ika <sup>4</sup> W <sub>22.1</sub>	ngudih <sup>32</sup> W <sub>23</sub>	ne <sup>92</sup> W <sub>1.1</sub>
C <sub>3</sub>		C <sub>1</sub>	
K <sub>4</sub>			
S <sub>21</sub>			

(21)

ne <sup>93</sup> W <sub>1.1</sub>	ša <sup>93</sup> W <sub>11.2</sub>	ndukwa <sup>43</sup> W <sub>21</sub>	kwly <sup>34</sup> W <sub>1.1</sub>	ko <sup>92</sup> W <sub>14.3</sub>	ngite <sup>91</sup> W <sub>27</sub>	ti <sup>932</sup> w <sub>03.2</sub>	ne <sup>92</sup> W <sub>1.1</sub>	ku <sup>32</sup> W <sub>24.1</sub>	lomsa <sup>34</sup> W <sub>1.2</sub>	ne <sup>93</sup> W <sub>1.1</sub>
P <sub>1.1</sub>		C <sub>2</sub>			P <sub>24</sub>			C <sub>1</sub>		P <sub>3</sub>
C <sub>2</sub>					K <sub>4</sub>					
S <sub>21</sub>										

(22)

9a <sup>4</sup> w <sub>03.1</sub>	ska <sup>3</sup> W <sub>12.2</sub>	no <sup>2</sup> W <sub>1.1</sub>	ndiya <sup>21</sup> W <sub>21</sub>	9 <sup>2</sup> W <sub>4.2</sub>	kuhw <sup>1932</sup> W <sub>23</sub>	ka <sup>4</sup> W <sub>22.1</sub>	lomsa <sup>34</sup> W <sub>1.2</sub>	9yo <sup>21</sup> W <sub>4.2</sub>	yhw <sup>1</sup> W <sub>26</sub>
P <sub>04</sub>		P <sub>1</sub>			C <sub>2</sub>		C <sub>1</sub>		
K <sub>4</sub>					C <sub>3</sub>				
K <sub>4</sub> = S <sub>31</sub>									C <sub>21</sub>
S <sub>32</sub>									

(23)

ndiya <sup>21</sup>	yhw <sup>1</sup>	kq <sup>2</sup>	yhw <sup>32</sup>	ne <sup>2</sup>	ngwa <sup>4</sup>	tyl <sup>2</sup>
W <sub>21</sub>	W <sub>26</sub>	W <sub>14.3</sub>	W <sub>26</sub>	W <sub>1.1</sub>	W <sub>22.1</sub>	W <sub>1.4</sub>
C <sub>2</sub> = S <sub>32</sub>			C <sub>3</sub>			
S <sub>32</sub>			C <sub>31</sub>			
S <sub>21</sub>						

(24)

ndiya <sup>21</sup>	kalu <sup>4</sup>	yhw <sup>32</sup>	ne <sup>2</sup>
W <sub>21</sub>	W <sub>1.1</sub>	W <sub>26</sub>	W <sub>1.1</sub>
C <sub>2</sub> = S <sub>31</sub>		C <sub>21</sub>	
S <sub>32</sub>			

(25)

ni <sup>3</sup>	nu <sup>3</sup>	ndškw <sup>32</sup>	ne <sup>2</sup>	lo <sup>2</sup>	kwity <sup>32</sup>	kq <sup>2</sup>	kalu <sup>4</sup>	ndiya <sup>21</sup>	ba <sup>3</sup>
W <sub>1.1</sub>	W <sub>02.2</sub>	W <sub>23</sub>	W <sub>1.1</sub>	W <sub>14.1</sub>	W <sub>1.1</sub>	W <sub>14.3</sub>	W <sub>1.1</sub>	W <sub>21</sub>	W <sub>4.2</sub>
C <sub>1</sub>						C <sub>2</sub>			
S <sub>01</sub>						C <sub>2</sub>			
P <sub>1.3</sub>						C <sub>2</sub>			
S <sub>21</sub>									

(26)

ni <sup>3</sup>	luwe <sup>2</sup>	ti <sup>3</sup>	lka <sup>4</sup>	ti <sup>2</sup>
W <sub>1.1</sub>	W <sub>11.6</sub>	W <sub>03.2</sub>	W <sub>23.1</sub>	W <sub>4.2</sub>
P <sub>1.1</sub>				
C <sub>3</sub> = S <sub>1</sub>				

(27)

ndšku <sup>32</sup>	nte <sup>34</sup>	ti <sup>1</sup>	ti <sup>3</sup>	š <sup>2</sup>	ni <sup>3</sup>	lka <sup>4</sup>	ti <sup>2</sup>
W <sub>24</sub>	W <sub>1.1</sub>	W <sub>14.1</sub>	W <sub>4.2</sub>	W <sub>11.3</sub>	W <sub>1.1</sub>	W <sub>22.1</sub>	W <sub>4.2</sub>
C <sub>1</sub>				C <sub>6</sub>		C <sub>3</sub>	
K <sub>2</sub> = S <sub>1</sub>				K <sub>4</sub>			

(28)

ni <sup>3</sup>	šku <sup>1</sup>	šku <sup>1</sup>	ya <sup>43</sup>	ba <sup>3</sup>	yhw <sup>32</sup>	ti <sup>3</sup>	ba <sup>3</sup>	ni <sup>3</sup>	ndšku <sup>1</sup>	nte <sup>34</sup>	lka <sup>4</sup>	ti <sup>2</sup>
W <sub>1.1</sub>	W <sub>1.3</sub>	W <sub>1.3</sub>	W <sub>23</sub>	W <sub>04</sub>	W <sub>23</sub>	W <sub>4.3</sub>	W <sub>4.2</sub>	W <sub>1.1</sub>	W <sub>24</sub>	W <sub>1.1</sub>	W <sub>22.1</sub>	W <sub>4.2</sub>
P <sub>2</sub>		C <sub>1</sub>			C <sub>11</sub>			P <sub>1.2</sub>			C <sub>3</sub>	
K <sub>3</sub>						C <sub>11</sub>			C <sub>3</sub>			
K <sub>2</sub>												

K <sub>2</sub>	kq <sup>2</sup>	kalu <sup>4</sup>	ndiya <sup>21</sup>	ba <sup>3</sup>
	W <sub>14.3</sub>	W <sub>1.1</sub>	W <sub>21</sub>	W <sub>4.2</sub>
	C <sub>2</sub>			
S <sub>21</sub>				

(29)

ha <sup>4</sup> w <sub>03.1</sub>	ndiya <sup>21</sup> W <sub>21</sub>	kalu <sup>4</sup> W <sub>1.1</sub>	nu <sup>3</sup> w <sub>02.2</sub>	tsu <sup>7</sup> we <sup>32</sup> W <sub>11.3</sub>	la <sup>3</sup> w <sub>01.3</sub>	ha <sup>4</sup> w <sub>03.1</sub>	ndiya <sup>21</sup> W <sub>21</sub>	kuno <sup>7</sup> <sup>1</sup> W <sub>1.4</sub>	nu <sup>3</sup> w <sub>02.2</sub>	tsu <sup>7</sup> we <sup>32</sup> W <sub>11.3</sub>	la <sup>3</sup> w <sub>01.2</sub>
		P <sub>01</sub>							P <sub>01</sub>		
		S <sub>01</sub>							S <sub>01</sub>		
P <sub>21</sub>		P <sub>1.2</sub>			P <sub>21</sub>		P <sub>1.3</sub>				
C <sub>2</sub>						C <sub>2</sub>					
K <sub>1</sub> = S <sub>1</sub>											

(30)

ka <sup>4</sup> W <sub>22</sub>	tu <sup>9</sup> <sup>32</sup> w <sub>03.2</sub>	ko <sup>7</sup> <sup>2</sup> W <sub>14.3</sub>	kuhw <sup>1</sup> <sup>9</sup> <sup>32</sup> W <sub>23</sub>	ku <sup>32</sup> W <sub>24</sub>	yhw <sup>1</sup> <sup>32</sup> W <sub>26</sub>	ne <sup>7</sup> <sup>3</sup> W <sub>1.1</sub>	ša <sup>7</sup> <sup>3</sup> W <sub>11.2</sub>	ko <sup>7</sup> <sup>2</sup> W <sub>4.3</sub>
		C <sub>1</sub>				P <sub>1.1</sub>		
C <sub>22</sub>		K <sub>12</sub>						
S <sub>21</sub> = S <sub>31</sub>				C <sub>21</sub>				
S <sub>32</sub>								

(31)

ndšga <sup>3</sup> W <sub>11.1</sub>	no <sup>2</sup> W <sub>1.1</sub>	ndšku <sup>1</sup> W <sub>24</sub>	nte <sup>3</sup> <sup>34</sup> W <sub>1.1</sub>	tsu <sup>7</sup> we <sup>32</sup> W <sub>11.3</sub>	ndšku <sup>32</sup> W <sub>24</sub>
C <sub>1</sub>					
P <sub>1.2</sub>			P <sub>31</sub>		
C <sub>1</sub> = S <sub>1</sub>					

(32)

tsu <sup>7</sup> we <sup>32</sup> W <sub>11.3</sub>	ndšku <sup>32</sup> W <sub>24</sub>	lo <sup>2</sup> W <sub>14.2</sub>	ko <sup>7</sup> <sup>2</sup> W <sub>4.3</sub>	tša <sup>7</sup> <sup>2</sup> W <sub>1.1</sub>	ndšku <sup>32</sup> W <sub>24</sub>	w <sup>0</sup> <sup>2</sup> w <sub>04</sub>	ʔ <sup>1</sup> <sup>3</sup> W <sub>4.2</sub>
C <sub>6</sub>		C <sub>1</sub>		C <sub>6</sub>		C <sub>1</sub>	
K <sub>4</sub>			S <sub>12</sub>				

no <sup>2</sup> W <sub>1.1</sub>	ndšku <sup>32</sup> W <sub>24</sub>	nte <sup>3</sup> <sup>34</sup> W <sub>1.1</sub>	lka <sup>4</sup> W <sub>22.1</sub>	ko <sup>7</sup> <sup>2</sup> W <sub>4.3</sub>	tša <sup>7</sup> <sup>2</sup> W <sub>2.1</sub>	ndšku <sup>32</sup> W <sub>24</sub>	w <sup>0</sup> <sup>2</sup> w <sub>04</sub>	ʔ <sup>1</sup> <sup>3</sup> W <sub>4.2</sub>
C <sub>1</sub>								
P <sub>1.2</sub>								
C <sub>3</sub>			C <sub>6</sub>		C <sub>1</sub>			
S <sub>12</sub>				S <sub>12</sub>				
K <sub>11</sub> = S <sub>1</sub>								

(33)

ka <sup>4</sup> W <sub>22</sub>	tu <sup>9</sup> <sup>32</sup> w <sub>03.2</sub>	ko <sup>7</sup> <sup>2</sup> W <sub>14.3</sub>	kuhw <sup>1</sup> <sup>9</sup> <sup>32</sup> W <sub>23</sub>	ku <sup>32</sup> W <sub>24</sub>
		C <sub>1</sub>		C <sub>1</sub>
C <sub>22</sub>		K <sub>12</sub>		
S <sub>21</sub>				



# ANALYSED TEXT

(34)

ngite <sup>21</sup>	sa <sup>2</sup> a <sup>2</sup>	ti <sup>43</sup>	ku <sup>32</sup>	loms <sup>43</sup>	ngite <sup>21</sup>	sa <sup>2</sup> a <sup>2</sup>	ti <sup>43</sup>	ku <sup>32</sup>	kyha <sup>3</sup>	yhw <sup>11</sup>	
W <sub>27</sub>	W <sub>01.1</sub>	W <sub>03.2</sub>	W <sub>24</sub>	W <sub>1.2</sub>	W <sub>27</sub>	W <sub>01.1</sub>	W <sub>03.2</sub>	W <sub>24</sub>	W <sub>1.1</sub>	W <sub>28</sub>	
P <sub>24</sub> = C <sub>1</sub>			C <sub>1</sub>		P <sub>24</sub> = C <sub>1</sub>			C <sub>1</sub>			
K <sub>4</sub>				K <sub>4</sub>							
K <sub>1</sub> = S <sub>31</sub>								C <sub>21</sub>			
S <sub>32</sub>											

(35)

tsu <sup>2</sup> we <sup>32</sup>	lye <sup>32</sup>	yhw <sup>11</sup>	ne <sup>2</sup>	ngwa <sup>4</sup>	tyi <sup>2</sup>
W <sub>11.3</sub>	W <sub>11.8</sub>	W <sub>28</sub>	W <sub>1.1</sub>	W <sub>22.1</sub>	W <sub>1.2</sub>
P <sub>28</sub> = C <sub>8</sub> = S <sub>31</sub>			C <sub>21</sub>		
S <sub>32</sub>					

lo <sup>2</sup>	yhw <sup>11</sup>	ne <sup>2</sup>	kalu <sup>4</sup>	kwityi <sup>32</sup>	lo <sup>2</sup>	yku <sup>2</sup>	ne <sup>2</sup>
W <sub>14.2</sub>	W <sub>23</sub>	W <sub>1.1</sub>	W <sub>1.1</sub>	W <sub>1.1</sub>	W <sub>14.2</sub>	W <sub>24</sub>	W <sub>1.1</sub>
P <sub>2</sub>				C <sub>1</sub>			
S <sub>16</sub>							

(36)

tsu <sup>2</sup> we <sup>32</sup>	yu <sup>2</sup> wi <sup>43</sup>	šiy <sup>2</sup>	kalu <sup>4</sup>	kwityi <sup>32</sup>	tsu <sup>2</sup> we <sup>32</sup>	yu <sup>2</sup> wi <sup>43</sup>	mš <sup>14</sup>	lo <sup>2</sup>	q <sup>3</sup>
W <sub>11.3</sub>	W <sub>22</sub>	W <sub>1.1</sub>	W <sub>1.1</sub>	W <sub>1.1</sub>	W <sub>11.3</sub>	W <sub>22</sub>	W <sub>1.1</sub>	W <sub>14.1</sub>	W <sub>04</sub>
P <sub>21</sub>		P <sub>3</sub>			P <sub>21</sub>		P <sub>11.1</sub>		
C <sub>12</sub>				C <sub>12</sub>					
K <sub>1</sub> = S <sub>1</sub>									

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ngudiya <sup>21</sup>	ti <sup>32</sup>	ne <sup>2</sup>	ša <sup>2</sup>	no <sup>2</sup>	yku <sup>2</sup>	ne <sup>2</sup>
W <sub>21</sub>	W <sub>03.2</sub>	W <sub>1.1</sub>	W <sub>11.2</sub>	W <sub>1.1</sub>	W <sub>24</sub>	W <sub>1.1</sub>
P <sub>24</sub>			P <sub>1.1</sub>		P <sub>1.2</sub>	
C <sub>1</sub> = S <sub>1</sub>						

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yku <sup>2</sup>	ne <sup>2</sup>	kwityi <sup>32</sup>	yku <sup>2</sup>	ne <sup>2</sup>	kye <sup>2</sup>	kwityi <sup>32</sup>	yku <sup>2</sup>	ne <sup>2</sup>	ti <sup>2</sup>	nyo <sup>2</sup>	kwityi <sup>32</sup>
W <sub>24</sub>	W <sub>1.1</sub>	W <sub>1.1</sub>	W <sub>24</sub>	W <sub>1.1</sub>	W <sub>1.2</sub>	W <sub>1.1</sub>	W <sub>24</sub>	W <sub>1.1</sub>	W <sub>03.3</sub>	W <sub>1.2</sub>	W <sub>1.1</sub>
P <sub>3</sub>			P <sub>3</sub>			P <sub>3</sub>			P <sub>12</sub>		
C <sub>1</sub>			C <sub>1</sub>				C <sub>1</sub>				
K <sub>11</sub>						K <sub>11</sub>					

tsu <sup>2</sup> we <sup>32</sup>	yu <sup>2</sup> wi <sup>43</sup>	kwityi <sup>32</sup>	ni <sup>2</sup>	ki <sup>2</sup> no <sup>2</sup>	yku <sup>2</sup>	ne <sup>2</sup>
W <sub>11.3</sub>	W <sub>23</sub>	W <sub>1.1</sub>	W <sub>14.1</sub>	W <sub>1.1</sub>	W <sub>24</sub>	W <sub>1.1</sub>
P <sub>21</sub>		P <sub>11.1</sub>			C <sub>1</sub>	
C <sub>12</sub>				C <sub>1</sub>		
K <sub>11</sub>			K <sub>12</sub>			
K <sub>11</sub> = S <sub>1</sub>						

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ngudiya <sup>43</sup> W <sub>21</sub>	ti <sup>32</sup> w <sub>02.2</sub>	ne <sup>2</sup> W <sub>1.1</sub>	šy <sup>24</sup> W <sub>11.3</sub>	ndšku <sup>32</sup> W <sub>34</sub>	yku <sup>2</sup> W <sub>24</sub>	ne <sup>2</sup> W <sub>1.1</sub>
P <sub>34</sub>			C <sub>6</sub>	C <sub>1</sub>		C <sub>1</sub>
C <sub>1</sub>			K <sub>4</sub>			
K <sub>2</sub> = S <sub>1</sub>						

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ko <sup>2</sup> W <sub>14.3</sub>	nu <sup>3</sup> w <sub>02.2</sub>	mdy <sup>11</sup> W <sub>25</sub>	yku <sup>33</sup> W <sub>24</sub>	ti <sup>3</sup> w <sub>02.2</sub>	ne <sup>2</sup> W <sub>1.1</sub>	ʔ <sup>12</sup> W <sub>4.2</sub>	mdo <sup>01</sup> W <sub>23</sub>	ne <sup>2</sup> W <sub>1.1</sub>	ngiya <sup>43</sup> W <sub>23</sub>	ne <sup>2</sup> W <sub>1.1</sub>
P <sub>38</sub>							C <sub>1</sub>		C <sub>1</sub>	
C <sub>1</sub>					K <sub>2</sub>			K <sub>13</sub>		
K <sub>13</sub>						K <sub>11</sub>				
S <sub>01</sub>										
S <sub>21</sub>										

ndo <sup>01</sup> W <sub>23</sub>	ne <sup>2</sup> W <sub>1.1</sub>	mdiya <sup>21</sup> W <sub>21</sub>	tukwa <sup>32</sup> W <sub>21</sub>	ne <sup>2</sup> W <sub>1.1</sub>	kwilya <sup>34</sup> W <sub>1.1</sub>	ʔ <sup>1</sup> W <sub>14.1</sub>	ne <sup>2</sup> W <sub>1.1</sub>	ndo <sup>01</sup> W <sub>23</sub>	ngiya <sup>43</sup> W <sub>23</sub>	ne <sup>2</sup> W <sub>1.1</sub>	bra <sup>3</sup> W <sub>3.2</sub>	ko <sup>2</sup> W <sub>4.3</sub>
C <sub>1</sub>		P <sub>32.2</sub>			P <sub>4</sub>			P <sub>38</sub>			P <sub>1.1</sub>	
K <sub>3</sub>				C <sub>2</sub>				C <sub>1</sub>				
K <sub>13</sub>						C <sub>1</sub>						

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ko <sup>2</sup> W <sub>14.3</sub>	nu <sup>3</sup> w <sub>02.2</sub>	ngila <sup>32</sup> W <sub>23</sub>	ne <sup>2</sup> W <sub>1.1</sub>	seq <sup>03</sup> W <sub>1.1</sub>	nu <sup>3</sup> w <sub>02.2</sub>	ki <sup>2</sup> ya <sup>33</sup> W <sub>1.1</sub>	kitu <sup>2</sup> W <sub>1.1</sub>	bra <sup>3</sup> W <sub>3.2</sub>	ko <sup>2</sup> W <sub>4.3</sub>	
P <sub>1</sub>				P <sub>1</sub>		P <sub>3</sub>		P <sub>1.1</sub>		
C <sub>1</sub>						P <sub>1.1</sub>				
S <sub>01</sub>										
S <sub>21</sub>										

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ne <sup>2</sup> W <sub>1.1</sub>	ša <sup>2</sup> W <sub>11.2</sub>	ndukwa <sup>43</sup> W <sub>21</sub>	hwinka <sup>4</sup> W <sub>1.1</sub>	ki <sup>2</sup> ya <sup>33</sup> W <sub>1.1</sub>	kitu <sup>2</sup> W <sub>1.1</sub>	lka <sup>4</sup> W <sub>22.1</sub>	ne <sup>2</sup> W <sub>1.1</sub>
P <sub>1.1</sub>				P <sub>2</sub>			
C <sub>2</sub>				C <sub>3</sub>			
K <sub>4</sub>							

ne <sup>2</sup> W <sub>1.1</sub>	ša <sup>2</sup> W <sub>11.2</sub>	ndukwa <sup>43</sup> W <sub>21</sub>	hwinka <sup>4</sup> W <sub>1.1</sub>	ki <sup>2</sup> ya <sup>33</sup> W <sub>1.1</sub>	kitu <sup>2</sup> W <sub>1.1</sub>	lka <sup>4</sup> W <sub>22.1</sub>	ne <sup>2</sup> W <sub>1.1</sub>	ko <sup>2</sup> W <sub>14.3</sub>	ne <sup>2</sup> W <sub>1.1</sub>	ša <sup>2</sup> W <sub>11.2</sub>	lka <sup>4</sup> W <sub>22.1</sub>	ko <sup>2</sup> W <sub>14.3</sub>	ngila <sup>23</sup> W <sub>23</sub>	ne <sup>2</sup> W <sub>1.1</sub>
P <sub>1.1</sub>				P <sub>2</sub>										
C <sub>2</sub>				C <sub>3</sub>		C <sub>3</sub>		P <sub>1.1</sub>		C <sub>3</sub>		C <sub>1</sub>		
K <sub>4</sub>								C <sub>3</sub>		C <sub>1</sub>				
S <sub>21</sub>														

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ne <sup>3</sup>	ša <sup>3</sup>	ndukwa <sup>4s</sup>	ki <sup>3</sup> ya <sup>2s</sup>	kiti <sup>3</sup>	lka <sup>4</sup>
W <sub>1.1</sub>	W <sub>11.2</sub>	W <sub>2.1</sub>	W <sub>1.1</sub>	W <sub>1.1</sub>	W <sub>23.1</sub>
P <sub>1.1</sub>		P <sub>2</sub>			
C <sub>2</sub>			C <sub>3</sub>		
K <sub>4</sub>					

lo <sup>2</sup>	ndiya <sup>2.1</sup>	tyi <sup>2</sup>	ška <sup>3</sup>	ɔ <sup>1</sup>	ne <sup>3</sup>	nu <sup>3</sup>	ndikye <sup>3s2</sup>	no <sup>2</sup>	ndšku <sup>1</sup>	ne <sup>3</sup>
W <sub>14.2</sub>	W <sub>3.1</sub>	W <sub>1.2</sub>	W <sub>1.1</sub>	W <sub>14.1</sub>	W <sub>1.1</sub>	W <sub>02.2</sub>	W <sub>23</sub>	W <sub>1.1</sub>	W <sub>24</sub>	W <sub>1.1</sub>
P <sub>3</sub>			P <sub>4</sub>		P <sub>6</sub>			P <sub>1.2</sub>		C <sub>1</sub>
S <sub>01</sub>						C <sub>1</sub>				
K <sub>4</sub>						C <sub>2</sub>				
S <sub>15</sub>										

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lo <sup>2</sup>	no <sup>2</sup> o <sup>3s</sup>	ne <sup>2</sup>	nd <sup>2</sup> o <sup>3s</sup>	ska <sup>3</sup>	sne <sup>12</sup>
W <sub>14.2</sub>	W <sub>22.3</sub>	W <sub>1.1</sub>	W <sub>23</sub>	W <sub>13.3</sub>	W <sub>1.1</sub>
C <sub>1</sub>			C <sub>1</sub>		
K <sub>4</sub>					
S <sub>1</sub>					

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yhw <sup>1s2</sup>	ne <sup>2</sup>	ɔ <sup>1</sup>	tyi <sup>2</sup>	ška <sup>3</sup>	ɔ <sup>1</sup>	ne <sup>3</sup>
W <sub>26</sub>	W <sub>1.1</sub>	W <sub>14.1</sub>	W <sub>1.2</sub>	W <sub>1.1</sub>	W <sub>14.1</sub>	W <sub>1.1</sub>
P <sub>3</sub>			P <sub>4</sub>		P <sub>11.1</sub>	
C <sub>21</sub> = S <sub>1</sub>						

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kuhw <sup>1s2</sup>	ɔ <sup>1</sup> ni <sup>3</sup>	nde <sup>3</sup>	yhw <sup>1s2</sup>	ne <sup>2</sup>
W <sub>23</sub>	W <sub>1.1</sub>	W <sub>4.3</sub>	W <sub>26</sub>	W <sub>1.1</sub>
P <sub>1.1</sub>		C <sub>21</sub>		
C <sub>1</sub> = S <sub>31</sub>		S <sub>32</sub>		

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kuhw <sup>1s2</sup>	ɔ <sup>1</sup> ni <sup>3</sup>	nde <sup>3</sup>	lo <sup>2</sup>	kye <sup>3s2</sup>	ɔ <sup>1</sup>	ɔ <sup>1</sup>	ku <sup>2</sup> ni <sup>1s2</sup>	kalu <sup>4</sup>	ɔ <sup>1</sup>	ɔ <sup>1</sup>	ša <sup>2</sup>	ku <sup>2s</sup>	yhw <sup>1.1</sup>
W <sub>23</sub>	W <sub>1.1</sub>	W <sub>4.3</sub>	W <sub>14.3</sub>	W <sub>23</sub>	W <sub>14.1</sub>	W <sub>4.2</sub>	W <sub>23</sub>	W <sub>1.1</sub>	W <sub>14.1</sub>	W <sub>4.2</sub>	W <sub>14.2</sub>	W <sub>24</sub>	W <sub>26</sub>
P <sub>1.1</sub>		C <sub>1</sub>			P <sub>4</sub>		C <sub>1</sub>		P <sub>4</sub>				
C <sub>11</sub>			S <sub>13</sub>				K <sub>11</sub>						
S <sub>11</sub> = S <sub>11</sub>											C <sub>1</sub>	C <sub>21</sub>	K <sub>1</sub>
S <sub>31</sub>													K <sub>11</sub>

yhw <sub>28</sub> <sup>1 32</sup>	ne <sup>2</sup> W <sub>1.1</sub>	ʔ <sup>1</sup> W <sub>14.1</sub>	tyl <sup>2</sup> W <sub>1.3</sub>	škwā <sup>3</sup> W <sub>1.1</sub>	ʔ <sup>1</sup> W <sub>14.1</sub>	ne <sup>2</sup> W <sub>1.1</sub>	yhw <sub>28</sub> <sup>1 32</sup>	ne <sup>2</sup> W <sub>1.1</sub>	ʔ <sup>1</sup> W <sub>14.1</sub>	nu <sup>3</sup> W <sub>02.2</sub>	kwōʔ <sup>0 1</sup> W <sub>11.2</sub>	ndŋkye <sup>2 32</sup> W <sub>23</sub>	no <sup>3</sup> W <sub>1.1</sub>	ndŋku <sup>1</sup> W <sub>24</sub>	ne <sup>2</sup> W <sub>1.1</sub>
			P <sub>3</sub>											C <sub>1</sub>	
			P <sub>4</sub>											C <sub>1</sub>	
			P <sub>11.1</sub>											P <sub>1.2</sub>	
C <sub>21</sub>						K <sub>1</sub>						C <sub>31</sub>			

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ha <sup>4</sup> W <sub>03.1</sub>	iškw <sub>23</sub> <sup>1 32</sup> W <sub>23</sub>	ngwo <sup>2</sup> W <sub>11.8</sub>	ʔ <sup>0 3</sup> W <sub>04</sub>	yhw <sub>28</sub> <sup>1 32</sup> W <sub>28</sub>	nu <sup>3</sup> W <sub>02.2</sub>	kwōʔ <sup>0 1</sup> W <sub>11.2</sub>	yhw <sub>28</sub> <sup>1 32</sup> W <sub>28</sub>	tyl <sup>2</sup> W <sub>1.2</sub>	škwā <sup>3</sup> W <sub>1.1</sub>	ʔ <sup>1</sup> W <sub>14.1</sub>	ne <sup>2</sup> W <sub>1.1</sub>
P <sub>31</sub>		*		C <sub>21</sub>				P <sub>3</sub>		P <sub>4</sub>	
C <sub>1</sub> = S <sub>31</sub>				C <sub>21</sub>						C <sub>21</sub>	
						K <sub>11</sub>					
										S <sub>32</sub>	

\*This minor phrase is unique and an exception to all the phrase types described.

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ha <sup>4</sup> W <sub>03.1</sub>	iškw <sub>23</sub> <sup>1 32</sup> W <sub>23</sub>	ngwo <sup>2</sup> W <sub>11.8</sub>	ʔ <sup>0 3</sup> W <sub>04</sub>	ʔni <sup>6</sup> W <sub>1.1</sub>	la <sup>2</sup> W <sub>11.3</sub>	lka <sup>4</sup> W <sub>22.1</sub>	nde <sup>3</sup> W <sub>4.3</sub>	yhw <sub>28</sub> <sup>1 1</sup> W <sub>28</sub>
P <sub>21</sub>		*		P <sub>1.1</sub>				C <sub>21</sub>
C <sub>1</sub>				C <sub>3</sub>				
								K <sub>2</sub> = S <sub>31</sub>
								S <sub>32</sub>

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ha <sup>4</sup> W <sub>03.1</sub>	ndŋku <sup>1</sup> W <sub>24</sub>	ntē <sup>3 4</sup> W <sub>1.1</sub>	ʔni <sup>3</sup> W <sub>1.1</sub>	nde <sup>3</sup> W <sub>4.3</sub>	yhw <sub>28</sub> <sup>1 1</sup> W <sub>28</sub>
P <sub>21</sub>				P <sub>1.1</sub>	
C <sub>1</sub> = S <sub>31</sub>				C <sub>21</sub>	
				S <sub>32</sub>	

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nde <sup>3</sup> W <sub>4.3</sub>	ʔni <sup>3</sup> W <sub>1.1</sub>	nu <sup>3</sup> W <sub>02.2</sub>	no <sup>3</sup> W <sub>22.2</sub>	sne <sup>1 2</sup> W <sub>1.1</sub>	yhw <sub>28</sub> <sup>1 1</sup> W <sub>28</sub>
		C <sub>3</sub>			
		S <sub>01</sub>			
		P <sub>1.2</sub>			
C <sub>6</sub> = S <sub>31</sub>				C <sub>21</sub>	
				S <sub>32</sub>	

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ha <sup>4</sup> W <sub>03.1</sub>	la <sup>1</sup> W <sub>11.2</sub>	ʔa <sup>2</sup> W <sub>01.1</sub>	yhw <sub>28</sub> <sup>1 1</sup> W <sub>28</sub>	ʔni <sup>2</sup> W <sub>1.1</sub>	tau <sup>2</sup> we <sup>3 32</sup> W <sub>11.2</sub>	lka <sup>4</sup> W <sub>22.1</sub>	nde <sup>3</sup> W <sub>4.3</sub>	yhw <sub>28</sub> <sup>1 1</sup> W <sub>28</sub>	nu <sup>3</sup> W <sub>02.2</sub>	wa <sup>1</sup> W <sub>03.1</sub>	no <sup>2</sup> ʔ <sup>0 3</sup> W <sub>22</sub>	ndŋku <sup>1</sup> W <sub>24</sub>	ʔ <sup>1</sup> W <sub>14.1</sub>	ʔ <sup>1</sup> W <sub>14.2</sub>	yhw <sub>28</sub> <sup>1 1</sup> W <sub>28</sub>
P <sub>15</sub>				P <sub>1.1</sub>						P <sub>31</sub>		P <sub>4</sub>		C <sub>21</sub>	
C <sub>2</sub> = S <sub>31</sub>		C <sub>31</sub>		C <sub>2</sub> = S <sub>31</sub>		S <sub>32</sub>		C <sub>31</sub>		K <sub>22</sub>		C <sub>1</sub>			
										S <sub>01</sub> = S <sub>32</sub>		S <sub>33</sub>			
														K <sub>11</sub>	
														S <sub>32</sub>	
														K <sub>11</sub> = S <sub>33</sub> complex	

šū <sup>4</sup> W <sub>11.3</sub>	ʔa <sup>1</sup> w <sub>01.1</sub>	ndšku <sup>32</sup> W <sub>24</sub>	ʔni <sup>3</sup> W <sub>1.1</sub>	nde <sup>3</sup> W <sub>4.3</sub>	yhw <sup>1</sup> <sub>1</sub> W <sub>26</sub>
P <sub>11</sub> = C <sub>1</sub>		C <sub>1</sub>			C <sub>21</sub>
K <sub>4</sub> = S <sub>31</sub>					
S <sub>32</sub>					

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nde <sup>3</sup> W <sub>4.3</sub>	ʔni <sup>3</sup> W <sub>1.1</sub>	nguda <sup>1</sup> W <sub>23</sub>	ne <sup>2</sup> W <sub>1.1</sub>	yku <sup>1</sup> W <sub>24</sub>	tu <sup>2</sup> kw <sup>1</sup> <sub>1</sub> <sup>21</sup> W <sub>1.3</sub>	nu <sup>3</sup> w <sub>02.2</sub>	nglyo <sup>1</sup> W <sub>23</sub>	yhw <sup>1</sup> <sub>1</sub> W <sub>26</sub>
C <sub>1</sub>		C <sub>1</sub>			P <sub>1.3</sub>		C <sub>1</sub>	C <sub>21</sub>
K <sub>12</sub>					S <sub>01</sub>		C <sub>1</sub>	
S <sub>2.1</sub>					C <sub>1</sub>			
C <sub>8</sub> = S <sub>31</sub>								
S <sub>32</sub>								

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ngil <sup>1</sup> W <sub>23</sub>	se <sup>2</sup> e <sup>3</sup> W <sub>1.1</sub>	ngō <sup>2</sup> o <sup>32</sup> W <sub>21</sub>	ne <sup>2</sup> W <sub>1.1</sub>	ngite <sup>2</sup> W <sub>27</sub>	t <sup>1</sup> ʔ <sup>32</sup> w <sub>03.1</sub>	ky <sup>32</sup> W <sub>24</sub>	kyha <sup>3</sup> W <sub>1.1</sub>	ngite <sup>2</sup> W <sub>27</sub>	t <sup>1</sup> ʔ <sup>32</sup> w <sub>03.1</sub>	ku <sup>2</sup> ni <sup>1</sup> W <sub>23</sub>	lomsa <sup>34</sup> W <sub>1.2</sub>	yhw <sup>1</sup> <sub>1</sub> W <sub>26</sub>
P <sub>1.2</sub>		C <sub>2</sub>		P <sub>24</sub> = C <sub>1</sub>		C <sub>1</sub>		P <sub>24</sub> = C <sub>1</sub>		C <sub>1</sub>		C <sub>21</sub>
C <sub>1</sub>				K <sub>4</sub>				K <sub>11</sub>				
K <sub>11</sub> = S <sub>31</sub>												
S <sub>32</sub>												

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lo <sup>2</sup> W <sub>14.2</sub>	nde <sup>3</sup> W <sub>4.3</sub>	ʔni <sup>3</sup> W <sub>1.1</sub>	ngu <sup>2</sup> ni <sup>1</sup> W <sub>23</sub>	ne <sup>2</sup> W <sub>1.1</sub>	kalu <sup>4</sup> W <sub>1.1</sub>	nguda <sup>1</sup> W <sub>23</sub>	ne <sup>2</sup> W <sub>1.1</sub>	yku <sup>1</sup> W <sub>24</sub>	yhw <sup>1</sup> <sub>1</sub> W <sub>26</sub>
C <sub>1</sub>		C <sub>1</sub>			K <sub>12</sub>		C <sub>1</sub>		C <sub>21</sub>
K <sub>12</sub>					S <sub>2.1</sub>		C <sub>1</sub>		
C <sub>1</sub>					S <sub>1</sub> = S <sub>31</sub>		C <sub>1</sub>		
S <sub>32</sub>									

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šū <sup>4</sup> W <sub>11.3</sub>	ʔa <sup>1</sup> w <sub>01.1</sub>	ʔni <sup>3</sup> W <sub>1.1</sub>	nde <sup>3</sup> W <sub>4.3</sub>	tsu <sup>2</sup> we <sup>32</sup> W <sub>11.3</sub>	ʔa <sup>1</sup> w <sub>01.1</sub>	ndšku <sup>32</sup> W <sub>24</sub>	ʔni <sup>3</sup> W <sub>1.1</sub>	nde <sup>3</sup> W <sub>4.3</sub>	yhw <sup>1</sup> <sub>1</sub> W <sub>26</sub>	
P <sub>28</sub>		P <sub>1.1</sub>		P <sub>26</sub> = C <sub>6</sub>		C <sub>1</sub>			C <sub>21</sub>	
C <sub>6</sub>				K <sub>4</sub>						
K <sub>11</sub> = S <sub>31</sub>										
S <sub>33</sub>										

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si <sup>1</sup> ʔi <sup>1</sup>	ʔni <sup>3</sup>	nde <sup>3</sup>	lka <sup>4</sup>	no <sup>2</sup>	ngwo <sup>2</sup>	ʔo <sup>2</sup>	yhw <sup>1</sup> <sup>32</sup>	ty <sup>2</sup>	ška <sup>3</sup>	yhw <sup>1</sup> <sup>22</sup>	nu <sup>3</sup>	kw <sup>2</sup> ʔo <sup>1</sup>	ndikye <sup>2</sup> <sup>32</sup>	no <sup>2</sup>	ndšku <sup>4</sup>	ne <sup>2</sup>	
W <sub>28</sub>	W <sub>1.1</sub>	W <sub>4.3</sub>	W <sub>22.1</sub>	W <sub>1.1</sub>	W <sub>11.9</sub>	w <sub>24</sub>	W <sub>28</sub>	W <sub>1.2</sub>	W <sub>1.1</sub>	W <sub>28</sub>	w <sub>22.2</sub>	W <sub>11.2</sub>	W <sub>11</sub>	W <sub>1.1</sub>	W <sub>24</sub>	W <sub>1.1</sub>	
P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>	
C <sub>3</sub>				C <sub>3</sub>				C <sub>1</sub>				C <sub>1</sub>					
K <sub>4</sub>								P <sub>2</sub>				P <sub>1.2</sub>					
K <sub>4</sub> = S <sub>31</sub>								C <sub>21</sub>				C <sub>11</sub>					
S <sub>32</sub>								K <sub>11</sub>									

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si <sup>1</sup> ʔi <sup>1</sup>	ʔni <sup>3</sup>	nde <sup>3</sup>	lka <sup>4</sup>	ko <sup>2</sup>	yhw <sup>1</sup> <sup>1</sup>	ša <sup>3</sup>	nyo <sup>2</sup> ʔo <sup>4</sup> <sup>43</sup>	ko <sup>2</sup>	yhw <sup>1</sup> <sup>1</sup>
W <sub>28</sub>	W <sub>1.1</sub>	W <sub>4.3</sub>	W <sub>22.1</sub>	W <sub>4.3</sub>	W <sub>28</sub>	W <sub>11.2</sub>	W <sub>22.2</sub>	W <sub>4.3</sub>	W <sub>28</sub>
P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>	
C <sub>3</sub>				C <sub>3</sub>				C <sub>21</sub>	
K <sub>4</sub> = S <sub>31</sub>				C <sub>21</sub>		C <sub>1</sub> = S <sub>31</sub>		C <sub>21</sub>	
S <sub>32</sub>				S <sub>32</sub>		S <sub>32</sub>			
K <sub>11</sub> = S <sub>32</sub> complex									

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ko <sup>2</sup>	ʔni <sup>3</sup>	nu <sup>3</sup>	no <sup>2</sup>	kwity <sup>1</sup> <sup>32</sup>	yhw <sup>1</sup> <sup>1</sup>	ko <sup>2</sup>	nu <sup>3</sup>	ʔni <sup>3</sup>	ndšku <sup>4</sup>	ntę <sup>2</sup> <sup>24</sup>	yhw <sup>1</sup> <sup>1</sup>
W <sub>4.3</sub>	W <sub>1.1</sub>	W <sub>22.2</sub>	W <sub>22.2</sub>	W <sub>1.1</sub>	W <sub>28</sub>	W <sub>14.3</sub>	W <sub>22.2</sub>	W <sub>1.1</sub>	W <sub>24</sub>	W <sub>1.1</sub>	W <sub>28</sub>
P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>	
C <sub>3</sub>				C <sub>21</sub>				C <sub>21</sub>			
C <sub>3</sub> = S <sub>31</sub>				C <sub>21</sub>		S <sub>21</sub> = S <sub>31</sub>		C <sub>21</sub>			
S <sub>32</sub>				S <sub>32</sub>				S <sub>32</sub>			
S <sub>21</sub> = S <sub>33</sub> complex											

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si <sup>1</sup> ʔi <sup>1</sup>	ʔni <sup>3</sup>	nde <sup>3</sup>	no <sup>2</sup>	ša <sup>3</sup>	nyo <sup>2</sup> ʔo <sup>4</sup> <sup>43</sup>	ko <sup>2</sup>	yhw <sup>1</sup> <sup>1</sup>
W <sub>28</sub>	W <sub>1.1</sub>	W <sub>4.3</sub>	W <sub>1.1</sub>	W <sub>11.2</sub>	W <sub>22.2</sub>	W <sub>4.3</sub>	W <sub>28</sub>
P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>	
C <sub>3</sub>				C <sub>21</sub>			
K <sub>11</sub> = S <sub>31</sub>				C <sub>21</sub>			
S <sub>32</sub>							

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kw <sup>1</sup> ʔ <sup>1</sup>	yhw <sup>1</sup> <sup>22</sup>	ne <sup>2</sup>	ša <sup>3</sup>	kw <sup>1</sup> ʔ <sup>1</sup>	ʔni <sup>3</sup>	nde <sup>3</sup>	lka <sup>4</sup>	ʔi <sup>2</sup>	
W <sub>11.3</sub>	W <sub>28</sub>	W <sub>1.1</sub>	W <sub>11.2</sub>	W <sub>11.3</sub>	W <sub>1.1</sub>	W <sub>4.3</sub>	W <sub>22.1</sub>	W <sub>4.2</sub>	
P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>	
C <sub>3</sub>				C <sub>21</sub>				C <sub>3</sub>	
C <sub>3</sub> = S <sub>31</sub>				C <sub>21</sub>		K <sub>4</sub> = S <sub>31</sub>		C <sub>3</sub>	
S <sub>32</sub>				K <sub>4</sub> = S <sub>31</sub>				C <sub>3</sub>	
K <sub>11</sub> = S <sub>32</sub> complex									

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no <sup>2</sup>	ngwo <sup>2</sup>	nyo <sup>2</sup> ʔo <sup>4</sup> <sup>43</sup>	yhw <sup>1</sup> <sup>1</sup>	ngwo <sup>2</sup>	nyo <sup>2</sup> ʔo <sup>4</sup> <sup>43</sup>	nkye <sup>2</sup> <sup>32</sup>	ʔi <sup>3</sup>	yhw <sup>1</sup> <sup>1</sup>	
W <sub>1.1</sub>	W <sub>11.9</sub>	W <sub>22.2</sub>	W <sub>28</sub>	W <sub>11.9</sub>	W <sub>22.2</sub>	W <sub>23</sub>	W <sub>4.2</sub>	W <sub>28</sub>	
P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>		P <sub>1.1</sub>	
C <sub>3</sub> = S <sub>31</sub>				C <sub>21</sub>		K <sub>4</sub> = S <sub>31</sub>		C <sub>21</sub>	
S <sub>32</sub>				C <sub>21</sub>		S <sub>32</sub>		C <sub>21</sub>	
K <sub>11</sub> = S <sub>32</sub> complex									

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si <sup>1</sup> ɔ <sup>1</sup>	ɔ <sup>1</sup>	yhw <sup>1</sup> <sub>1</sub>	ḡa <sup>3</sup>	yi <sup>1</sup> ɔ <sup>43</sup>	ko <sup>2</sup>	ḡa <sup>3</sup>	yi <sup>1</sup> ɔ <sup>43</sup>	ko <sup>2</sup>	yhw <sup>1</sup> <sub>1</sub>
W <sub>28</sub>	W <sub>4.2</sub>	W <sub>38</sub>	W <sub>11.2</sub>	W <sub>22.2</sub>	W <sub>4.3</sub>	W <sub>11.3</sub>	W <sub>22.2</sub>	W <sub>4.3</sub>	W <sub>28</sub>
P <sub>21</sub>		C <sub>13</sub>		P <sub>21</sub>		C <sub>13</sub>			
C <sub>5</sub> = S <sub>31</sub>		C <sub>21</sub>	K <sub>1</sub> = S <sub>31</sub>				C <sub>21</sub>		
S <sub>32</sub>		S <sub>32</sub>							
K <sub>11</sub> = S <sub>32</sub> complex									

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lo <sup>2</sup>	nde <sup>3</sup>	nde <sup>3</sup>	ɔ <sup>1</sup> n <sup>1</sup>	nu <sup>3</sup>	no <sup>2</sup>	ene <sup>12</sup>	yhw <sup>1</sup> <sub>1</sub>	tḡe <sup>2</sup>	nyo <sup>1</sup> ɔ <sup>43</sup>	nde <sup>3</sup>	yhw <sup>1</sup> <sub>1</sub>	tḡe <sup>2</sup>	nyo <sup>1</sup> ɔ <sup>43</sup>	nde <sup>3</sup>
W <sub>14.2</sub>	W <sub>4.3</sub>	W <sub>22.2</sub>	W <sub>1.1</sub>	w <sub>28.2</sub>	W <sub>22.2</sub>	W <sub>1.1</sub>	W <sub>28</sub>	W <sub>11.9</sub>	W <sub>22.2</sub>	W <sub>4.3</sub>	W <sub>28</sub>	W <sub>11.9</sub>	W <sub>22.2</sub>	W <sub>4.3</sub>
C <sub>3</sub>		P <sub>1.5</sub>		e <sub>01</sub>		P <sub>21</sub>		C <sub>5</sub> = S <sub>31</sub>		C <sub>21</sub>	P <sub>21</sub>		C <sub>5</sub> = S <sub>31</sub>	
S <sub>1</sub> = S <sub>31</sub>		C <sub>3</sub>		C <sub>21</sub>		S <sub>32</sub>		K <sub>1</sub>		S <sub>32</sub>		C <sub>5</sub> = S <sub>31</sub>		
S <sub>32</sub>		K <sub>11</sub> = S <sub>32</sub> complex								S <sub>32</sub>				

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ɔ <sup>1</sup> n <sup>1</sup>	la <sup>2</sup>	lka <sup>4</sup>	nde <sup>3</sup>	yhw <sup>1</sup> <sub>1</sub>	ha <sup>4</sup>	ndḡku <sup>1</sup>	ntḡ <sup>34</sup>	nde <sup>3</sup>	yhw <sup>1</sup> <sub>1</sub>	kaha <sup>1</sup>	ntḡ <sup>34</sup>	e <sup>1</sup>	ku <sup>2</sup>	ne <sup>3</sup>	nde <sup>3</sup>	yhw <sup>1</sup> <sub>1</sub>
W <sub>1.1</sub>	W <sub>11.3</sub>	W <sub>22.1</sub>	W <sub>4.3</sub>	W <sub>28</sub>	w <sub>28.1</sub>	W <sub>24</sub>	W <sub>1.1</sub>	W <sub>4.3</sub>	W <sub>28</sub>	W <sub>23</sub>	W <sub>1.1</sub>	W <sub>14.2</sub>	W <sub>24</sub>	W <sub>1.1</sub>	W <sub>4.3</sub>	W <sub>28</sub>
P <sub>1.1</sub>		C <sub>3</sub> = S <sub>31</sub>		C <sub>21</sub>	P <sub>21</sub>		C <sub>1</sub> = S <sub>31</sub>		C <sub>21</sub>	C <sub>1</sub>		C <sub>1</sub>		C <sub>1</sub>		C <sub>21</sub>
S <sub>32</sub>		K <sub>11</sub>		S <sub>32</sub>		S <sub>14</sub> = S <sub>31</sub>		S <sub>32</sub>		C <sub>21</sub>						
K <sub>12</sub> = S <sub>32</sub> complex																

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ha <sup>4</sup>	kaha <sup>1</sup>	ne <sup>3</sup>	yhw <sup>1</sup> <sub>1</sub>
w <sub>28.1</sub>	W <sub>23</sub>	W <sub>1.1</sub>	W <sub>28</sub>
P <sub>21</sub>		C <sub>21</sub>	
C <sub>1</sub> = S <sub>31</sub>		S <sub>32</sub>	

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ɔ <sup>1</sup> n <sup>1</sup>	tsu <sup>2</sup> we <sup>32</sup>	lka <sup>4</sup>	nde <sup>3</sup>	yhw <sup>1</sup> <sub>1</sub>	wa <sup>2</sup>	no <sup>2</sup> ɔ <sup>43</sup>	ndḡku <sup>1</sup>	ɔ <sup>1</sup>	yhw <sup>1</sup> <sub>1</sub>
W <sub>1.1</sub>	W <sub>11.3</sub>	W <sub>22.1</sub>	W <sub>4.3</sub>	W <sub>28</sub>	w <sub>28.1</sub>	W <sub>23</sub>	W <sub>24</sub>	W <sub>4.2</sub>	W <sub>28</sub>
P <sub>1.1</sub>		C <sub>3</sub> = S <sub>31</sub>		C <sub>21</sub>	P <sub>21</sub> = C <sub>1</sub>		C <sub>1</sub>		C <sub>21</sub>
S <sub>32</sub>		K <sub>12</sub> = S <sub>31</sub>		S <sub>32</sub>					
K <sub>11</sub> = S <sub>32</sub> complex									

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kye <sup>32</sup>	ku <sup>32</sup>	yhw <sup>1</sup> <sub>1</sub>
W <sub>23</sub>	W <sub>34.1</sub>	W <sub>38</sub>
C <sub>1</sub>	C <sub>1</sub>	C <sub>21</sub>
K <sub>12</sub> = S <sub>31</sub>		S <sub>32</sub>

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ha <sup>4</sup> w <sub>03.1</sub>	kye <sup>743</sup> W <sub>23</sub>	yhw <sub>1</sub> <sup>32</sup> W <sub>26</sub>	tyl <sup>2</sup> W <sub>1.2</sub>	škwa <sup>3</sup> W <sub>1.1</sub>	ha <sup>4</sup> w <sub>03.1</sub>	kye <sup>743</sup> W <sub>23</sub>	yhw <sub>1</sub> <sup>32</sup> W <sub>26</sub>	nu <sup>3</sup> w <sub>02.2</sub>	kw <sub>0</sub> <sup>741</sup> W <sub>11.2</sub>	ndilkye <sup>732</sup> W <sub>23</sub>	no <sup>2</sup> W <sub>1.1</sub>	ndšku <sup>1</sup> W <sub>24</sub>	ne <sup>7</sup> W <sub>1.1</sub>
		P <sub>3</sub>									C <sub>1</sub>		
									P <sub>1.2</sub>				
P <sub>21</sub> = S <sub>31</sub>		C <sub>21</sub>			P <sub>21</sub> = S <sub>31</sub>						C <sub>21</sub>		
S <sub>32</sub>									S <sub>32</sub>				
K <sub>11</sub> = S <sub>32</sub> complex													

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no <sup>2</sup> W <sub>1.1</sub>	kaha <sup>22</sup> W <sub>23</sub>	s <sup>1</sup> W <sub>14.2</sub>	ku <sup>22</sup> W <sub>24</sub>	ʔ <sup>3</sup> W <sub>4.2</sub>	yhw <sub>1</sub> <sup>4</sup> W <sub>26</sub>
C <sub>1</sub>				C <sub>21</sub>	
S <sub>14</sub> = S <sub>31</sub>					
S <sub>32</sub>					

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kye <sup>733</sup> W <sub>23</sub>	ky <sup>32</sup> W <sub>24</sub>
C <sub>1</sub>	C <sub>1</sub>
K <sub>12</sub> = S <sub>1</sub>	

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ha <sup>4</sup> w <sub>03.1</sub>	kye <sup>743</sup> W <sub>23</sub>	yhw <sub>1</sub> <sup>32</sup> W <sub>26</sub>	nu <sup>3</sup> w <sub>02.2</sub>	kw <sub>0</sub> <sup>741</sup> W <sub>11.2</sub>
		P <sub>1</sub>		
P <sub>21</sub> = S <sub>31</sub>		C <sub>21</sub>		
S <sub>32</sub>				

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kye <sup>732</sup> W <sub>23</sub>	yhw <sub>1</sub> <sup>1</sup> W <sub>26</sub>
C <sub>1</sub>	C <sub>21</sub>
S <sub>32</sub>	

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no <sup>2</sup> W <sub>1.1</sub>	ʔni <sup>3</sup> W <sub>23</sub>	tsu <sup>7we32</sup> W <sub>11.3</sub>	no <sup>2</sup> W <sub>1.1</sub>	wa <sup>2</sup> w <sub>03.1</sub>	no <sup>743</sup> W <sub>23</sub>	ndšky <sup>1</sup> W <sub>24</sub>	ʔ <sup>2</sup> W <sub>4.2</sub>	yhw <sub>1</sub> <sup>1</sup> W <sub>26</sub>
				P <sub>21</sub>				
		C <sub>1</sub>				C <sub>1</sub>		
C <sub>1</sub>			K <sub>12</sub>					
K <sub>11</sub> = S <sub>31</sub>								C <sub>21</sub>
S <sub>32</sub>								



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ha <sup>4</sup> w <sub>03·1</sub>	kye <sup>2</sup> w <sub>23</sub>	no <sup>2</sup> w <sub>1·1</sub>	kaha <sup>32</sup> w <sub>23</sub>	ku <sup>32</sup> w <sub>24</sub>	ʔ <sub>1</sub> <sup>2</sup> w <sub>4·2</sub>	yhw <sub>1</sub> <sup>32</sup> w <sub>28</sub>	nu <sup>3</sup> w <sub>03·2</sub>	kwɔ <sup>2</sup> w <sub>11·2</sub>	tyl <sup>2</sup> w <sub>1·2</sub>	škwa <sup>3</sup> w <sub>1·1</sub>	ʔ <sub>1</sub> <sup>1</sup> w <sub>14·1</sub>	ne <sup>2</sup> w <sub>1·1</sub>	ša <sup>2</sup> w <sub>11·2</sub>	
P <sub>21</sub>		C <sub>1</sub>				P <sub>1</sub>		P <sub>3</sub>		P <sub>11·1</sub>		P <sub>11·1</sub>		
P <sub>21</sub>		P <sub>1·2</sub>				C <sub>21</sub>								C <sub>21</sub>
C <sub>1</sub> = S <sub>31</sub>						S <sub>32</sub>						K <sub>1</sub>		

yhw <sub>1</sub> <sup>32</sup> w <sub>28</sub>	nu <sup>3</sup> w <sub>03·2</sub>	kwɔ <sup>2</sup> w <sub>11·2</sub>	tyl <sup>2</sup> w <sub>1·2</sub>	škwa <sup>3</sup> w <sub>1·1</sub>	ʔ <sub>1</sub> <sup>1</sup> w <sub>14·1</sub>	patru <sup>4</sup> w <sub>1·1</sub>	ʔ <sub>1</sub> <sup>3</sup> w <sub>4·2</sub>
P <sub>1</sub>		P <sub>3</sub>		P <sub>4</sub>		P <sub>11·1</sub>	
C <sub>21</sub>							

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ha <sup>4</sup> w <sub>03·1</sub>	kye <sup>2</sup> w <sub>23</sub>	no <sup>2</sup> w <sub>1·1</sub>	kaha <sup>32</sup> w <sub>23</sub>	ku <sup>32</sup> w <sub>24</sub>	ʔ <sub>1</sub> <sup>2</sup> w <sub>4·2</sub>	yhw <sub>1</sub> <sup>1</sup> w <sub>28</sub>
P <sub>21</sub>		C <sub>1</sub>				C <sub>21</sub>
P <sub>21</sub>		K <sub>2</sub>				
P <sub>21</sub>		P <sub>1·2</sub>				C <sub>21</sub>
C <sub>1</sub> = S <sub>31</sub>						
S <sub>32</sub>						

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kye <sup>2</sup> w <sub>23</sub>	ʔ <sub>1</sub> <sup>1</sup> w <sub>14·1</sub>	ʔ <sub>1</sub> <sup>3</sup> w <sub>4·2</sub>	yhw <sub>1</sub> <sup>1</sup> w <sub>28</sub>	no <sup>2</sup> w <sub>1·1</sub>	ʔni <sup>3</sup> w <sub>11·3</sub>	tsu <sup>2</sup> w <sub>11·3</sub>	lka <sup>4</sup> w <sub>22·1</sub>	ʔ <sub>1</sub> <sup>3</sup> w <sub>4·2</sub>	yhw <sub>1</sub> <sup>1</sup> w <sub>28</sub>	wa <sup>2</sup> w <sub>03·1</sub>	no <sup>2</sup> w <sub>23</sub>	ndšku <sup>1</sup> w <sub>24</sub>	ʔ <sub>1</sub> <sup>1</sup> w <sub>14·1</sub>	ʔ <sub>1</sub> <sup>3</sup> w <sub>4·2</sub>	yhw <sub>1</sub> <sup>1</sup> w <sub>28</sub>
P <sub>11·1</sub>		P <sub>21</sub> = C <sub>1</sub>				P <sub>1·2</sub>		C <sub>21</sub>		P <sub>21</sub> = C <sub>1</sub>		C <sub>1</sub>		P <sub>4</sub>	
C <sub>1</sub> = S <sub>31</sub>		C <sub>11</sub>		C <sub>2</sub> = S <sub>31</sub>				C <sub>21</sub>		K <sub>12</sub> = S <sub>31</sub>		S <sub>32</sub>		C <sub>31</sub>	
S <sub>33</sub>			S <sub>32</sub>				K <sub>11</sub>				S <sub>32</sub>				
K <sub>11</sub> = S <sub>32</sub> complex															

(78)

wa <sup>2</sup> w <sub>03·1</sub>	ngitsɔ <sup>2</sup> w <sub>23</sub>	ʔ <sub>1</sub> <sup>2</sup> w <sub>4·2</sub>	wa <sup>2</sup> w <sub>03·1</sub>	ngitsɔ <sup>2</sup> w <sub>23</sub>	ʔ <sub>1</sub> <sup>2</sup> w <sub>4·2</sub>	tša <sup>2</sup> w <sub>14·2</sub>	ʔni <sup>3</sup> w <sub>1·1</sub>	la <sup>2</sup> w <sub>11·3</sub>	lka <sup>4</sup> w <sub>22·1</sub>	ʔ <sub>1</sub> <sup>2</sup> w <sub>4·2</sub>	tša <sup>2</sup> w <sub>14·2</sub>	kaha <sup>32</sup> w <sub>23</sub>	ku <sup>32</sup> w <sub>24</sub>	ʔ <sub>1</sub> <sup>1</sup> w <sub>14·1</sub>	ʔ <sub>1</sub> <sup>3</sup> w <sub>4·2</sub>
P <sub>21</sub>		C <sub>1</sub>				P <sub>21</sub>		P <sub>1·1</sub>		C <sub>2</sub>		C <sub>1</sub>		P <sub>11·1</sub>	
K <sub>1</sub>						C <sub>2</sub>				K <sub>2</sub>					
S <sub>11</sub>															

(79)

wa <sup>2</sup> w <sub>03·1</sub>	ngitsɔ <sup>2</sup> w <sub>23</sub>	ʔ <sub>1</sub> <sup>2</sup> w <sub>4·2</sub>	tša <sup>2</sup> w <sub>14·2</sub>	ha <sup>4</sup> w <sub>03·1</sub>	ndšku <sup>1</sup> w <sub>24</sub>	nte <sup>34</sup> w <sub>1·1</sub>	ʔ <sub>1</sub> <sup>1</sup> w <sub>14·1</sub>	ʔ <sub>1</sub> <sup>3</sup> w <sub>4·2</sub>
P <sub>21</sub>		C <sub>1</sub>				P <sub>11·1</sub>		C <sub>1</sub>
P <sub>21</sub>		C <sub>1</sub>				P <sub>11·1</sub>		
S <sub>11</sub>								

(80)

ha <sup>4</sup> W <sub>03·1</sub>	kusu <sup>2</sup> wa <sup>32</sup> W <sub>23</sub>	ki <sup>2</sup> ya <sup>2</sup> W <sub>1·1</sub>	yo <sup>2</sup> W <sub>4·2</sub>	ha <sup>4</sup> W <sub>03·1</sub>	tyo <sup>0</sup> W <sub>23</sub>	ki <sup>2</sup> ya <sup>2</sup> W <sub>1·1</sub>	yo <sup>2</sup> W <sub>4·2</sub>	si <sup>1</sup> W <sub>14·2</sub>	kaha <sup>32</sup> W <sub>23</sub>	ku <sup>32</sup> W <sub>24</sub>	ʔ <sup>1</sup> W <sub>14·1</sub>	ʔ <sup>3</sup> W <sub>4·2</sub>
P <sub>21</sub>				P <sub>21</sub>							P <sub>11·1</sub>	
C <sub>1</sub>				C <sub>11</sub>					C <sub>1</sub>	C <sub>1</sub>		
K <sub>11</sub>								K <sub>2</sub>				
S <sub>14</sub>												

(81)

wa <sup>3</sup> W <sub>03·1</sub>	ngita <sup>0</sup> W <sub>23</sub>	ʔ <sup>1</sup> W <sub>4·2</sub>	tša <sup>2</sup> W <sub>14·2</sub>	ha <sup>4</sup> W <sub>03·1</sub>	kuhw <sup>1</sup> W <sub>23·2</sub>	ʔ <sup>1</sup> W <sub>14·1</sub>	ʔ <sup>3</sup> W <sub>4·2</sub>	tša <sup>2</sup> W <sub>14·2</sub>	kaha <sup>32</sup> W <sub>23</sub>	ku <sup>32</sup> W <sub>24</sub>	ʔ <sup>1</sup> W <sub>14·1</sub>	ʔ <sup>3</sup> W <sub>4·2</sub>	tša <sup>2</sup> W <sub>14·2</sub>	ika <sup>4</sup> W <sub>21·1</sub>	ʔn <sup>2</sup> W <sub>1·1</sub>	la <sup>3</sup> W <sub>11·2</sub>
P <sub>21</sub>				P <sub>21</sub>		P <sub>11·1</sub>			C <sub>1</sub>	C <sub>1</sub>				P <sub>1·1</sub>		
C <sub>1</sub>				C <sub>11</sub>						K <sub>2</sub>				C <sub>2</sub>		
S <sub>11</sub>																

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wa <sup>3</sup> W <sub>03·1</sub>	ngita <sup>0</sup> W <sub>23</sub>	ʔ <sup>1</sup> W <sub>4·2</sub>	wa <sup>2</sup> W <sub>03·1</sub>	ykw <sup>1</sup> W <sub>23</sub>	lo <sup>0</sup> W <sub>14·1</sub>	lo <sup>2</sup> W <sub>14·2</sub>	ha <sup>4</sup> W <sub>03·1</sub>	yn <sup>0</sup> W <sub>23</sub>	tša <sup>2</sup> W <sub>1·1</sub>	ykw <sup>1</sup> W <sub>23</sub>	lo <sup>0</sup> W <sub>14·1</sub>
P <sub>21</sub>				P <sub>21</sub>						C <sub>1</sub>	
C <sub>1</sub>				C <sub>1</sub>				P <sub>21</sub>		P <sub>1·2</sub>	
K <sub>11</sub>						C <sub>1</sub>					
S <sub>18</sub>											

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kuhw <sup>1</sup> W <sub>23</sub>	ʔ <sup>1</sup> W <sub>14·1</sub>	ʔ <sup>3</sup> W <sub>4·2</sub>	tša <sup>2</sup> W <sub>14·2</sub>	ku <sup>32</sup> W <sub>24·1</sub>	tša <sup>2</sup> W <sub>14·2</sub>	ha <sup>4</sup> W <sub>03·1</sub>	yn <sup>0</sup> W <sub>23</sub>	tša <sup>2</sup> W <sub>1·1</sub>	ykw <sup>1</sup> W <sub>23</sub>	lo <sup>0</sup> W <sub>14·1</sub>
P <sub>11·1</sub>				C <sub>1</sub>				P <sub>21</sub>		P <sub>1·2</sub>
C <sub>11</sub>					C <sub>1</sub>		C <sub>1</sub>			
S <sub>11</sub>										

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kuhw <sup>1</sup> W <sub>23</sub>	tu <sup>2</sup> W <sub>03·2</sub>	ʔ <sup>1</sup> W <sub>14·1</sub>	ʔ <sup>3</sup> W <sub>4·2</sub>	ku <sup>32</sup> W <sub>24</sub>	ha <sup>4</sup> W <sub>03·1</sub>	yn <sup>0</sup> W <sub>23</sub>	tša <sup>2</sup> W <sub>1·1</sub>	ykw <sup>1</sup> W <sub>23</sub>	lo <sup>0</sup> W <sub>14·1</sub>
P <sub>23</sub>		P <sub>11·1</sub>		C <sub>1</sub>		P <sub>21</sub>		C <sub>1</sub>	
C <sub>11</sub>						C <sub>1</sub>		P <sub>1·2</sub>	
K <sub>12</sub>						C <sub>1</sub>			
K <sub>12</sub> = S <sub>1</sub>									

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yhw <sup>1</sup> W <sub>23</sub>	yhw <sup>1</sup> W <sub>24</sub>	ne <sup>3</sup> W <sub>1·1</sub>	ša <sup>3</sup> W <sub>11·2</sub>	yhw <sup>1</sup> W <sub>23</sub>	yhw <sup>1</sup> W <sub>26</sub>	patru <sup>4</sup> W <sub>1·1</sub>	ʔ <sup>3</sup> W <sub>4·2</sub>
C <sub>11</sub> = S <sub>31</sub>		P <sub>1·1</sub>		C <sub>11</sub> = S <sub>31</sub>		C <sub>21</sub>	
S <sub>32</sub>		C <sub>21</sub>		C <sub>11</sub> = S <sub>31</sub>		C <sub>21</sub>	
K <sub>11</sub> = S <sub>32</sub>				complex			

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no <sup>2</sup> W <sub>1·1</sub>	ɔni <sup>3</sup> W <sub>23</sub>	tsu <sup>2</sup> we <sup>32</sup> W <sub>11·3</sub>	lka <sup>4</sup> W <sub>22·1</sub>	wa <sup>2</sup> w <sub>03·1</sub>	no <sup>2</sup> ɔ <sup>43</sup> W <sub>23</sub>	ndʃku <sup>1</sup> W <sub>24</sub>	ɔi <sup>2</sup> W <sub>4·2</sub>	yhwi <sup>1</sup> W <sub>26</sub>
C <sub>1</sub>			P <sub>21</sub> = C <sub>1</sub>		C <sub>1</sub>			
P <sub>1·2</sub>			C <sub>3</sub>		K <sub>12</sub>			
K <sub>11</sub> = S <sub>31</sub>							C <sub>21</sub>	
S <sub>32</sub>								

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ngitsɔ <sup>2</sup> W <sub>23</sub>	ɔi <sup>2</sup> W <sub>4·2</sub>	tʃsɔ <sup>2</sup> W <sub>14·2</sub>	lka <sup>4</sup> W <sub>22·1</sub>	ɔni <sup>3</sup> W <sub>1·1</sub>	ls <sup>2</sup> W <sub>11·3</sub>	ɔi <sup>2</sup> W <sub>4·2</sub>	ha <sup>4</sup> w <sub>08·1</sub>	yno <sup>1</sup> W <sub>23</sub>	tʃsa <sup>2</sup> W <sub>1·1</sub>	ykwɔ <sup>1</sup> W <sub>23</sub>	lo <sup>2</sup> W <sub>14·1</sub>
C <sub>1</sub>		P <sub>1·1</sub>			C <sub>3</sub>		P <sub>21</sub>		C <sub>1</sub>		
C <sub>1</sub>			S <sub>11</sub>		C <sub>3</sub>		P <sub>21</sub>		C <sub>1</sub>		
K <sub>12</sub> = S <sub>1</sub>											

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yhwi <sup>1</sup> W <sub>23</sub>	tyi <sup>2</sup> W <sub>1·2</sub>	ʃkwa <sup>3</sup> W <sub>1·1</sub>	ɔi <sup>3</sup> W <sub>4·2</sub>	yhwi <sup>1</sup> W <sub>23</sub>	nu <sup>3</sup> w <sub>02·2</sub>	kwɔ <sup>2</sup> W <sub>11·2</sub>	ndikye <sup>2</sup> W <sub>23</sub>	no <sup>2</sup> W <sub>1·1</sub>	ndʃku <sup>1</sup> W <sub>24</sub>	ne <sup>3</sup> W <sub>1·1</sub>
P <sub>3</sub>			C <sub>11</sub>		C <sub>3</sub>		C <sub>1</sub>		P <sub>1·2</sub>	
C <sub>11</sub>			C <sub>11</sub>		C <sub>3</sub>		C <sub>1</sub>		P <sub>1·2</sub>	
K <sub>11</sub> = S <sub>1</sub>										

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yhwi <sup>31</sup> W <sub>23</sub>	ɔi <sup>1</sup> W <sub>4·2</sub>	lo <sup>2</sup> W <sub>14·2</sub>	nkye <sup>33</sup> W <sub>23</sub>	ɔi <sup>1</sup> W <sub>14·1</sub>	ɔi <sup>3</sup> W <sub>4·2</sub>	ngwa <sup>4</sup> W <sub>22·1</sub>	ɔi <sup>3</sup> W <sub>4·2</sub>	kalu <sup>4</sup> W <sub>1·1</sub>	ndʃku <sup>1</sup> W <sub>24</sub>	ne <sup>3</sup> W <sub>1·1</sub>	nu <sup>3</sup> w <sub>02·2</sub>	lka <sup>4</sup> W <sub>22·1</sub>	ska <sup>4</sup> W <sub>12·2</sub>	sne <sup>13</sup> W <sub>1·1</sub>	ko <sup>2</sup> W <sub>4·3</sub>
C <sub>11</sub>		C <sub>1</sub>			C <sub>3</sub>		C <sub>3</sub>		C <sub>1</sub>		C <sub>1</sub>		C <sub>3</sub>		
C <sub>11</sub>		C <sub>1</sub>			C <sub>3</sub>		C <sub>3</sub>		C <sub>1</sub>		C <sub>1</sub>		C <sub>3</sub>		
K <sub>11</sub> = S <sub>1</sub>															

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ko <sup>2</sup> W <sub>14·3</sub>	nda <sup>43</sup> W <sub>23</sub>	ne <sup>3</sup> W <sub>1·1</sub>	nda <sup>32</sup> W <sub>23</sub>	ngusu <sup>2</sup> wa <sup>43</sup> W <sub>23</sub>	nkye <sup>23</sup> W <sub>23</sub>	ti <sup>3</sup> w <sub>03·2</sub>	kalu <sup>4</sup> W <sub>1·1</sub>
C <sub>1</sub>		C <sub>1</sub>		C <sub>1</sub>		C <sub>1</sub>	
C <sub>1</sub>		C <sub>1</sub>		C <sub>1</sub>		C <sub>1</sub>	
S <sub>21</sub>		C <sub>1</sub>		K <sub>3</sub>		C <sub>1</sub>	
K <sub>11</sub>							

ko <sup>2</sup> W <sub>14·3</sub>	ngusu <sup>2</sup> wa <sup>43</sup> W <sub>23</sub>	tyi <sup>2</sup> W <sub>1·2</sub>	ʃkwa <sup>3</sup> W <sub>1·1</sub>	ɔi <sup>1</sup> W <sub>14·1</sub>	o <sup>2</sup> w <sub>04</sub>	ni <sup>2</sup> W <sub>14·1</sub>	ki <sup>2</sup> no <sup>3</sup> W <sub>1·1</sub>
K <sub>11</sub>		P <sub>3</sub>			P <sub>11·1</sub>		P <sub>11·1</sub>
K <sub>11</sub>		P <sub>3</sub>			P <sub>11·1</sub>		P <sub>11·1</sub>
C <sub>1</sub>							
S <sub>21</sub>							

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nda <sup>32</sup>	yku <sup>2</sup>	ne <sup>3</sup>
W <sub>23</sub>	W <sub>24·1</sub>	W <sub>1·1</sub>
C <sub>1</sub>	C <sub>1</sub>	
K <sub>12</sub> = S <sub>1</sub>		

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laha <sup>32</sup>	ndukwa <sup>43</sup>	ne <sup>2</sup>	ndšku <sup>1</sup>	ne <sup>3</sup>	kau <sup>4</sup>	kq <sup>2</sup>	ʔ <sup>2</sup>
W <sub>11·3</sub>	W <sub>21</sub>	W <sub>1·1</sub>	W <sub>24</sub>	W <sub>1·1</sub>	W <sub>1·1</sub>	W <sub>4·3</sub>	W <sub>4·3</sub>
P <sub>21</sub>				P <sub>1·1</sub>		P <sub>4</sub>	
C <sub>2</sub>				C <sub>1</sub>			
K <sub>11</sub> = S <sub>1</sub>							

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bra <sup>34</sup>	ngwilyu <sup>32</sup>	ne <sup>2</sup>	bra <sup>3</sup>	kq <sup>2</sup>	bra <sup>34</sup>	nguhwi <sup>32</sup>	ne <sup>2</sup>
W <sub>3·2</sub>	W <sub>23·3</sub>	W <sub>1·1</sub>	W <sub>3·2</sub>	W <sub>4·3</sub>	W <sub>3·2</sub>	W <sub>23</sub>	W <sub>1·1</sub>
P <sub>1·1</sub>				C <sub>1</sub>			
C <sub>11</sub>				C <sub>1</sub>			
K <sub>3</sub> = S <sub>1</sub>							

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la <sup>1</sup>	ʔa <sup>2</sup>	ʔni <sup>3</sup>	nu <sup>3</sup>	nq <sup>2</sup>	ane <sup>12</sup>	ʔni <sup>3</sup>	la <sup>1</sup>	ʔa <sup>2</sup>	ika <sup>4</sup>	kq <sup>2</sup>
W <sub>11·3</sub>	w <sub>01·1</sub>	W <sub>1·1</sub>	w <sub>02·2</sub>	W <sub>22·2</sub>	W <sub>1·1</sub>	W <sub>1·1</sub>	W <sub>11·3</sub>	w <sub>01·1</sub>	W <sub>22·1</sub>	W <sub>4·3</sub>
P <sub>25</sub>		P <sub>1·3</sub>		C <sub>3</sub>		P <sub>25</sub>		C <sub>3</sub>		
C <sub>6</sub>						K <sub>4</sub>				
K <sub>11</sub> = S <sub>1</sub>										

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ha <sup>4</sup>	suʔwa <sup>43</sup>	nyoʔo <sup>43</sup>	ʔ <sup>2</sup>	loʔo <sup>1</sup>	ʔni <sup>3</sup>	nu <sup>3</sup>	nq <sup>2</sup>	kwilyi <sup>32</sup>
w <sub>03·1</sub>	W <sub>11·9</sub>	W <sub>22·2</sub>	W <sub>4·2</sub>	W <sub>14·1</sub>	W <sub>1·1</sub>	w <sub>02·2</sub>	W <sub>22·3</sub>	W <sub>1·1</sub>
P <sub>21</sub>				P <sub>1·3</sub>		C <sub>3</sub>		
C <sub>13</sub>				P <sub>11·2</sub>				
K <sub>13</sub> = S <sub>1</sub>								

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ʔni <sup>3</sup>	nu <sup>3</sup>	kwilyi <sup>32</sup>	ʔ <sup>2</sup>	ša <sup>3</sup>	nyoʔo <sup>43</sup>	kq <sup>2</sup>	ʔni <sup>2</sup>	tsuʔwe <sup>33</sup>	ika <sup>4</sup>	kq <sup>2</sup>	ʔni <sup>2</sup>	ndšku <sup>1</sup>	nte <sup>34</sup>	ika <sup>4</sup>	kq <sup>2</sup>
W <sub>1·1</sub>	w <sub>02·3</sub>	W <sub>1·1</sub>	W <sub>4·2</sub>	W <sub>11·2</sub>	W <sub>23·2</sub>	W <sub>4·3</sub>	W <sub>1·1</sub>	W <sub>11·3</sub>	W <sub>22·1</sub>	W <sub>4·3</sub>	W <sub>1·1</sub>	W <sub>24</sub>	W <sub>1·1</sub>	W <sub>22·1</sub>	W <sub>4·2</sub>
P <sub>1</sub>		P <sub>1</sub>		P <sub>4</sub>				P <sub>1·1</sub>				C <sub>1</sub>		P <sub>1·2</sub>	
P <sub>6</sub>				P <sub>21</sub>				C <sub>2</sub>				C <sub>3</sub>			
C <sub>13</sub>								C <sub>2</sub>				K <sub>1</sub>			
K <sub>11</sub> = S <sub>1</sub>															

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$\text{?ni}^3$ $W_{1 \cdot 1}$	$\text{tsu?we}^{32}$ $W_{11 \cdot 3}$	$\text{lka}^4$ $W_{22 \cdot 1}$	$\text{k}\text{q}^2$ $W_{4 \cdot 3}$	$\text{lo}^3$ $W_{14 \cdot 2}$	$\text{?ni}^3$ $W_{1 \cdot 1}$	$\text{nu}^3$ $W_{02 \cdot 2}$	$\text{n}\text{q}^2$ $W_{22 \cdot 2}$	$\text{sn}\text{e}^{12}$ $W_{1 \cdot 1}$	$\text{t}\check{\text{s}}\text{e}^2$ $W_{11 \cdot 9}$	$\text{ny}\text{q}^2\text{q}^{43}$ $W_{22 \cdot 2}$	$\text{k}\text{q}^2$ $W_{4 \cdot 3}$				
$P_{1 \cdot 1}$			$C_3$		$P_{1 \cdot 3}$			$P_{21}$		$C_{13}$		$C_{13}$	$C_{13}$		
$S_{15}$					$S_{2 \cdot 1}$										
$K_1$															

$\check{\text{s}}\text{a}^3$ $W_{11 \cdot 2}$	$\text{ny}\text{q}^2\text{q}^{43}$ $W_{22 \cdot 2}$	$\text{k}\text{q}^2$ $W_{4 \cdot 3}$	$\text{t}\check{\text{s}}\text{e}^2$ $W_{11 \cdot 9}$	$\text{ny}\text{q}^2\text{q}^{43}$ $W_{22 \cdot 2}$	$\text{k}\text{q}^2$ $W_{4 \cdot 3}$
$P_{21}$		$P_{21}$		$C_{13}$	
$C_{13}$			$C_{13}$		

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$\text{k}\text{q}^2$ $W_{4 \cdot 3}$	$\text{t}\check{\text{s}}\text{a}^2$ $W_{1 \cdot 1}$
$C_4 = S_1$	

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$\text{wa}^2$ $W_{03 \cdot 1}$	$\text{lka}^4$ $W_{22 \cdot 1}$	$\text{ny}\text{q}^2\text{q}^{43}$ $W_{22 \cdot 2}$	$\text{n}\text{q}^2$ $W_{1 \cdot 1}$	$\text{aka}^3$ $W_{12 \cdot 2}$	$\text{?ni}^3$ $W_{1 \cdot 1}$	$\text{si?ya}^1$ $W_{14 \cdot 2}$	$\text{su?wa}^{43}$ $W_{11 \cdot 9}$	$\text{ny}\text{q}^2\text{q}^{43}$ $W_{22 \cdot 2}$	$\text{?ni}^2$ $W_{1 \cdot 1}$	$\text{?t}^3$ $W_{4 \cdot 2}$
$P_1$		$P_1$		$P_3$		$P_{21}$		$P_{21}$		
$P_{21} = C_3$			$C_{13}$			$P_{21}$		$C_{13}$		
$K_4$						$C_{13}$				
$S_{13}$										

(100)

$\text{a1?i}^1$ $W_{28}$	$\text{aka}^3$ $W_{12 \cdot 2}$	$\text{t}^1$ $W_{03 \cdot 2}$	$\text{ny}\text{q}^2\text{q}^{43}$ $W_{22 \cdot 2}$	$\text{n}\text{q}^2$ $W_{1 \cdot 1}$	$\text{?i}^3$ $W_{4 \cdot 2}$	$\text{nda}^{32}$ $W_{23}$	$\text{ska}^3$ $W_{12 \cdot 2}$	$\text{y1?o}^{43}$ $W_{22 \cdot 2}$	$\text{n}\text{q}^2$ $W_{1 \cdot 1}$	$\text{?i}^1$ $W_{14 \cdot 1}$	$\text{aka}^3$ $W_{12 \cdot 2}$	$\text{?ni}^3$ $W_{1 \cdot 1}$
$P_{03}$			$P_3$		$P_3$		$C_3$		$P_1$		$P_1$	
$C_6$		$C_{11}$				$P_{1 \cdot 2}$		$P_{1 \cdot 2}$		$P_{11 \cdot 1}$		
$K_4$						$C_1$						
$K_{12} = S_1$												

[blank]

# Appendices

## Appendix A

### KEY TO CONSTRUCTION TYPES AND CLASSES

#### WORDS

Noun Word hyperclass . . . . .	W <sub>0</sub>
Common Noun class . . . . .	W <sub>1</sub>
General subclass . . . . .	W <sub>1.1</sub>
Simple General type . . . . .	W <sub>1.1.1</sub>
Multiple General type . . . . .	W <sub>1.1.2</sub>
Possessed subclass . . . . .	W <sub>1.2</sub>
Obligatorily Possessed type . . . . .	W <sub>1.2.1</sub>
Innately Possessed type . . . . .	W <sub>1.2.2</sub>
Unpossessed subclass . . . . .	W <sub>1.3</sub>
Locative subclass . . . . .	W <sub>1.4</sub>
Classified subclass . . . . .	W <sub>1.5</sub>
Proper Noun class . . . . .	W <sub>2</sub>
Personal Name subclass . . . . .	W <sub>2.1</sub>
Vocative Term subclass . . . . .	W <sub>2.2</sub>
Expandable Vocatives subclass . . . . .	W <sub>2.3</sub>
Place Name subclass . . . . .	W <sub>2.4</sub>
Temporal Noun class . . . . .	W <sub>3</sub>
General Temporal subclass . . . . .	W <sub>3.1</sub>
Simple Temporal type . . . . .	W <sub>3.1.1</sub>
Multiple Temporal type . . . . .	W <sub>3.1.2</sub>
Subordinator Temporal subclass . . . . .	W <sub>3.2</sub>
Pronoun class . . . . .	W <sub>4</sub>
Subject subclass . . . . .	W <sub>4.1</sub>

Goal subclass . . . . .	W <sub>4.2</sub>
Demonstrative subclass . . . . .	W <sub>4.3</sub>
Particle Word hyperclass . . . . .	W <sub>10</sub>
Descriptive Particle class . . . . .	W <sub>11</sub>
Quantifier subclass . . . . .	W <sub>11.1</sub>
Attributive subclass . . . . .	W <sub>11.2</sub>
Characteristic subclass . . . . .	W <sub>11.3</sub>
State subclass . . . . .	W <sub>11.4</sub>
Colour subclass . . . . .	W <sub>11.5</sub>
Adjective subclass . . . . .	W <sub>11.6</sub>
Modifier subclass . . . . .	W <sub>11.7</sub>
Adverb subclass . . . . .	W <sub>11.8</sub>
Manner subclass . . . . .	W <sub>11.9</sub>
Numerical Particle class . . . . .	W <sub>12</sub>
Base Numeral subclass . . . . .	W <sub>12.1</sub>
Empiric Prime subclass . . . . .	W <sub>12.2</sub>
Addition Numeral subclass . . . . .	W <sub>12.3</sub>
Allotive Numeral subclass . . . . .	W <sub>12.4</sub>
Derived Numeral subclass . . . . .	W <sub>12.5</sub>
Temporal Particle class . . . . .	W <sub>13</sub>
Monomorphemic type . . . . .	W <sub>13.0.1</sub>
Complex type . . . . .	W <sub>13.0.2</sub>
Relator Particle class . . . . .	W <sub>14</sub>
Independent Preposition subclass . . . . .	W <sub>14.1</sub>
Conjunction subclass . . . . .	W <sub>14.2</sub>
Referent subclass . . . . .	W <sub>14.3</sub>
Relative-Interrogative subclass . . . . .	W <sub>14.4</sub>
Verb Word hyperclass . . . . .	W <sub>20</sub>
Referential Verb class . . . . .	W <sub>21</sub>
Differentiated Referential type . . . . .	W <sub>21.0.1</sub>
Undifferentiated Referential type . . . . .	W <sub>21.0.2</sub>



Equational Verb class . . . . .	W <sub>22</sub>
Permanent Equational subclass . . . . .	W <sub>22.1</sub>
Temporary Equational subclass . . . . .	W <sub>22.2</sub>
Quasi-Equational subclass . . . . .	W <sub>22.3</sub>
Active Verb class . . . . .	W <sub>23</sub>
Unchanging Aspect type . . . . .	W <sub>23.0.1</sub>
Changing Aspect type . . . . .	W <sub>23.0.2</sub>
Different Aspect type . . . . .	W <sub>23.0.3</sub>
Reflexive Verb class . . . . .	W <sub>24</sub>
Undifferentiated Reflexive type . . . . .	W <sub>24.0.1</sub>
Differentiated Reflexive type . . . . .	W <sub>24.0.2</sub>
Auxiliary Verb class . . . . .	W <sub>25</sub>
Auxiliary Referential type . . . . .	W <sub>25.0.1</sub>
Auxiliary Equational type . . . . .	W <sub>25.0.2</sub>
Auxiliary Active type . . . . .	W <sub>25.0.3</sub>
Quotational Verb class . . . . .	W <sub>26</sub>
Emotional Head Verb class . . . . .	W <sub>27</sub>
Particle Head type . . . . .	W <sub>27.0.1</sub>
Basic type . . . . .	W <sub>27.0.2</sub>
Directed type . . . . .	W <sub>27.0.3</sub>
Differentiated type . . . . .	W <sub>27.0.4</sub>
Stative Verb class . . . . .	W <sub>28</sub>
Minor Word hyperclass . . . . .	W <sub>00</sub>
Augmentative class . . . . .	W <sub>01</sub>
Intensifier Augmentative subclass . . . . .	W <sub>01.1</sub>
Comparison Augmentative subclass . . . . .	W <sub>01.2</sub>
Classifier class . . . . .	W <sub>02</sub>
Noun Classifier subclass . . . . .	W <sub>02.1</sub>
Delictic subclass . . . . .	W <sub>02.2</sub>
Boundary class . . . . .	W <sub>03</sub>
Phrase-Initial Boundary subclass . . . . .	W <sub>03.1</sub>

Phrase-Final Boundary subclass . . . . .	W <sub>03</sub> ·2
Directional Boundary subclass . . . . .	W <sub>03</sub> ·3
Sentence Boundary subclass . . . . .	W <sub>03</sub> ·4
Pronominal class . . . . .	W <sub>04</sub>

## PHRASES

Noun Phrase class . . . . .	P <sub>0</sub>
Attributive Noun phrase . . . . .	P <sub>1</sub>
Quality Noun phrase . . . . .	P <sub>2</sub>
Possessive Noun phrase I . . . . .	P <sub>3</sub>
Possessive Noun phrase II . . . . .	P <sub>4</sub>
Addressee Noun phrase . . . . .	P <sub>5</sub>
Apposite Noun phrase . . . . .	P <sub>6</sub>
Prepositional Phrase class . . . . .	P <sub>10</sub>
Relational phrase . . . . .	P <sub>11</sub>
Prepositionally Directed phrase . . . . .	P <sub>12</sub>
Predicate Phrase class . . . . .	P <sub>20</sub>
Simple Predicate phrase . . . . .	P <sub>21</sub>
Qualified Predicate phrase . . . . .	P <sub>22</sub>
Affirmation Predicate phrase . . . . .	P <sub>23</sub>
Emotional Predicate phrase . . . . .	P <sub>24</sub>
Stative Predicate phrase . . . . .	P <sub>25</sub>
Auxiliary Predicate phrase . . . . .	P <sub>26</sub>
General Phrase class . . . . .	P <sub>30</sub>
Temporal phrase . . . . .	P <sub>31</sub>
Calendar phrase . . . . .	P <sub>32</sub>
Numerical phrase . . . . .	P <sub>33</sub>
Interrogative phrase . . . . .	P <sub>34</sub>
Minor Phrase class . . . . .	P <sub>00</sub>
Comparison minor phrase . . . . .	P <sub>01</sub>
Classifier minor phrase . . . . .	P <sub>02</sub>

Limited minor phrase . . . . .	P03
Negative minor phrase . . . . .	P04

CLAUSES

Basic Clause class . . . . .	C <sub>0</sub>
Basic Action clause . . . . .	C <sub>1</sub>
Basic Referential clause . . . . .	C <sub>2</sub>
Basic Equational clause . . . . .	C <sub>3</sub>
Reflexive clause . . . . .	C <sub>4</sub>
Stative clause . . . . .	C <sub>5</sub>
Directed Clause class . . . . .	C <sub>10</sub>
Directed Action clause . . . . .	C <sub>11</sub>
Directed Referential clause . . . . .	C <sub>12</sub>
Directed Equational clause . . . . .	C <sub>13</sub>
Symbiotic Clause class . . . . .	C <sub>20</sub>
Speech clause . . . . .	C <sub>21</sub>
Affirmation clause . . . . .	C <sub>22</sub>
Subordinate Clause class . . . . .	C <sub>30</sub>
Temporal Subordinate clause . . . . .	C <sub>31</sub>
Minor Clause class . . . . .	c <sub>00</sub>
Basic Action minor clause . . . . .	c <sub>01</sub>
Directed Action minor clause . . . . .	c <sub>02</sub>
Basic Referential minor clause . . . . .	c <sub>03</sub>
Numeral Referential minor clause . . . . .	c <sub>04</sub>

COLONS

Simple Colon class . . . . .	K <sub>0</sub>
Statement-Statement colon . . . . .	K <sub>1</sub>
Activity-Instigation colon . . . . .	K <sub>2</sub>
Antecedent-Consequent colon . . . . .	K <sub>3</sub>

Predication-Development colon . . . . .	K <sub>4</sub>
Thesis-Antithesis colon . . . . .	K <sub>5</sub>
Complex Colon class . . . . .	K <sub>10</sub>
Axiom-Elaboration colon . . . . .	K <sub>11</sub>
Situation-Result colon . . . . .	K <sub>12</sub>
Initiation-Sequel colon . . . . .	K <sub>13</sub>

## SENTENCES

Simple Sentence class . . . . .	S <sub>0</sub>
Primary sentence . . . . .	S <sub>1</sub>
Descriptive sentence . . . . .	S <sub>2</sub>
Hinge Sentence class . . . . .	S <sub>10</sub>
Purpose sentence . . . . .	S <sub>11</sub>
Reason sentence . . . . .	S <sub>12</sub>
Cause sentence . . . . .	S <sub>13</sub>
Condition sentence . . . . .	S <sub>14</sub>
Balance sentence . . . . .	S <sub>15</sub>
Symbiotic Sentence class . . . . .	S <sub>20</sub>
Comment sentence . . . . .	S <sub>21</sub>
Alternative sentence . . . . .	S <sub>22</sub>
Interrogative sentence . . . . .	S <sub>23</sub>
Inquiry sentence . . . . .	S <sub>24</sub>
Quotation Sentence class . . . . .	S <sub>30</sub>
Address sentence . . . . .	S <sub>31</sub>
Quotative sentence . . . . .	S <sub>32</sub>
Minor Sentence class . . . . .	S <sub>00</sub>
Relative minor sentence . . . . .	S <sub>01</sub>

## Appendix B

## KEY TO TAGMEME SYMBOLS

Phrase Tagmemes:

Ad	Addressee	IPH	Innately Possessed Head
Adj	Adjectival		
Adv	Adverbial	ItgC	Interrogative Completor
AH	Head to the Auxiliary	ItgH	Interrogative Head
An	Addition	LH	Limited Head
App	Apposition	li	Limitation
APrH	Affirmed Predicate Head	Mod	Modification
		n	Negation
Att	Attribution	Nc	Numeric
aug	Augmentation	ncp	Negation-Completion
Aux	Auxiliary	NegH	Negated Head
cer	Certainty	NoH	Nominal Head
Ch	Character	Num	Number
cl	Classification	Own	Owner
Col	Colouration	PH	Possessed Head
Com	Concomitant	PI	Possession Indicator
cp	Completion	Por	Possessor
Cpr	Completor	PrH	Predicate Head
CR	Calendar Relational	Q	Quality
cve	Comparative	QH	Quality Head
deg	Degree	Qn	Qualification
dei	Deictic	QPrH	Qualified Predicate Head
Dem	Demonstration		
Des	Description	QrH	Qualifier Head
Desg	Designation	Qua	Quantity
Det	Determinator	Rel	Relator
dp	Director Preposition	SH	Stative Head
EH	Emotional Head	Sp	Specifier
ev	Emotional Verbaliser	Spe	Specification
H	Head	SpNm	Specifying Number

St	Status	TH	Temporal Head
sve	Superlative	TopH	Topic Head

Clause Tagmemes:

A	Action	NRA	Numeral Referential Action
AA	Affirmative Action		
Acc	Accompaniment	O	Object
Axs	Axis	PnS	Pronominal Subject
B	Boundary	POb	Possessed Object
Cop	Complement	QM	Quotation Mark
DA	Directed Action	R	Reference
DE	Directed Equation	RA	Referred Action
DR	Directed Referential	Re	Receptor
E	Equation	RefA	Reflexive Action
EG	Equational Goal	RN	Reference Number
ES	Equational Subject	S	Subject
G	Goal	Sbr	Subordinator
GE	Goal Expansion	SE	Subject Expansion
IO	Indirect Object	Sk	Speaker
Ins	Instrument	SN	Subject Number
L	Location	SPr	Stative Predicate
M	Manner	T	Time

Colon Tagmemes:

Act	Activity	Inst	Instigation
Ant	Antecedent	Pred	Predication
Athe	Antithesis	Res	Result
Ax	Axiom	Seq	Sequel
Cons	Consequent	Sit	Situation
Dev	Development	Sta	Statement
Elb	Elaboration	The	Thesis
Init	Initiation		

Sentence Tagmemes:

Ads	Address	J	Junction
Alt	Alternate	Out	Outcome
AR	Alternative Reference	PHI	Purpose Hinge
Bal	Balance	Prop	Proposition
Bald	Balanced	Pur	Purposive
BHI	Balance Hinge	qmr	Question Marker
Cau	Cause	QSt	Question Statement
CHi	Cause Hinge	QT	Quotation Termination
CnHi	Condition Hinge	Quot	Quotation
Comt	Comment	Rea	Reason
Cond	Condition	RHI	Reason Hinge
Epn	Expression	SAd	Subject Addressed
ER	Emphatic Reference	Set	Setting
Exn	Explanation	Sub	Substance
F	Focus	Sug	Suggestion
Inj	Injunction	Term	Terminator
IS	Inquiry Statement	Top	Topic
Itg	Interrogation	VAd	Vocative Address
Itr	Introducer		

## Appendix C

## A NOTE ON PHONOLOGICAL WORDS

A phonological word consists of one or more syllables with word stress always occurring on the ultimate syllable. In bisyllabic or trisyllabic words the syllables preceding the stress are voiceless and/or accelerated, accentuating the Chatino trend towards using only monosyllabic words. Trisyllabic words are very unusual. Small Chatino children learning to talk usually begin by using only stressed syllables, and omitting the voiceless and accelerated syllables as well as consonants at the beginning of a word-initial consonant cluster. Thus  $wa^2$   $ngi\eta^3$  'completive am-going-I' (I am definitely going) becomes  $wa^2$   $\eta^3$  for small children, and similarly  $kyha^3$  'tortilla' becomes  $ha^3$ , and  $tškw\eta^4$  'metal, tin' becomes  $kw\eta^4$ .

One category of grammatical words which are not co-terminus with phonological words are words of more than one syllable borrowed from Spanish. These are conformed to the Chatino phonological word patterns in various ways apart from phoneme changes. The stress may be shifted to the ultimate syllable and the initial syllables become voiceless, accelerated, or contracted to a consonant cluster as when *panela* 'brown sugar' becomes  $pnela^4$ , *semana* 'week' becomes  $smno^4$ , *machete* 'jungle knife' becomes  $wštyi^3$ . The original Spanish word may become two Chatino words splitting between the stressed syllable and the syllables following, i.e., a phonological phrase, as when *tienda* 'shop' becomes  $tiye$   $ta^4$ , *septiembre* 'September' becomes  $sptiye$   $mbre^4$ , *culantro* 'coriander' becomes  $kula$   $ntru^4$ . Such a phonological phrase comprises a single morpheme and is considered to be a single syntactic word in this paper.



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