71-865
WHEELER, Alva Lee, 1928GRAMMAR OF THE SIONA LANGUAGE, COLOMBIA, SOUTH AMERICA.

University of California, Berkeley, Ph.D., 1970 Language and Literature, linguistics

University Microfilms, A XEROX Company , Ann Arbor, Michigan

Grammar of the Sion Language, Colombia, South America
By
Alva Lee Wheeler
A.B. (University of California) 1949 B.S. (University of California) 1951

DISSERTATION

Submitted in partial satisfaction of the requirements for the degree of DOCTOR OF PHILOSOPHY
in
Linguistics
in the
GRADUATE DIVISION
of the
UNIVERSITY OF CALIFORNIA, BERKELEY

Approved:


Degree conferred
DEGREE CONFERRED MARCH 24, 1970
Date

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

## PLEASE NOTE:

Sone pages have indistinct print. Filmed as received. UNIVERSITY MICROFILMS.

Grammar of the Siona Language, Colombia, South America

The gramar of the Siona lancuage. Solombia. South America is oriented to the tagmemic school of linguistics. Special attention has been given to the srammatical role of constituents in terms of their particular structural level (sentence, clause, phrase, word, etc.). Relationships between structural levels are stated on the assumption that a complex constituent manifesting a tagmeme of one level is further analyzable in terms of tagnemes of the next lomer level.

The most complex levels of structure in Siona are the clause and the word. Dlause structure is displayed in sumary form by way of a matrix chart (page 24). This chart presents the eisht basic clause types of the language along one perimeter and the structural variants common to each one along the other. Ford structure has its greatest complexities in the verb, which is analyzed in terms of three lower levels. Verb classes are identifier with the basic clause types they manifest. A salient feature of noun structure is the occurrence of classinier suf. fixes bo form the bulk of the noun stems. Aninate noun stens are distincuished on the basis of classifiers for masculine, feminine, and plural. Inanirate noun steas occur with any of twenty classifier suffixes indicating shape or function.

The section on discourse structure presents the lanzuage from perspectives that point to overall semantic relationshins. Although these relationsips do not lend themselves to segmentation and constituency in sramatical strinss, they form ar integral part of the language. It is in this area that further study is bein! djrected.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

## Contents

Page
000. Introduction ..... 13
010. General ..... 13
020. Iinguistic model ..... 17
100. Brief statement of phonology ..... 19
110: Consonants ..... 19
120. Vowels ..... 19
130. Stress ..... 20
140. Syllable ..... 21
250. Morphophonemics ..... 22
200. Clause structure ..... 23
210. Composition clause types ..... 25
211: Quotative clause ..... 28
212. Transitive clause ..... 29
213. Intransitive clause ..... 30
214. Progressive clause ..... 30
215. Stative clause ..... 31
216. Descriptive clause ..... 32
217. Equative clause ..... 33
218. Tmpersonal clause ..... 34
220. Tacmemes of the composition clause types ..... 35
221. Predicate tagmemes ..... 36
221.3. Quotative predicate ..... 36
221.2. Transitive predicate ..... 37
221.3. Intransitive predicate ..... 38
221.4. Progressive predicate ..... 38
221.5. Stative predicate ..... 39
221.6. Descriptive predicate ..... 39
221.7. Equative predicate ..... 40
221.8. Impersonal predicate ..... 40
222. Central nonpredication tagmemes ..... 41
222.1. Descriptive manner ..... 41
222.2. Goal. ..... 42
222.3. Locative referent ..... 43
222.4. Object ..... 43
222.5. Predicate nominative ..... 44
222.6. Quotation ..... 45
222.7. Referent ..... 46
222.8. Subject ..... 47
223. Peripheral tagmemes ..... 48
223.1. Accompaniment ..... 48
223.2. Benefactor ..... 49
223.3. Interjection ..... 49
223.4. Instrument ..... 50
223.5. Intensifier ..... 50
223.6. Locative source ..... 51
223.7. Manner ..... 51
223.8. Time ..... 53
223.9. Vocative ..... 53
230. Distribution clause types ..... 54
231. Dependent clause ..... 55
231.1. Subordinate clause ..... 55
231.2. Adjectival clause ..... 56
231.3. Adverbial clause ..... 57
231.4. Nominal clause ..... 57
232. Independent clause types ..... 59
232.1. Declarative clause constructions ..... 59
232.1.1. Definite involvement ..... 59
232.1.2. Imperative ..... 60
232.1.3. Subjunctive ..... 61
232.1.4. Detachment ..... 61
232.1.5. Indefinite involvement ..... 62
232.1.6. Distant ..... 62
232.2. Confirmation interrogative clause ..... 63
232.3. Information interrogative clause ..... 64
240. Perfective clause types ..... 66
241. Subordinate perfective clause ..... 66
242. Declarative perfective clause ..... 67
242.1. Definite ..... 68
242.2。 Detachment ..... 68
242.3. Subjunctive ..... 69
243. Interrogative perfective ciause ..... 69
300. Phrase structure ..... 71
310. Nominal ..... 71
311. Nominal core ..... 72
3ll.1. Apposition ..... 72
311.2. Sequence ..... 73
312. Qualifier 1 ..... 73
313. Function ..... 73
313.1. Function enclitic complex ..... 74
313.2. Function word ..... 76
320. Noun phrase ..... 76
321. Modifier ..... 76
322. Demonstrative ..... 77
323. Possessor ..... 78
324. Number ..... 79
325. Qualifier 2 ..... 80
326. Qualifier 3 ..... 81
327. Noun head ..... 81
330. Specifier phrases ..... 82
331. Noun specifier phrase ..... 83
332. Nominal specifier phrase ..... 83
340. Temporal ..... 85
341. Temporal core ..... 85
350. Temporal phrase ..... 86
351. Temporal demonstrative ..... 86
352. Temporal qualifier ..... 86
353. Temporal head ..... 87
360. Verb phrase ..... 87
400. Word structure ..... 90
410. Verb ..... 90
411. Verb composition ..... 91
411.1. Subordinate verb construction ..... 91
411.1.1. Subordinate verb inflection type one ..... 97
411.1.2. Subordinate verb inflection type two ..... 98
411.2. Adjectival verb construction ..... 100
411.3. Adverbial verb construction ..... 101
411.4. Nominal verb construction ..... 101
411.5. Declarative verb constructions ..... 102
411.5.1. Definite involvement ..... 103
411.5.2. Imperative ..... 204
411.5.3. Subjunctive ..... 105
411.5.4. Indefinite involvement ..... 106
411.5.5. Detachment ..... 107
411.5.6. Distant past ..... 107
411.6. Confirmation interrogative verb construc- tion ..... 108
411.7. Information interrogative verb construc- tion ..... 109
412. Verb theme composition ..... 109
412.1. Definite verb theme ..... 110
412.2. Indefinite verb theme ..... 111
422.3. Distant verb theme ..... 112
413. Verb stem composition ..... 113
413.1. Simple verb stems ..... 214
413.2. Complex verb stems ..... 116
413.2.1. Verb stern construction type one ..... 117
413.2.2. Verb stem construction type two ..... 117
423.2.3. Verb stem construction type three ..... 118
413.2.4. Verb stem construction type four ..... 119
413.2.5. Verb stem construction type five ..... 120
423.2.6. Verb stem construction type six ..... 120
433.2.7. Repetitives without counterparts ..... 121
420. Noun ..... 122
421. Animate noun class ..... 122
421.1. Ingroup human ..... 123
421.1.1. Stem subclass la ..... 123
421.1.2. Stem subclass 1b ..... 125
421.1.3. Stem subclass le ..... 125
421.1.4. Stem subclass Id ..... 125
421.1.4.1. Subclass 1dx ..... 126
421.1.4.2. Subclass 1dy ..... 126
421.1.4.3. Subclass 1dz ..... 126
421.2. Noun stem subclass 2 ..... 127
421.2.1. Stem subclass 2a ..... 127
421.2.2. Stem subclass 2b ..... 128
421.3. Noun stem subclass 3 ..... 128
421.3.1. Stem subclass 3a ..... 128
421.3.2. Stem subclass 3b ..... 129
421.4 Proper nouns and kinship nouns ..... 129
422. Inanimate noun class ..... 130
422.1. Stem subclass 1 ..... 130
422.2. Stem subclass 2 ..... 136
422.2.1. Subclass 2a ..... 137
422.2.2. Subclass 2b ..... 137
423. Spatial noun class ..... 137
423.1. Stem subclass 1 ..... 137
423.2. Stem subclass 2 ..... 137
423.3. Stem aubclass 3 ..... 138
423.4. Stem subclass 4 ..... 138
423.5. Stem subclass 5 ..... 139
424. Temporal noun class ..... 139
424.1. Stem subclass 1 ..... 139
424.2. Stem subclass 2 ..... 140
425. Specifier noun ..... 140
430. Pronoun ..... 140
431. Animate ..... 141
432. Inanimate ..... 142
433. Spatial ..... 142
434. Temporal ..... 142
435. Interrogative ..... 143
440. Modifiers ..... 144
441: Adjective ..... 144
442. Numeral ..... 145
443. Qualifier ..... 146
444. Modifier ..... 146
445. Adverb ..... 147
450. Demonstrative ..... 147
451. Nominal demonstrative ..... 147
452. Temporal demonstrative ..... 148
460. Function word ..... 148
470. Interjection ..... 149
480. Intensifier ..... 149
490. Miscellaneous forms ..... 150
491. Conjunction ..... 150
492. Exclamatory word ..... 150
49\%. Onomatopoetic word ..... 151
494. Special responses ..... 151
500. Sentence structure ..... 153
510. Complete sentences ..... 153
511. Sentence types ..... 154
511.1. Declarative ..... 154
5l1.2. Confirmation interrogative ..... 156
511.3. Information interrogative ..... 157
512. Subordinate base ..... 159
512.1. Loose knit connectivity ..... 159
512.2. Close knit connectivity ..... 160
513. Special patterns of intonation ..... 162
513.1. Stimulation to excitement ..... 162
513.2. Expression of disapproval ..... 162
520. Fragmentary sentences ..... 163
600. Discourse structure ..... 165
610. Sentence connectivity ..... 166
611. The linking element ..... 167
6i2. Elaboration ..... 168
613. The distribution of sentence types within discourse ..... 169
620. Participant identification and role desirnation ..... 169
621. Patterns of participant identification ..... 170
622. Focus ..... 173
630. Speaker or narrator viewpoint ..... 17う
631. The narrator's relationship to the circumstances ..... 17ラ
632. The narrator's relationship to the listener ..... 176
References ..... 178
Bibliosraphy ..... 183

## Chart Index

I Siona Slause Matrix ..... 24
II Function Enclitic Orders ..... $7 ラ$
III Definite Verb ..... 92
IV Imperative Verb ..... 93
V Indefinite Verb ..... 93
VI Distant Past Verb ..... 94
VII Perfective Predication ..... 94
VIII Nominalization ..... 93-96
IX Verb Stem Class Number Coding ..... 11ラ
X Animate loun Specification and Pluralization ..... 124
XI Enclitic Narking for Focus ..... 174
000. Introduction
010. General

Siona is a member of the Western branch of the Tucanoan family ${ }^{l}$ and is spoken by about 150 people, who live at three points along the Putumayo River (Colombia-Ecuador border) betweer sei mouths of the Cuhembi and the Piñuña Blanca. The language has minor dialect variations associated with geographical spread and age differences. It is mutually intelligible with Hacaguaje, spoken by about 50 people in scattered dwellings along the Putumayo at Tablero and El Hacha (below the mouth of the San Niguel), and along the Mecaya and Senseya, tributaries to the Caqueta.

Earlier recordings of the Siona language under the names of Ceona, Zeona, Sioni, and Quenquejoyo have been made by Franciscan missionary priests, whose first contact is reported to have been 1638 or earlier. ${ }^{2}$ Mission establishments along the Napo, San Miguel and Putumayo rivers met with native resistance and failed on numerous occasions until 1752. From then until the 1870's the Franciscan missionaries maintained active work at several stations. Many of them made special efforts to learn the native language and left recorded word lists and catechisms. 3

The Siona were considered the prestige people of the upper Putumayo during the period of the Franciscan influence, and attempts were made to establish the language as the lingua franca of that region. Population estimates ranged up to

8,000. Contacts with civilization since the beginning of the twentieth century have resulted in a rapid trend toward extinction. "White man's disease" in the form of small pox, measles and whooping cough, along with the Siona's inability to cope with these, has been the major cause of depopulation. Today only three or four older men retain tribal dress and other practices. No one has been initiated into the office of shaman since before the death of Arcenio Yaiguaje, the "Taita Grande" of the Putumayo, in 1961. Arcenio had disqualified all the Siona men because of their use of commercial liquor in addition to their manioc beer, thus bringing "impurity" upon themselves.

At this writing Siona is still spoken in the family unit, although many people under twenty-five deny they understand more than a few words of the language. Intermarriage with whites and with Indians of other tribes (Cofan, Quichua) is common. Social, political and economic aspects of the culture are approaching almost complete integration with those of the white community. Chief Ricardo (younger brother to Arcenio) maintains very little influence on the tribe, but gains his reputation by posing for photographers in his ornate festive dress.

The name Siona seems to have been given by the Witotos (inhabitants of the lower Putumayo). In their language the term means "perfume people," which fits the practice of the Siona men in applying native perfumes to the decorative palm fibers they attach to their upper arms. Another possibility,
which seems less plausible, is that Siona is the name given by priests and white settlers, who have observed that these people's answer to a common greeting "Shere are you going?" is ziona "to the field." The Siona call themselves gątíya bą1~ "people of the Nild Cane River," Which is the Putumayo.

Contemporary investigation hitherto has consisted of sporadic gathering of word lists for purposes of classification, 4 in addition to a concentrated effort by Manuel Jose Casas y Manrique. whose field notes date from 1930 until the present. ${ }^{5}$

As I gathered language data during various sojourns in the tribal area between 1960 and 1968 , the following informants were especially helpful: Ricardo Yaiguaje, Estanislao Yaiguaje, Francisco Piaguaje, Luciano Piasuaje, Sofonias Lanigueje, Aurelio :Ianiguaje, Gladys Cabrera (all of Euena Vista, the center of the tribal area alons the Putuayo); and Corneiio Payoguaje, who lives near the mouth of the Piñuña Negra and represents the Hacaguaje dialect.

It is difficult to evaluate the special help and encouragement my collecues of the Summer Institute of Linguistios have given me throughout the period of investigation. To begin with Dr. Kenneth Pike provided me with insights into the analysis of the lansuage during workshops at Limoncocha, Ecuador in 1960 and 1961. His theoretical Nork is the primary influence on the development of this presentation. Dr. Catherine Peeke made many valuable suggestions at about the
same time. I benefited greatly from the data gathering and tribal experience of Orville Johnson in Secoya, a language closely related to Siona. My thanks, also, go to Dr. Viola Waterhouse for her help on various aspects of the grammar analysis in 1965; to Dr. Esther Matteson, who read this dissertation and made many valuable sug§estions; and to Niss Carolyn Zuller, Miss Eeverly Erandrup, Niss Sheryl Takasi, and Mrs. Doris Svedbere, who typed the manuscript.

Of the faculty and graduate students in the Department of Linguistics, University of California, Eerkeley, Tho have influenced the formation of my theoretical views, I an especially grateful to Drs. Nary R. Faas, M.B. Emeneau, Vadison S. Deeler, Wallace L. Chafe, Nilliam Shipley, Terrence S. Kaufman, and 0. Brent Eerlin.

I an deeply conscious of the help given by my wife Margaret, who, with our four children, accompanied me to the tribal area, learned to speak the languase, established many friends amons the Siona, and contributed greatly toward winning the confidence of these people.

Sponsorshiv for this invesitigation has been under the auspices of the Summer Institute of Linguistics, Santa Ana, California.
020. Linguistic model

This description of the Siona gramar. ${ }^{6}$ is tagnemically oriented. 7 The tem tacmeme refers to a grammatical unit or constituent (together with its conditioned variatiors) which
bears a specific function (also called slot) within a larger structural unit and is realized by one or more given classes of constructions (fillers of a slot). This analysis approaches the clause level as a convenient starting point (Section 200). After the internal structure of each clause type (in terms of the function-class relationships of each constituent unit) and their external distribution (in terms of larger construction classes which manifest sentence level taomemes) are stated. the analysis procoeds to the next lower level and deals with the constituent tagmemes composing the phrase (Section 300). Subsequently the word, and then the theme. stem and root are analyzed in like manner (Section 400) until the lowest cormon denominator the morpheme (or hyper-morpheme). is cited according to its distribution class by which it is labeled in the lexicon.

Ideally, one should begin the succession of analytical steps at the top level in the hierarchy, discourse, and proceed from there to sentence and then clause. so that tagmemes are analyzed by level of complexity as follows:

Discourse
Sentence
Clause
Phrase
Word
Theme
Stera
Tor wheme

However. clause is used as a starting point in the analysis because it encompasses a fairly controllable "chunk" of the sramatical structure. Sentence (Section j00) and discourse (Section 600) are dealt with at the end of the description as aspects of the grammar which tie together relationships on a less segmentable basis and explain features of syntax which cut across various levels of the grammatical hierarchy.
100. Brief statement of phonology ${ }^{8}$
110. Consonants

Consonants consist of two series of stops ${ }^{9}$; fortis (aspirated) $p, t, k, k^{\mathbb{W}}$ and lenis ( (lottalized) $b, d, g, g^{\mathbb{N}}$; sibilants s (fortis), z (lenis-glottalized), © (fortis affricate); semivowels $w$ and $y$; nasals $m$ and $n$; and laryngeals $h$ and $h^{W}$ (fortis), and ? (lenis).

Lenis d is retroflexed and has allophone [ r ] occurring intervocalically. Semivowel y has allophone [ñ] occuirring contiguous to a nasalized vowel. Glottal stop $/$ / is very faint and is accompanied by a glottal effect on the contiguous vowels in certain environments. ${ }^{10}$
120. Vowels

Vowels are of six tongue positions:

Front Central Back

| High | 1 | a | $u$ |
| :--- | :--- | :--- | :--- |
| Low | e | a | 0 |

Back vowels are rounded. Contrast between oral and nasalized counterparts occurs for all vowels except in the environment adjacent to a nasal consonant, in which case only the nasalized counterparts occur. Low front vowel e has the value of $[\varepsilon]$ and has allophone [æ] when nasalized. All vorels have voiced offglide (phonetically long vowel and descending pitch) when they occur as strossed single vorel nucleus of word initial syllable and are followed by an un-
stressed syllable. All single vowels have voiceless offolide preceding a stressed syllable with fortis consonant onset.
130. Stress

Stress is non-contrastive, but is analyzed as phonemic because of the conditioning effect it has on adjacent vowels and on the selection of certain allomorphs of stem inflection. Stress occurs obligatorily on all verb steri syllables, all root syllables and various suffix syllables. Some sin-gle-syllable morphemes have stressed and unstressed alternates. Stress is not written on the first syllable of a stem or root unless the stem or root is monosyllabic.

Stress is reduced on words that do not occupy a nuclear position in the phonolofical phrase, so that the resultant phonetic effect is the same as in cases where stress does not occur. Phonological phrase ${ }^{1 l}$ is a term used among tagmemicists to refer to a level of phonological structure involving one or inore word units, i.e. a head word and its attributes. It is fruitiful in explaining conditioning factors for phonological variation on lower levels. ヨ.ع., Nord, syllable. phoneme. The phonological phrase (structural level of the phonological hierarchy) usually coincides with the grammatical phrase (structural level of the grammatical hierarchy), but not when the grammatical phrase has such complexities as apposition, series, disjunct constituents, etc. In Siona the phonological phrase consists of optional onset, obligatory pea! and optional offglide. The peak coincides
with the head word of the gramnatical phrase. The stress of that word is distinct, and ro leveling of phonemes occurs. Words (or syllables) which coincide with the onset and offglide positions of the phonological phrase are not stressed as heavily as they would be in isolation or in the peak position. Because of this phenomenon, syllables are shortened, and intervocalic glottal stop is not articulated. Only the glottal effect on the contiguous vowels remains. The following examples illustrate y $\ddagger$ ? ${ }^{\prime}$ "First person singular" and 8告"垂"louse" first in the peak position of a phonological phrase, then in the onset position.




(comb)."
140. Syllable

The syllable canon is described phonemically as: $\mathrm{CV}(\mathrm{V})$ and $\mathrm{CV}{ }^{2}$ -

Glottal stop never occurs in word final position. Two rounded vowels never occur contiguously.

A two-vowel. sequence is considered a complex nucleus of a single syllable because the timing and intonation involved
in its articulation is the same as that of a single stressed vowel. Sequences of VV' also occur, but morpheme boundary alwaju occurs between the final vowel and the glottal stop. See the distant past constructions illustrated in Section 412.3.
150. Morphophonemics

Morphophonemic alternation within the word ${ }^{13}$ unit is stated as follows:

$$
\begin{aligned}
& u>i \text { before } o . \\
& V>V \text { contiguous to a nasalized vowel. }
\end{aligned}
$$

Nasalization carries through $w, y, h$, anci $?$ to the following vowel.

Glottal stop is intercalated between a vowel and a lenis consonant, and the lenis consonant becomes fortis, when the following vowel is stressed. The phoneme sequences CVi and CV'i (Whether oral or nasalized) are shortened to CV preceding a stressed syllable that has a fortis consonant onset. In cases where these sequences do not coincide with grammatical stem boundaries, shortening to CV occurs preceding any stressed syllable.
200. Clause structure

Two sets of structural criteria distinguish Siona clause types. These are illustrated each along different axes of Chart I, page 24. The vertical axis indicates the distinctions based on the internal composition of the clause. The types of constituent elements, their relationship to each other, and the way they pattern in the maximum expansion of the clause comprise the internal composition, hence these clause types are referred to as composition clause types.

The horizontal axis indicates the different forms the composition types may manifest as they are distributed as functional elements among their various higher level syntactic environments, such as sentence or discourse, and as well, as units embedded within clause or phrase level construction. These different forms group tosether as members of a paradigm corresponding to a particular composition type and are herein referred to as distribution clause types.

The syntactic categories indicated as composition types are sumarized in terms of a tagnemic formula for each (Sections 211-218). The concepts therein manifested are essentially the same as those expressed in the phrase structure components of Transformational Grammar ${ }^{14}$, and would correspond to the categories of deep structure. Likewise, the different forms that the composition types manifest (i.e. distribution types) represent essentially the transformations which are assigned to the phrase structure component, according to the transformational school, and coincide with their concept of surface structure.

## Chart I <br> Siona Clause Matrix



For convenience of description these two types are illustrated in chart form (Chart I, page 24) as intersecting vectors of a matrix. The total array of Siona clauses classified according to both sets of criteria amount to fifty-six types, as a result of multiplying the eight composition types by the seven distribution types. A particular clause type represented by the intersection of two given vectors of the matrix may be labeled Transitive-Declarative, Descriptive-Adjectival, Progressive-Subordinate, etc. In this description the composition types are assigned number codes 10 through 80 , and the distribution types are assigned 01 through 07. Combinations of these types will be referred to by their appropriate number combinations, 11 for Quotative-Subordinate, 25 for Tran-sitive-Deciarative, 56 for Stative-Interrogative Corroborative, and so on to cover the entire scheme.

The composition types, with respect to their component tagmemes and interrelations, are discussed in Section 210. The analysis of individual tagmemes is further elaborated in Section 220. Variations in form and distribution are covered in Section 230 on distribution types. Section 240 deals with the perfective clause type, which is a separate category of syntactic construction from the major patterns displayed in Chart I, page 24.
210. Composition clause types

The nuclear tagmeme of a clause is the predicate, which is the only obligatory element of all clause types except
the Equative 70 (Section 217). Other clause level tagmemes are key 15 to the definition of the clause type, and/or they perform a central role of syntactic relationship to the predicate. Object, Referent, Goal, and Quotation are of that type, since their potential occurrence along with the type of predicate determines the basic clausc typs. Subject does not bear this determining feature, since it occurs in all the clause types except the Impersonal 80 (Section 218), but its close relationship to the predicate justifies its role as central in the clause. Should the subject tagmeme not occur overtly, other syntactic features brought to light through discourse analysis make clear the covert element furictioning as logical subject.

Other tagmemes such as Time, Manner, Interjection, and the Locatives, do not perform a central syntactic role in distinguishing one clause type from another. These elements, as stated by Longacre, 16 function as setting. They perform a peripheral role or backdrop for the dramatis personnae, or the central elements.

In order to minimize redundancy and simplify the description only the central tagmemes of a clause type will be mentioned in the following discussion on differences in clause types (Sections 221 and 222). The peripheral elements will be presented in Section 223.

The order of tagmemes in sequence is fixed only where indicated in the particular clause type. The most frequent
order is shown by the formulae. It is normally the case that the predicate occurs finally in the clause. Only in the Declarative clause type (Section 232.1) do other tacmemes follow the predicate, and then only as an afterthousht to clarify or to highlight other information pertinent to the comunication.
 "Everyone brought chonta palm, to place on the floor, as flat sections."
 apple, in the field."

The afterthought element may involve a subordinate clause as well as a nominal constituent of a declarative clause, in which case the afterthought is analyzed on the sentence level (Section 511).

In general, clause level tagmemes preceding the predicate assume no significant order, except that the first position in the clause bears a special degree of prominence before the others.

A basic djfference between clause types is that certaini tagmemes occur in one type and not in another. Two such differences constitute emically different clause types. 18 All the clause types have different types of predicates and are so indicated by the numerical code which occurs suffixed to the predicate symbol P - and to the clause symbol Cl-. These codes correspond to the appropriate categories indi-
cated in Chart I. page 24. This distinction may have as its basis the fact that only a certain list of verbs comprising a distinct grammatical class constitutes the fillers of the given predicate slot.

The first six slause types, Quotative, Transitive, Intransitive, Prosressive, Stative, Descriptive, represent varying degrees of transitivity. The Jquative and the Impersonal are radically different tyees.

Each formula is followed by verbal interpretation of its symbols.
211. Quotative clause 10
$\mathrm{Cl}-10= \pm S \pm G \pm \mathrm{Q} \pm \mathrm{R}+\mathrm{P}-10$
Quotative clause (C1-10) consists of optional tacmemes: subject (S), goal (G), quotation (Q), referent (R); and of obligatory quotative predicate (P-10) tagmeme. The distinguishing features of the quotailve clause are: the quotative predicate slot, filled by a class of verbs denoting speaking, thinking, or revelation (throush dreams or visions); the occurrence of a quotation (Q) tacmeme, which involves either direct quotation, indirect quotation, or a noun phrase or pronominal referent substituting for either of the first two; and the occurrence of a referent ( R ) tagrame, indicating the nominal element about which the quotation refers. Goal (G) identifies the addressee. Subject (S) is the addressor.
"He told me the story of the tiger killins."

" 'She doesn't know how to cook,' they were sayins,
about her."

"Now I thought about wanting to go."
212. Transitive clause 20
$\mathrm{Cl}-20= \pm \mathrm{S} \pm \mathrm{G} \pm 0+\mathrm{P}-20$
Transitive clause (Cl-20) consists of optional tagmemes subject ( S ), goal ( $G$ ), object ( 0 ), and obligatory transitive predicate ( $\mathrm{P}-20$ ). The distinguishing feature of the transitive type is that the verb class occurring in the predicate slot denotes action which is directed toward an object. Although the object tagmeme is essential in the definition of the transitive type, it is optionai in occurrence. An object is at least implicit in all transitive clauses.

"He keeps a dog in the house."

"Pacho is carrying the corn to the house."

"Give him beverage to drink."
$\begin{array}{cc}{[0]} & {[\mathrm{P}-25]} \\ \text { das } \mathrm{Z} \\ \text { sabbi }\end{array}$
"He sent a message."
[Inj][ Ins ] [M ] [P-25]
yuá y6 wa’tibi besá wâi¹.
"Now he quickly ixilled him with a paddle."
213. Intransitive clause 30
$\mathrm{Cl}-30= \pm \mathrm{S} \pm \mathrm{G}+\mathrm{P}-30$
Intransitive clause ( $C 1-30$ ) consists of optional tagmemes subject (S), goal (G), and obligatory intransitive predicate ( $\mathrm{P}-30$ ). The distinguishing feature of the intransitive type is that the verb class occurring in the predicate slot denotes action or motion toward a goal, but not toward an object.

"He went home."
[Ins ] [ G ] [P-35]
y6gubi sídibȧną męąhiz.
"He is drifting downriver by canoe."
[ G ] [P-35]
gogoną hự'ş hiz.
"He is ill with a cough."

"The foreigner came by trail."

"He alights like a dove."
214. Progressive clause 40
$\mathrm{Cl}-40= \pm S+P-40$
Progressive clause ( $\mathrm{Cl}-40$ ) consists of optional sub-
ject (S) tagmeme and obligatory progressive predicate ( $\mathrm{P}-40$ ) tagmeme. The progressive clause type is characterized by the occurrence in the predicate slot of a class of verbs indicating that the subject is undergoing some kind of change, whether gradual or sudden. This type does not involve a goal nor an object.
[P-45]
ną ${ }^{2}$ \& $h \frac{1}{2}$.
"It is getting late."

"The shotgun went off."

"The armadillo quickly became caught."

"The fermented beverage ran out."
[ S ] [P-45][Inj]
zif wa? ${ }^{2} \mathfrak{z r b j}$ wahthi yuá.
"The child is getting well now."
215. Stative clause 50
$\mathrm{Cl}-50= \pm \mathrm{S} \pm \mathrm{LR}+\mathrm{P}-50$
Stative clause (Cl-50) consists of optional tagmemes
subject ( S ), and locative referent (LR), and obligatory stative predicate ( $\mathrm{P}-50$ ). The predicate slot of the stative type is filled by a class of verbs which indicates a temporary state of being in reference to a given place. Many of these stative verbs have intransitive counterparts which
involve action directed toward a goal. The locative referent tagmeme is related to the goal, but the two are distinguished formally (Sections 222.1 and 222.2).
[uqki kábite tuíh1.
"He is seated on a tree limb."
[ LR ${ }^{\text {ziayate }}$ [P-55]
"It is floating in the river."

"ily younger brother is seated in the canoe."

"The sloth is hansing."
sųki kébit te déni.
"He is hanging from a tree limb."
hai hąǫquite wéhi.
"He is reclining in the big hamock."
216. Descriptive clause 60

CI-60 $= \pm S \pm D M+P-60$
Descriptive clause (C1-60) consists of an optional
subject (S) tagmeme, an optional descriptive manner (Dii) tagmeme, and an obligatory descriptive predicate (P-60) tagmeme. The descriptive predicate slot (P-60) is filled by a class of verbs indicating quality. The main structural difference between the descriptive and the progressive
clause types is the fact that the manner tajmome（Din）is manifested by a limited number of adverbial constructions （Section 222．1）．
［Int］［P－6ラ］
＂ai dikini．＂It is very heavy．＂
［ S ］［Int］［P－65］
gatâbi ${ }^{7}$ ai hinháhi．＂The rock is very hard．＂
［P－65］
de？bhi．＂It is good．＂

＂The fruit is red like fire．＂

217．Equative clause 70
$\mathrm{Cl}-70= \pm \mathrm{S}+\mathrm{PR}+\mathrm{P}-70$
Equative clause（Cl－70）consists of optional subject $(S)$ tagmene，and obligatory predicate nominative（PR）and equative predicate（ $P-70$ ）tagmemes．The equative predicate slot is filled by a class of verbs consisting of two members ba？q＂be＂and＂主叱＂appear．＂

$$
\begin{aligned}
& \text { "This house is a big house." }
\end{aligned}
$$

$$
\begin{aligned}
& \text { "I was a sick person。" }
\end{aligned}
$$

［ PR ］［P－7ラ］
wahf y毛go ？${ }_{2}^{2} y$ ygo．
＂She appeared afroid．＂

"This clay pot is broken."

"This clay pot is a broken pot."

"This clay pot is a broken one."

"Those clothes are for washing."

"It is a lons pole."
218. Impersonal clause 80
$\mathrm{Cl}-80= \pm \mathrm{R}+\mathrm{P}-80$
Impersonal clause (Cl-80) consists of optional referent $(R)$ tagmeme and obligatory impersonal predicate ( $\mathrm{P}-80$ ) tagmeme. The impersonal predicate slot is filled by a class of verbs which may be inflected only in the third person singular, masculine. No overt subject occurs in this clause type.

"I feel bad."

"He is thirsty."

"I'm hungry."
[P-8j]
ha'sini.
"It hurts."

"(My) head hurts."
One or two speakers, who have had heavy exposure to Spanish, transfer the Spanish passive verb construction into Siona by casting it in the form of the Siona impersonal clause.

"He arrived on the date indicated by him."
(Spanish: "Iles, en la fecha indicada por el.")
220. Tasmemes of the composition clause types.

The characteristics of each tagmeme on the clause level are stated in terms of a grammatical slot or function (symbol to the left of the colon) and the grammatical element filling that slot (symbol to the right of the colon). The fillers of a particular slot nay be of a single construction class or of several construction classes, such as a temporal phrase, temporal pronoun, or temporal clause as fillers of the time (T) slot. A particular construction class may occur as a filler of several different slots.

Since each clause type has a different predicate, these tagmemes are analyzed separately in Section 221. Other tagmemes performing a central role in the clause construction are described in Section 222. Those tagmemes performing a peripheral role in the clause are presented in Section 223.

## 221. Predicate tagmemes

Each predicate tagneme is the nucleus of the clause type wherein it occurs. Tach predicate slot is filled by a different class of verb or verb complex (Section 360 ). The differences are stated in terms of a semantic feature inherent in the verib stem class in relation to the kinds of clause level tasmemes which occur as complements of that verb stem class, and/or in terms of the structural features of the verb class.
221.1. The quotative predicate (P-10:v-10) tagmeme occurs in the quotative clause ( $C 1-20$ ) and consists of a quotative predicate slot filled by a quotative verb class. This verb class has as its membership verbs denoting address, thinking, dreaming, etc. Which may be coinplemented by a direct or incirect quotation (quotatisi tagmeme Q), the participant to Which the quotation refers (referent $R$ ), and the participant to which the address is directed (soal G).

$$
\begin{aligned}
& \text { "rie hunts well.' he said to me about his dog." }
\end{aligned}
$$


"I spoke the people's languase into the machine."
$\left[\begin{array}{ccc}{[ } & Q & ]\end{array} \begin{array}{cc}R & {[P-15}\end{array}\right]$
"He is a good person." I thought concerning you."

"I told the chief all we had done."
221.2. The trensitive predicate (P-20:v-20) tagmeme occurs In the transitive clause (Cl-20) and consists of a transitive predicate slot filled by a transitive verb class. This verb class encompasses causatives as well as simple transitives (Section 413.2), and is complemented optionally by both orject (O) and soal (G) tagmernes. Jven the transitives that have been made causative by suffixation may not be complemented by a second object or goal. Such a construction would occur in the form of a subordinate clause (Section 223.1), or an accompaniment tagrame (Seotion 223. i) in the same clause.

```
[\mp@code{O ] [ G ][P-2\] [ide zibną sabi. "He took the machete to the field."}
```


"He sent the machete to the field. with my child."
[O] [G] [P-2う]
wade síhǫbiną hthi"i. "He shot the agouti in the head."

"I left my wife. I left her downriver."
ho yá yainị $]$ wí? eną bahi. "Ee keeps a dos in the house."
221.3. The intransitive predicate ( $\mathrm{P}-30: \mathrm{v}-30$ ) tagmeme occurs in the intransitive clause ( $\mathrm{Cl}-30$ ) and consists of an intransitive predicate slot filled by a class of verbs which indicate motion toward a goal (G), but which may not be complemented by an object.
[íayanaz gahewi. "I descended to the river."
[ G ] [P-35]
ziong saini. "He is going to the field."
[ S ] [G] [ P-35]
wekíbi so"óną wí"wfbi. "The tapir ran far."

[S][G] [P-35] yaibi yihaną ką̣̂hich. "The jaguar sleeps on the ground."

221.4. The progressive predicate ( $\mathrm{P}-40: \mathrm{v}-40$ ) tagmeme occurs in the progressive clause (Cl-40) and consists of a progressive predicate slot filled by a verb class indicating that the subject is undergoing some kind of a change, whether gradual or sudden. It is not complemented by goai, object, nor referent.

221.5. The stative predicate ( $\mathrm{P}-50: \mathrm{v}-50$ ) tagmeme occurs in the stative clause (CI-50) and consists of a stative predicate slot filled by a class of verbs which indicate a temporary state of being and which are complemented optionally by a locative referent (IR) tagmeme.

"The dog is standing on a sheet of split palm wood."

"The sloth is hanging."

"He is lying there just like a sick person."
221.6. The descriptive predicate ( $P-60: v-60$ ) tagmerae occurs In the descriptive clause ( $C 1-60$ ) and consists of a descriptive predicate slot filled by a class of verbs indicating a quality about the subject. There is no occurrence of goal, object nor referent as complements. The theme suffix order 400 "aspect" (Section 412.1), the paxticipial nominalizer 23.2 -se?e "completive" (Chart VIII, page 95), and the imperative inflection (Chart IV, page 94) do not occur in the verb construction.

```
[ Seq`sa tabibi [Int][P-65] dykini.
"The heart wood pillar pole is very heavy."
```



```
"The coconut shell is very hard."
```


## 

221.7. The equative predicate ( $\mathrm{P}-70: \mathrm{v}-70$ ) tagmeme occurs In the equative clause (Cl-70) and consists of an equative predicate slot filled by a class of verbs having only two members, ba" 1 "be", and "foyt "show, appear, cause (oneself) to be seen." Its function is that of copula to show transition between the subject and predicate nominative.
 haif gatabi $\begin{aligned} & \mathrm{PR} \\ & {[\mathrm{P}-75]} \\ & \mathrm{ba} \text { ini. "It is a big rock." }\end{aligned}$

 "My younger brother has gone very far away."

"It was where the herd of peccary had slept this morning." [aco taye $\quad$ [P-75] ${ }^{2}$ ąc̨ tę̧yę ba'ini. "There is food planting to be done." 221.8. The impersonal predicate (P-80:v-80) tagmeme occurs in the impersonal clause (Cl-80) and consists of an impersonal predicate slot filled by an impersonal verb (v-80). The impersonal veros are inflected only in the third person singular. masculine, and may be nominalized only by suffixation of order 23 -ye and -se?e (Section 411.4. Chart VIII, page 96 ). Theme suffix order 400 "aspect", and the
imperatives do not occur in the verb construction. Complementation by the referent tagmeme is key to the definition of this verb class.



"It hurts regarding my thigh."

"It feels bad to her from the fall."
222. Central nonpredication tagmemes

Central tagmemes are key to the clause construction and are diagnostic components of the clause type in which they occur.
222.1. Descriptive manner (DH:Nom/mod) occurs only in the descriptive clause type (Section 216). It is distinct from the manner tagmemes of the other clause types, since the filler list consists of either a nominal construction (Section 310) marked only with nominalizing suffix 23.1 -ye (Chart VIII. p. 96) enclitic 74 -du "like" (Section 313.1); or a modifier (Section 444). The descriptive manner tagmeme occurs optionally not more than once. The manner tagmeme occurring in other clause types encompasses a larger filler 1ist (Section 223.7).
[DM] [P-60] [S ]
gadé díaini bagí. "Ye is extromely heavy."

"It is red. like macaw feathers."
[rehe'iye do'pot'neş. uHow much does it cost!"
222.2. Goal (G:Nom) occurs only as a complenent to verbs of motion. which are either quotative. transitive. or intransitive. It is the point toward which the subject noves in the case of the intransitive, and the point tovard which the object or quotation is directed in the cese of the transitive and quotative.

It consists of a soal slot filled by a nominal construction (Section 310). The soal slot is identifiable by context and by the pattern of enclitic marising that occurs with the nominal construction. Either -ne. -niz. or -de (norinal enclitic order 60. Section 313.1) occurs. depending on the degree of focus given to the nominal element and Whether the nominal refers to an animate or inanimate participant in the discourse (Section 622).



"I removed the turtle eggs from the sandbar."
222.3. Locative referent (LR:Nom) occurs only in stative clauses. It is parallel in function to the goal which occurs with motion verbs. Since the stative verbs do not reflect the element of motion, the locative complementing them functions as a point of reference to the predication.

It consists of a locative referent slot filled by a nominal which refers only to an inanimate participant and which is obligatorily marked with nominal enclitic -de "referent."




"The caterpillar is clung to the leaf."

"The bird is upon the tree limb."
222.4. Object ( $0:$ Nom) occurs only as a complement to transitive verbs, and indicates the recinient of the action. It consists of an object slot filled by a nominal. It is identifiable by context and by the pattern of occurrence of the enclitic markers -nî, -de, or no marker (Section 622). depending on the degree of focus given to the nominal element and whether the nominal refers to an animate or inanimate participant (Eection 313).






"They buried the one who died yesterday."
222.5. Predicate nominative (PR:adj/Nom)

The predicate nominative tagmeme occurs obligatorily in the equative clause type (S.ection 217). The nominal construction (Section 310) in this case does not involve the occurrence of a function word nor of enclitic order 60 (Section 313).

"He was indeed one who had come (here) a long time ago."


"She then showed herself afraid."
The adjective (Section 441) here enters into some idiomatic constructions that do not occur in the qualifier 2 slot of the noun phrase (Section 325). These are formed by suffixation of inanimate noun classifier order 20 and result in
special semantic connotations.
$z f_{2}$ "offspring, small"
zifó "pregnant"
[PR] [P-75]
zq̊bi ba"ico. "She is pregnant."
The following nominal clause (Cl-04) also patterns as this kind of idiomatic construction:
[ PR ] [P-75]
㸚 bebwi bahi’i.
"He was nude (i.e., without clothes)"
The suffix 21.17 -wi "containing within" is associated with that of gą ${ }^{\text {n }}$ niwi
222.6. Quotation (Q:Disc/Nom) occurs only as a complement to quotation verbs. It consists of a quotation slot filled by a direct discourse of any length (Disc) or by a nominal (Nom). When the nominal occurs, the pattern of enclitic marking is the same as for inanimate object. The nominal may be an indirect discourse of no more than clause length, or a construction referring to a discourse as its antecedent. When the direct discourse is short (generally eight or ten words). the quotation tagmeme often occurs between the subject and the predicate, as indirect discourse constructions normally do. Long quotations usually precede or follow the rest of the clause construction.

$$
\begin{aligned}
& \text { [ Q ] [P-11] [S ] [ Q } \quad \text { [P-15] }
\end{aligned}
$$

"When he said that, I said, 'If that's the case,
let's go.'"
[ P-11 ] [S ] [P-15] [ Q ] [P-11]
[P-15] [S ]
sewbbi bagi. "He finished telling it, and another person answered, '..........' he answered saying."

"Tell the story of the tiger shooting."
 "He asked me about my older brother, Where has he gone? '"
222.7. Referent (R:Nom) occurs as a complement to quotation verbs and to impersonal verbs. It consists of a referent slot filled by a nominal, which is obligatorily marised with the nominal enclitic-de "referent" (Section 313.1). Most frequently the nominal filling the referent slot is animate, but the inenimate gender is manifest on occasion.
[ R ] [M ] [P-85]
bagote de? ${ }^{7}$ węnşhi. "It feels good to her."
[ Q ] [P-17] [ $R \quad]$
ge koká kaye"nę so"b daisi"kśde.
"What talk are they saying about the one who came from far?"

"There is desire to leave with respect to our (banisterium) drinking peopie."
222.8. Subject (S:Nom) occurs in all clause types except the impersonal. It consists of a subject slot filled by a nominal. It is identifiable by context and by the pattern of occurrence of the nominal enclitic markers -ga (without enclitic order 60). -bi. or no marker (Section 313, 622), depending on the degree of focus given to the nominal element and whether the nominal refers to an animate or inanimate participant (Section 622). Context, along with the system of antecedents and switch rererence (Section 411.1.1.) determines what participant in the discourse is functioning as subject if the subject tagmeme is absent from the clause. Although the subject tagneme is not diagnostic of different clause types. it is central to the clause construction because it is implicit in every clause except the impersonal type.

$$
\begin{aligned}
& \text { [ S ] [P-3う] }
\end{aligned}
$$

$$
\begin{aligned}
& \text { "The fire ants came down to him and latched on." }
\end{aligned}
$$

$$
\begin{aligned}
& \text { "The one who came today lay down and slept." }
\end{aligned}
$$

223. Peripheral tagmemes occur optionally in most clause construction types, with restrictions indicated under the discussion of the particular tagmeme. Their semantic content is usually supplementary to the central theme or the discourse, and they are not grammatically significant in defining clause types.
223.1. Accompaniment ( $A: N o m$ ) occurs optionally in all clause types except descriptive (C1-60), equative (C1-70), and impersonal ( $C 1-80$ ), and consists of an accompaniment slot filled by a nominal. It is characterized by obligatory occurrence of nominal function word nakbni "with" (Section 313.2) in the nominal construction. The nominals occurring in the accompaniment slot are animate. The function word nąkbni occurs occasionally in an inanimate nominal construction, but only as a variant mith the function enclitic -bi "source" (Section 313.1) when the construction fills the instrument slot (Section 223.4).

"He went fishing with Jorge."

"I sent (it) to the settlement with my in-law."

$$
\begin{aligned}
& \text { "He is seated in the canoe with his child." }
\end{aligned}
$$

223.2. Benefactor (B:Nom) occurs in all clause types except the stative (C1-50), descriptive (Cl-60), equative (Cl-70) and impersonal (Cl-80), and consists of a benefactor slot filled by a nominal, which is animate, and which is obligatorily marked by the function enclitic -de "referent" (Section 313.1.). This tagmeme occurs optionally only when the verb theme suffix 201 -kai "benefactor" occurs in the verb construction (Section 411.1.).

"We made that house for the white man."

"He hewed the canoe for the one named Adan."

"Go to the settlement for me."
223.3. Interjection (Inj:inj) occurs optionaliy in all clause types and consists of an interjection slot filled by an interjection word, of which the membership is yua "nor" and its derivations (Section 470). It normally occurs following the subject (or clause finally as an afterthousht), in which case it highights the whole clause. It may also highlight other clause level tagmemes when it precedes them.
 "My wife then got the machete and she then chased the pig."

"About then I killed the snake and threw it in the river."
[Inj][P-45]
yuá wahíhi. "Now he is getting well."
223.4. Instrument (Jns:Nom) occurs optionally in clause types quotative (Cl-10), transitive (Cl-20), intransitive (Cl-30), and progressive (Cl-40), and consists of an instrument slot filled by a nominal, which is inanimate, and which is obligatorily marked with the nominal function enclitic -bi "source" (Section 313.1). Inanimate nominels marked with nominal function word nąkbnị "with" (Section 313.2.) occasionally occurs as a variant of the enclitic (Section 223.1.).

[Ins ] [P-35]
mą'ąbi dát́x. "I came via the path."

"He began to get weil from the medicine that was injected."
223.5. Intensifier (Irt:int) occurs optionally in all clause types immediately preceding the predicate. It consists of an
intensifier slot filled by an intensifier word class of one member "ai "much, very, greatly" (Section 480).
[Int][P-35]
"ai wí"wabi. "He ran hard."
[Int][P-65]
?a1 dikini. "It is very heavy."
[Int][P-15][S]
「ai kéhi bágí. "He talks much."
223.6. Locative source (IS:Nom) occurs optionally in quotative (Cl-10), transitive (Cl-20), and intransitive (Cl-30) clause types only. It consists of a locative source slot filled by a nominal denoting location and is obligatorily marked with nominal enclitic -bi "source" (Section 313.1). It indicates the point of origin of the action.
[ LS ] [P-35]
wí?ebi sahiri. "He went from the house."


"He took the rock out of the hole with a shovel."
[Ins ] [ LS ] [P-35]
ybgubi kokảabi męąbi.
"He drifted from Coca Creek by canoe."
223.7. Manner (M:Nom/adv/Cl-03/mod) occurs optionally in al. clause types except the descriptive (CI-60) and the equative (Cl-70). Its usual position is immediately preceding the predicate, unless the intensifier tagmeme occurs. It consists of a manner slot filled by a Nominal (Section 3l0),
adverb (Section 445), an adverbial clause (Section 231.3). or a modifier (Section 444). When the Nominal construction occurs in the manner slot it has as the filler of its function slot a construction consisting of optional enclitic il -déba. optional enclitic 64 -de or 65 -da. and obligatory enolitic 74 -du. More than one manner tagmeme may occur in the same clause without order preference.


"I quickly xilled the paca rodent."



ii did it again the same way."

"He is thirsty for beverage."

"He set out sending the pio off."

"He caine down descending from the clouds."
223.8. Time (T:Tem) occurs optionally in all clause types. It consists of a time slot filled by a temporal construction (Section 340). It may occur more than once in the same clause without order preference. When noun classifier suffix order 20 occurs, selection is restricted to temporal suffixes 22.2 -dit, 22.3 -t士, 22.4-to (Section 424.1). Occurrence of function enclitics (Section 313) is restricted to optional enclitic 51 -debs, optional enclitic 61 -bi (time since), and optional enclitic order 70. Of the function words only tika "until" may occur.



"I did it in the days that were long ago."


"I waited during the rainy season, until the river overflowed."

"He will arrive when it is time for the girl to marry."
223.9. Vocative (Voc:n-p/n-k) occurs optionally in all clause types. It consists of a vocative slot filled by a proper noun $(n-p)$, or a kinship noun $(n-k)$ (Section 421.4), both of which
are animate．It functions as a means of attracting the at－ tention of the addressee．The vocative may occur only once Within a sentence．

```
    \([P-35][\mathrm{Voc}]\)
saiyų mąmf. "Let's go. Child."
```


[Voc][P-35]
wági daih告’告. "Come, In-law."


Godfather."

230．Distribution clause types
Each of the composition clause types discussed above and illustrated alons the vertical axis of ChartI，page 24 may be transformed into a variety of distribution clause tyoes illustrated along the horizontal axis of the same chart．All the distribution type clauses are structurally distinct on the basis of their distribution within the grammatical hier－ archy，correlated with variations in the verb inflection．

The independent declarative clause type（Cl－0う）is viewed as the basic citation form．All other types are con－ sidered transformational variants．The other independent clause types are confirmation interrocative（ $01-06$ ），and in－ formation interrogative（C1－07）．The dependent clause type encompasses four sub－types．The first type（Cl－01）is in
subordinate relationship to another subordinate clause or to an independent clause within a sentence construction. The other three types occur as embedded in clause level or phrase level constructions. The adjectival clause (Cl-02) occurs as a filler of the qualifier 2 slot (Q-2) of a noun phrase (Section 325). The adverbial clause (Cl-03) occurs as a filler of the manner slot (Section 223.7). The nominal clause (Cl-04) fills the nominal core slot of the nominal construction (Section 311), the perfective nucleus slot of the perfective clause (Section 240), or the possessor slot of the noun phrase (Section 323).
231. Dependent clause types 231.1. Subordinate clause (C1-01)

The subordinate clause is a sentence level constituent Which depends on the following clause for semantic continuity and on the main clause for such gramatical features as person, number, tense and aspect. The predicate slot is filled with any verb inflected with the definite theme (Section 412.1) plus the dependent inflection (Section 411.1). The degree of relationship between one clause and another due to the arrangement of the dependent inflection is discussed in Section 512. Easic differences in arrangement of the dependent inflection are time oriented (suffix orders 500 and 510) and condition oriented (suffix order 5z0).

"I went down to the river and caught fish."

"While I was fishing, my in-law, as he was drifting downriver, pulled into (the bank) and greeted (me)."

 and when we looked, there was my child eating tree grapes."
231.2. Adjectival clause (Cl-02)

The adjectival clause qualifies the head of the noun phrase as filler of the qualifier 2 slot (Section 325). It is characterized by the occurrence in the predicate slot of the definite verb theme construction (Section 412.1) without further inflection, or of the descriptive verb stem (Section 413).
[ Q-2 ]
sęse saisi mę̇ę̨ną tui bi’ dâw.
"I set out following the trail the peccary had gone on."

"I cooked the hen he had given me, and I ate her."

"Fix up the ground the airplane is to land on."

"He is in the house where banisterium is taken."


"We don't pay the people who don't work."
[Q-2

"Go get the red feathers of the macaw."
231.3. Adverbial clause type (Cl-03)

The adverbial clause occurs as a filler of the manner slot of a clause (Section 223.7 ). It is characterized by the occurrence in the predicate slot of the uninflected verb stem. The adverbial clause often shares nonpredication tagmemes with the clause in which it is embedded.


"He went running very hard."
[ya?dibayąde tí $\frac{7}{6}$ bi?dawi.
"We set out putting palm sheets on (the floor)."
 231.4. Nominal clause (Cl-04)

The nominal clause type fills the nucleus of the nominal construction (Section 311). It is characterized by occurrence in its predicate slot, of the definite or descriptive verb theme (Section 412) plus any of the noun derivational
suffixes of order 20 (Section 420. Chart VIII, page 95) or any of the specifier nouns which occur in the Specifier Phrase (Section 330).

"I thought about your having gotten married."

"It is very bad to eat rotten meat."

"The banisterium drinkers suffer much."

"They must bury the one who died yesterday."

"The removed the turtle egg nests, the ones that had been laid."

"I returned to the place where I had left the machete."

"The very first canoe that was hewn is still floating."
The temporal clause type is structurally the same as the nominal, but it is formed only by suffixation of the temporal classifier $22.2-\mathrm{d}_{\frac{1}{2}}($ Section 424.1$)$ to the definite verb theme (Section 412.1). The temporal clause occurs in
the temporal core slot of the temporal construction (Section 341), and the perfective nucleus slot of the perfective clause (Section 240).
232. Independent clause types

There are three basic types of independent clauses: declarative (Ol-05), confirmation interrogative (Cl-06), and information interrogative (Cl-07). There is very little structural difference between the declarative and the confirmation interrogative types, but their distributional differences in higher level constructions justify the distinction (Section 511). All of the independent clause types fill the nuclear slot of a sentence.
232.1. The declarative clause constructions (01-0j) fill the declarative base slot of the declarative sentence (Section 511.1), and is the basic form from Which other distribution clause types are derived. Its predicate slot is filled by any of several types of verb construction, which are the definite involvement, imperative, subjunctive, detachment, indefinite involvement, and distant. These categories do not condition different clause types or sentence types, but they are significant on the discourse level (Section 630).
232.1.1. Definite involvement indicates that the speaker or narrator has a personal interest in the circurastances. Its verb construction consists of the definite vert theme
(Section 412.1 ) plus verb inflection order 330 or 340 (Section 411).


"He arrived as far as the canoe port."


"They went with my older brother."
232.1.2. The imperative has forms reflecting person as well as some distinctions in gender and number. The most common construction consists of the definite verb theme plus the verb infiection order 350 . The first person imperatives are further modified by occurrence of verb suffix orders 650 and 750.

[0] [P-21][P-35]



"I'm set on taking those seeds home and planting them."
A polite form of the imperative is the same as that of the detachment construction. which consists of the definite verb theme plus veri inflection order 360 plus mood suffix

662 -ya. In this context it refers to the second person.



232.1.3. The subjunctive reflects an element of uncertainty. Its construction is composed of the indefinite verb theme plus the verb inflection order 560 or 570 .



"Maybe she is pulling up manioc."
232.1.4. The detachment category applies only to the third person. Its construction consists of the definite verb theme plus verb inflection orders 560 or 570 plus the mood suffix 662 -yą. It indicates that the speaker or narrator considers himself apart from or not involved in the circumstances. The speakers attitude is reflected as faintly derogatory, hence this form is used comonly during gossip sessions, which are frequent among the Siona.

"The foreigner's baby is laughing."
 "I arrived home, and when I looked, my wife was gone."
 from a myth.)
[ G ] [P-3ラ]
ziáyaną dąteyą. "They sank into the river."
232.1.5. The indefinite involvement category applies only to the immediate past tense. Its construction consists of the indefinite verb theme with the occurrence of at least one form for the negative plus the verb inflection order 570. It indicates that the speaker or narrator concerns himself with the circumstances but is not aware of the time of their occurrence.
[ G ] [P-31][P-35] ybguną ką̧̧ hi̛ $\frac{1}{2}$ daimąté. "ile came as we slept in the canoe."

 turtles over."
232.1.6. The distant category has as its verb construction the distant verb theme (Section 412.3) plus the distant verb inflection. The construction may reflect detachment with verb inflection order 560 plus mood suffix 662 -vę̂ occurring, or it may reflect definite involvement with verb inflection order 580 occurring. The occurrence of the distant category
indicates that the speaker or narrator considers the events no longer pertinent to present circuinstances, but are rather "water under the bridge."


"As he was up in the air, he just turned and was going off."

232.2. The confirmation interrogative clause (Cl-06) fills the confirmation interrogative base slot of the confirmation interrogative sentence (Section 511.2), and its occurrence expects a yes or no response from the addressee. The response is either ? $\frac{1}{2} h h_{2}^{\prime} i \frac{f}{2}$ "confirmed, "bęhiz "no" or a repitition of the key verb in some form of the declarative. Its construction consists of the indefinite verb theme plus the verb inflection order 560 or 570 . It involves three degrees of certainty: positive, probable and negative. The positive form has no occurrence of the negation suffix. The probable forin has one occurrence of the negation suffix. The negative form has two occurrences of the negaition suffix.


 you (plur.)?"
the canoe?"
232.3. The information interrogative clause (Cl-07) fills the information interrogative base slot of the information interrogative sentence (Section 5ll.3). Its occurrence expects information other than yes or no from the addressee. It is characterized by the initial occurrence in the clause of an interrogative introducer tagmeme and the occurrence of mood suffix 661 -nę "doubt" in the verb construction. The interrogative introducer tasmeme consists of an introducer slot filled by an interrogative pronoun (Section 435 ). Simultaneously this interrogative pronoun manifests another clause ievel tagmeme: subject, object, time, manner, instrument, referent, etc.; or the qualifier, numeral, or possessor tagmeme on the phrase level. The verb construction of the information interrogative consists of the definite verb theme plus verb inflection order 560 or 370 plus mood suffix 661 -nę "doubt."












There are cases when the information interrogative has the formal characteristics of a subordinate and a main clause combined in a single sentence, however the lexical information points to a single underlying clause. 19
 digging?" i.e. "Why are you digging?"

This example is a rhetorical question used as a rebuke. It is in contrast with the following form, which expects information.
 The following example, also rhetorical, implies a strong assertion, and may be viened lexically as "With what motive would I drink banisteriur?"
keaka nęgi yahede "ưreges"nę. "How am I to gain drinking banisterium?" or "I have absolutely nothine to gain by drinking banisteriur."
240. Perfective clause types

The perfective clause type is analyzed apart from the main zody of clauses, since its internal composition does not consist primarily of a verb nucleus. It has structural features parallel to those of the main body, but its predication is formally distinct. The subordinate predication consists of a single form siad "be the case" with inflection described below. The declarative and interrogative predication consists of suffixes to the final element of the perfective nucleus. These suffixes indicate person, number and mood, but not tense. The significance conveyed by the perfective clause construction is that of permanent state.

There are three perfective clause types: subordinate, declarative and interrogative. Each has differences in predication and differences in distribution within the sentence construction. The perfective nucleus (PN) tagmeme is the same for each type. It is analyzed as a perfective nucleus (PN) slot filled by a nominal (Nom) construction, adjective (adj), interjection (inj) or intensifier (int). The nominal construction (Section 310) in this case does not involve the occurrence of a function word nor of enclitic order 60 (Section 313).
241. Subordinate perfective clause PCI-S $=+P N+P P-S$ The subordinate perfective clause (FCI-S) consists of
an obligatory perfective nucleus (PN) tagmeme and an obligatory subordinate perfective predicate (PP-s) tagmeme. It fills the subordinate base (B-sub) slot of a sentence (Section 511).

The subordinate perfective predicate ( $P$ P-s) tagmeme consists of a subordinate perfective predicate slot filled by a subordinate perfective verb (PP-S:pv-s). This class of verb has only one member siad- "be the case." It is inflected with the verb suffix orders 520 and 620 , but most frequently with the suffix - $\mathrm{ni}_{2}$, which in this case does not have its usual meaning of same or different subject for the following clause.
 meat."
 lot, we couldn't gather them up."
 gone, I didn't see him."
 tainly have had pain, but he didn't drink the medicine."
 were Cane River people, we were happy."
242. Declarative perfective clause
$\mathrm{PCl}-\mathrm{d}=+\mathrm{PN}+\mathrm{PP}-\mathrm{d}$
The declarative perfective clause (PCI-d) consists of
an obligatory perfective nucleus (DN) tacmeme and an obligatory declarative perfective predication (PP-d). It fills the independent base slot of the declarative sentence.

The declarative perfective predicate tagmeme is analyzed as a declarative perfective predicate slot filled by definite perfective, detachment, or subjunctive inflection (PP-d:per/det/subj). Fach type of inflection is structurally different, but there are no differences in distribution. (Chart VII, page 94).
242.1. The definite perfective inflection (per) consists of verb suffix order 590.

$$
\begin{aligned}
& \text { yail pi. "It is a tiger." } \\
& \text { [PN ][PP-d] } \\
& \text { Mąría"kb. "It is María." }
\end{aligned}
$$

$$
\begin{aligned}
& \begin{array}{l}
{[P N][P P-d]} \\
\text { ?al? }
\end{array} \\
& \text { yug? }
\end{aligned}
$$

242.2. The detachment inflection consists of the obligatory verb suffix order 560 plus obligatory detachment suffix 662 - $\mathrm{ya}_{i}$ (Sections 252.1.4 and 411.5.5).

 a little girl."

242.3. The subjunctive inflection consists of the obligatory negation suffix 301 -mą̨ $f_{z}$, plus the obligatory verb suffix order 560 (Sections 232.1.3 and 411.5.3).

 bottom."
 given birth."
243. Interrogative perfective clause

PCl-ig $=+P N+P P-i g$
The interrogative perfective clause (PCl-ig) consists of an obligatory perfective nucleus (PN) tagmeme and an obligatory interrogative perfective predicate. It fills the independent base of the confirmation interrogative sentence (Section 511.2). The response expected is of the yes or no type. Information interrogative is not a category of the perfective type clauses.

The interrogative perfective predicate tagmeme consists
of an interrogative perfective predicate slot filled by interrogative inflection (PP-igiig). The interrogative inflection (ig) consists of optional negation suffix 301 -máif. obligatory verb suffix order 590, and obligatory verb suffix 661 -nę "cioubt" (Section 411).


[ PN ][PP-ig]
ge?nêssígi"nę. "What (person) is he?"


"Aren't there eight of them?"
300. Phrase structure

A phrase construction normally fills a clause level slot, although some types fill other slots on the phrase level (Sections 323 and 330). In order to present the syntactic relationshios in most clause level constituent tagmemes (e.g., subject, object, goal, instrument, accompaniment, referent), a sub-level designated nominal is posited. The noun phrase. Thich is one of the fillers of the nominal core slot of the nominal construction is presented in Section 320. The noun specifier phrase. Which fills the head slot of a noun phrase, and the nominal specifier phrase. which fills the nominal core slot, are described in Section 330. The temporal. Which is a structural variant of the nominal. is different with respect to distribution. Its analysis is presented in Section 340. The temporal phrase (Section 350 ) is one of the fillers of the temporal core slot of the temporal construction: The verb phrase (Section 360) shows the relationship of auxiliaries to the main verb. 310. Nominal

Nom $=+\mathbb{N C} \pm Q-1 \pm F$
The nominal construction (Nom) consists of an obligatory nominal core (NC) tagmeme, an optional qualifier ( $\mathrm{Q}-1$ ) tacmeme, and an optional function (F) tagmeme, according to the order shown in the formula. It fills several of the non-predicate tagmemes on the clause level (Sections 222 , 223. and 240).
311. Nominal core (NC:NP/Sp-nom/pr/num/n-p/Cl-04)

The nominal core tagmeme consists of a nominal core siot filled by a noun phrase (NP), nominal specifier phrase (Sp-nom), pronoun (pr), numeral (num), proper noun ( $n-p$ ), or nominal clause (Cl-04).

"I finished making my big canambo leaf house."

"Only the one who went to the woods shot any grame."
[S:Nom] [M] [P-35]
hą’ª̨kó"abi besá dátéyą, "Those ones came quickly."

The nominal core tagmeme may be complex, in that repetitions of it may occur in the same nominal construction. Such repetitions of the nominal core may occur in two different contexts: (1) in apposition to one another, or (2) in a sequence. These two contexts are structurally distinct one from another.
311.1. Apposition

Apposition is usually indicated by different types of constructions in a series (NP, Cl-04, Sp-nom).

my younger-brother. John named-one

"He drank fermented liquid, three fingers of it."
311.2. Sequence

Sequential listings consist of a series of the same kind ofconstruction, concluded by a nominal specifier phrase referring to all the participants in the list. Rising intonation accompanies the end of each item in the sequence.

$$
\begin{aligned}
& \text { "I used to shoot the wooly monkey, the trumpeter bird, } \\
& \text { the turkey, the squirrel." }
\end{aligned}
$$

312. Qualifier $1(Q-1: q)$

The qualifier 1 tagmeme consists of a qualifier l slot filled by a qualifier, which is a word class limited to serega "only."
bagi se? ega mąsini. "Only he knows."
hai toawi se? ${ }^{\text {gegade dabi. }}$
"He brought only the big shotgun."
313. Function (F:en/f)

The function tagmeme consists of a function (F) slot filled by a function enclitic complex (en, Section 313.1) or a function Nord ( $f$, Section 313.2). It indicates the grammatical role of the nominal in the clause construction, the degree of focus of attention on the participant involved (Section 620), and certain conditional qualifications.

Restrictions on selection of individual enclitics of these orders are determined by the clause level slot which the nominal fills (Sections 222 and 223).
313.1. The function enclitic complex (en) consists of three orders of enclitics (Chart II, page 75). Each order of enclitics is optional in occurrence. Any one or all three orders may occur, except that order 70 may not occur following enclitics 61, 62, and 63.

"He spore commanding with the precise words of the people."

"I went only to the opposite riverbank."

"I gave him a piece of peccary meat, too."

"Although he drank the genuine drug. the vision
did not appear."
wek6da?da ka bi?dabi.
"He began to speak like a parrot."
 "He wove it like the Cofan people do."

Chart II
Function Enclitic Orders

| 50 | 60 | 70 |
| :---: | :---: | :---: |
| 51. -débá "exactly in the center, precisely" | 6i -bi "source" <br> 62 -ni "motion toward - animate" <br> 63 -nę "motion towara - inanimate" <br> 64 -de ~ -tel7 "referent" <br> 65 -da "more or less" | 71 -ga "even, also" <br> 72 -tg̨̨害 "indeed. although" . <br> 73 -ka "especially <br> 74 -da "like, as" <br> 75 -dé年 "conciseness" |

313.2. Function word (f)

Function word occurs as a filler of the function slot $(F)$ of the nominal construction. It consists of tika "until, toward" and nakoni "with."

"I'm going only toward Pedro's house."

"I conversed with the one who had caught the fish."

"Let's wait until he arrives."
320. Noun phrase (NP)

Noun phrase consists of an obligatory head (NE) plus optional modifier. formulized as:
$\mathrm{NP}_{=} \pm \mathrm{Mod} \pm \mathrm{D}: \mathrm{PO} \pm \mathrm{Num} \pm Q 2 \pm 23+\mathrm{NE}$
The order indicated is obligatory. Each component tagmeme is described as follows.
321. Modifier (: od:mod)

The modifier tacme:me consists of a modifier ( $\because \mathrm{od}$ ) slot filled by a modifier (mod), which is a class of words (Section 444) which may also occur in the nanner slot of a clause (Section 223.7), and which is limited to gads "completely" and do "just that and nothing more, just plain, in vain."
 "Since they were altogether people (not foreigners), they were happy."
[Mod]

"It was just my daughter sitting there."
[Mod]

"He planted just corn seeds (and nothing else)."
322. Demonstrative (D:dem)

Demonstrative tasmeme consists of a demonstrative (D) slot filled by a demonstrative (dem). This tagmeme has the function of specifying and making definite what the head noun refers to. There is no occurrence of generality (Section 420) as a category in the head noun construction when the demonstrative tagmeme occurs. Demonstrative (dem) is a class of words consisting of ba "that (nearby, in reach)," he"る "that (nearby, out of reach)," lee "that (distant," " $\frac{1}{5}$ "this."
[D] yỉs ybegubi gohe báhi.
"That canoe of mine has a hole."
[D]

"Those women take care of the manioc."

"These little coconuts are rottine."
[D]


"Those people eat capybara meat."
hą’] witbyote "f̨̨̂hąíqę. "Go get that fishing pole."
323. Possessor (Po:NP/Sp-nom/n-p/pr/Cl-04)

The possessor tagmeme consists of a possessor (Po) slot filled by noun phrase (NP), nominal specifier phrase (Sp-nom). proper noun ( $n-p$ ) , pronoun ( $p r$ ), or nominal clause (Cl-04). The constructions filling the possessor slot are the same as those filling the nominal core slot of the nominal construction (Section 311). There are internal differences, in that the participant in this function is always animate. It may be expanded to include appositions (Section 3ll.l.) and sequence (Section 311.2). The imolication is that there is no limit to the recursiveness of this structure, but in actual usage the possessor tagmeme is rarely embedded within itself more than once. This tacmeme is identifiable primarily by context, but also by its position in the noun phrase.
 cloth."


"They took it to the other people's chief's place."

"We went to the house of Peter and John."

"It is the tall fellow, Rosa's husband's canoe pole."
324. Number (Num: num)

The number tagmeme consists of a number (Num) slot filled by a numeral (num), which is a class of words including si"a "all," "oye "many," and ha"ta "many," as well as the cardinal numerals with Spanish borrowings from four on up (Section 442). Numerals may be inflected the same as nouns and stand in agreement with the gender classification and number of the head noun of the noun phrase to indicate focus of attention on quantity.
[Num]
te"é yo waptí se"egáde báyí. "I have only one canoe paddle."
[ Num
 medicinal plant."

 those three children of mine."
si?a bąf wa: nębi y
together."


The numeral functions in the same manner as a pronoun when it fills the nominal core slot (Section 3ll), tre head slot of the nominal specifier phrase (Section 332), and the perfective nucleus slot of the perfective clause (Section 240). It does not fill the possessor slot of the noun phrase as does the pronoun.



325. Qualifier 2 (Q-2:adj/Cl-02)

The qualifier 2 tagmeme consists of a qualifier 2 (Q-2) slot filled by an adjective (adj) or an adjectival clause (Cl-02). Either construction may bear further suffivation in agreement with the gender-number classification of the head noun of the noun phrase, to indicate focus of attention on quality. The qualisier 2 tagmeme may occur more than once in sequence in a noun phrase construction. In that case an adjective precedes an adjectival clause.
[Q-2] $h a 1$ wa?inf maftoi. "He caucht a big channel catfish." $[Q-2]$ haícu níse yosute tę"t6hahí"1. "He set out to hew a big achapo mood canoe."

"He is in the house he slept in last nicht."

＂The jaguar creature has yellow eyes．＂
The noun $z_{1}$＂offspring，shoot of a plant or tree＂may function as an adective meaning＂small＂and fill the qualifier 2 slot of the noun phrase．However，it does not occur with classifier suffix order 20 unless special se－ mantic connotations are involved（Section 222．4）．

326．Qualifier 3 （Q－3：n）
Qualifier 3 tagmeme consists of a qualifier 3（Q－3） slot filled by a noun（ $n$ ）．Its function is to specify the kind of object the head noun is．
［Q－3］
wỉe wąs 6 de．k＂ehás？
＂I set out to cut down poles for the house．＂
［Q－3］
＇uti ha．${ }^{\circ}$ ną toyawá．＂I wrote it on wasp leaf（paper）．＂
［Q－3］
toá nąsbde＂完y象央．＂I saw a caimo－fruit colored
wooly monkey．＂（a sub－species）
［Q－3］
kuda ziade riago．＂She is gathering the chicken eggs．＂
［Q－3］

＂The stack of leaves is drying well．＂
［Q－3］＂ą̣̆ade sabgo．＂She is toasting corn cassava．＂
327．Noun head（NH：$n / \mathrm{Sp}-\mathrm{n}$ ）
The noun head tagmeme consists of a head slot filled
by a noun（ $n$ ）；or a noun specifier phrase $(S p-n)$ ．It is the nuclear element of the noun phrase construction．


［NH］
winiz go＂goniz dí6bi．＂He berked at the agouti and jumped him into the river．＂
［ NH ］
takábábi was？é．＂They killed it with a stick．＂ ［NT］
ḣ̇？ena rayábi．＂He put it inside the basxet．＂
［ NH ］
toáde z芳家管．＂I lit the fire．＂
［ NH ］


330．Specifier phrases
Nouns，pronouns，numerals，adjectives，and nominal clauses which bear the noun classifier suffix order 20 as a specifier（Chart VIII，pase 95）have variant forms depending on other semantic implications．Instead of the class 20 suffix order，a class of specifier nouns（Section 42j）occurs in modifier relationship to the head element．Certain sub－ classes of nouns and pronouns do not occur with the suffix order 20．These are specified or pluralized only by modifi－ cation by a specifier noun（Sections 421 and 422）．

This construction is of two subtypes：noun specifier
phrase and nominal specifier phrase, which differ mainly with regard to distribution.
331. Noun specifier phrase

$$
\mathrm{Sp}-\mathrm{n}=+\mathrm{SpH}-\mathrm{n}+\mathrm{Sp}
$$

The noun specifier phrase ( $\mathrm{Sp}-\mathrm{n}$ ) consists of an obligatory noun specifier head ( $\mathrm{SpH}-\mathrm{n}$ ) tagmeme and obligatory specifier (Sp) tagmeme. It occurs as a filler of the head (NH) slot of the noun phrase (NP).

The noun specifier head tagneme consisț of a noun specifier head (SpH-n) slot filled by a noun ( $n$ ) without the noun classifier suffix order 20. The specifier tagneme consists of a specifier (Sp) slot filled by a specifier noun ( $n-s p$ ).


```
"The doss barked after the tapir and made him submerge."
```



```
    "Put the merchandise items inside the canoe."
```



```
younger brothers of mine now have gone to Guaraja-Fish
Lagoon."
```

332. Nominal specifier phrase

Sp-nom $=+$ SpH-nom $+S p$
The nominal specifier phrase (Sp-nom) consists of an oblicatory nominal specifier head (Spil-nom) tagmeme and an
obligatory specifier (Sp) tagmeme. It fills the nominal core (NX) slot of the nominal construction (Section 31l), the perfective nucleus (PN) slot of the perfective clause (Section 231), and the possessor (Po) slot of the noun phrase (Section 323).

The nominal specifier head tagmeme consists of a nominal specifier head (SpH-nom) slot filleü by a pronoun (pr), numeral (num), adjective (adj), proper noun ( $n-p$ ), demonstrative (dem), or a nominal clause (Cl-O4). All of these filler classes occur without the noun specifier suffix order 20. The specifier tagmeme consists of a specirier (Sp) slot filled by a specifier noun ( $n-s p$ ). The specifier may be singular or plural.

```
[Sp-nom] wa? nąbi mąsiyí. "They know."
[SD-nom] \(k{ }^{\text {neqnę }}\) nę tuiyų. "Let's follon after those yonder."
```


"He who had been brushed with a nettle was crying hard."

"It is the canoe of Sodi and her people."


"Because she is a big person, she can't get into that
canoe."
340. Temporal
$\mathrm{Tem}=+\mathrm{TC} \pm 0-1 \pm \mathrm{F}$
The teriporal construction (Tem) consists of an obligatory temporal core (TC) tagmeme, an optional qualifier 1 (Q-1) tagmeme, and an optional function (F) tagreme, according to the order shown in the formula. . It is parallel in composition to the nominal construction (Section 310), but it differs with respect to distribution and to the filler classes that occur in the temporal core slot. The qualifier 1 and function tagmemes do not differ, except for selection restrictions on the fillers of the function slot. These tagmernes are discussed in Sections 312 and 313 respectively. The temporal construction occurs only as a filler of the clause level time slot (Section 223.8).
341. Temporal core (TC:TP/t-pr/Cl-tem)

The temporal core tagmeme consists of a temporal core slot filled by a temporal phrase (TP), a terooral pronoun (t-pr), or a temporal clause (Cl-tem). All of the temporal constructions are of the same composition pattern as their nominal counterparts. The difference has to do with restrictions on the occurrence of modifiers and classifier suffixes. Temporal phrase is described below (Section 350 ). Temporal pronoun (t-pr) and temporal clause (Cl-tem) are described in Sections 434 and 231.4.
350. Temporal phrase
$T P= \pm M o d \pm T D \pm N u m \pm T Q+T H \quad$ -
Temporal phrase (TP) consists of optional tagmemes: modifier (Mod), temporal demonstrative (TD), numeral (Num), temporal qualifier (TQ), and obligatory temporal head (TH) tagmemes. A possessor tagmeme does not occur. Modifier and numeral tagmemes are the same as those occurring in the noun phrase (Sections 321 and 324). The temporal phrase fills the temporal core (TC) slot of the temporal construction (Tem), and the perfective nucleus slot of the perfective clause (Section 240).
351. Temporal demonstrative (MD:t-dem/dem)

The temporal demonstrative tagmeme consists of a temporal demonstrative (TD) slot filled by a temporal demonstrative (t-dem) or a nominal demonstrative (dem). The temporal demonstrative class is limited in meabership to yude "now."
yude "uqugguse "this day"
yude ną ito "this afternoon"
yude tikariz "this year"
Of the nominal demonstratives which may modify a temporal noun, ke "that yonder" occurs with mizato "future day (tomorrow)" and ną ${ }_{2}^{2}$ tí "past day (yesterday)" to mean "day after tomorrow" and "day berore yesterday."
352. Temporal qualifier (TQ:adj/CI-02/n)

The temporal qualifier tagmeme consists of a temporal
qualifier (TQ) slot filled by adjective (adj). adjectival clause (Cl-02), or a noun ( $n$ ). The parallel for the noun phrase construction is two qualifier tagmemes instead of one (Sections $32 j$ and 326 ). No occurrence of two qualifiers to a temporal noun has been found in the data.
[TQ] [ TH ]

$\left.\begin{array}{cc}{[T D][ } & T Q \\ \text { ba zoe barisi yąnf }\end{array}\right]$ that lons ago night"
[TQ] [TH]
hobs yąnf $" m i d-n i g h t "$
353. Temporal head (TH:t-n)

The temporal. head tagmeme consists of a temporel head
(TH) slot filled by a temporal noun ( $n-t$ ). The temporal noun class is limited to about a dozen members. e.g.
ną ${ }^{2}{ }_{2}$ to "afternoon"
yąmí "nicht"
zine"1d主 "dawn"
360. Verb phrase

The construction most commonly filling the predicate slot of a clause is a single verb (Section 221). but any of these may be expanded to include an auxiliary. In this case the composition clause type (Section 210) involved is correlated with the main verb of the verb phrase. The main verb theme is inflected with dependent suffixes $501 . j 02$. or 503 (Shart III, Dase 92) if the auxiliaiy is barg "be."
and with dependent suffix 521. - niz "sequence" if the auxiliary is tihi "finish." The formula for the construction $\mathrm{V}=+\mathrm{VH}: \mathrm{V}-01$ +Aux:auy
reads: Verb phrase (V) consists of obligatory verb head (VH) slot filled by a subordinate verb (v-01) and obligatory auxiliary (Aux) slot filled by a verbal auxiliary (aux).

Of the two auxiliary verbs, ba"1 "be" (which functions also as a stative verb 50 and an equative verb 70) indicates an aspect of continuation or progression as property of the main verb. The other auxiliary tini "finish" (also functioning as a transitive verb 20) indicates termination of the main event.

These tao constructions are the only cases of double verb sequences that can be explained as a main verb - auxiliary relationship. Others, such as huá swesehi "he has it injected," sab bidani "he set out to send them off," gahe daihi "he comes descending," have no restrictions as to what verb may occur as the second member of the sequence. The first member is treated as the predicate of an adverbial clause which fills the manner slot of the clause in which the second member functions as predicate (Sections 223.7 and 231.3). All the remaining two-verb sequences can be explained as predicates of separate clauses, since other clause level tagmemes complementing the second ver'b may occur between the two and interrupt the sequence.

Only one occurrence of another type of verb complex could be interpreted as a verb phrase, i.e. "̧̨仑 gu'ahi "it is

hungry (to me)." but the construction is considered a single lexical unit, classod as an impersonal verb (vs-80). Separate from this idiomatic usage the two words mean: "at "food." and gu"a (vs-60) "be bad."

400. Ford struoture

The division of grammatical worḍs into classes is determined by their distribution in syntactic environments, that is, their function in the gramatical hierarchy. Nost words are complex units and are further analyzed in terms of successively lower structural levels until the simplest forms (roots and affixes) are accounted. for in the syntax. The analysis for each word class is presented in the following sections: 410 verb, 420 noun, 430 pronoun, 440 modifiers (441 adjective, 442 numeral, 443 qualifier, 444 modifier, 445 adverb), 450 demonstrative, 460 function word, 470 interjection, 480 intensifier, and 490 miscellaneous forms ( 491 conjunction, 492 exclamatory word, 493 onomatopoetic word, 494 special response utterances). 410. Verb

Subclasses of verbs are determined by their occurrence in the predicate slot of the various composition clause types (Section 210). Each verb stem is coded in the lexicon according to the clause type in which it is distributed (10 through 80), as per the catecories indicated along the vertical axis of Chart I, page 24. See also Section 221 on predicate tagmenes. The arrangement of verb subclasses is discussed in Section 413 on verb stem composition.

Different verb construction types, analyzable in teras of inflection type (Section 411) and theme composition (Section 412), are deternined by their occurrence in the
predicate slot of the various distribution clause types （Section 230）and are coded（01 through 07）according to the categories indicated along the horizontal axis of Chart I， page 24.

411．Verb composition
The total verb structure involves a verb root and up to seven orders of suffixes．Charts III through VIII，pages 92－96 indicate the potential orders of these elements． Actual verb constructions involve specific arrangements of them．

Word level constructions are composed of a constituent unit desicnated theme，plus person－number or other type oî inflection．Jach type of construction is sumarized by a． formula indicating the distribution clause type it is as－ sociated with．Note that verbs 02，04，0ラ1 and 0ラう are of identical theme construction．

411．1．Subordinate verb construction
V－OI＝＋vnu－01：vt－def $+v-1 n f-01: s u b-1 / s u b-2$
Subordinate verb（ $\mathrm{v}-01$ ）consists of an obligatory sub－ ordinate verb nucleus（vnu－01）tagmeme and an obligatory subordinate verb inflection（ $v$－inf－01）tagmeme．The nucleus tagmeme involves the definite verb theme（Section 412．1）． The inflection tagmeme consists of either subordinate in－ flection type one（sub－1）or type two（sub－2）．

Chart III - Definite Verb


Chart IV - Imperative Verb

|  |  |
| :---: | :---: |
|  |  |
|  |  |

Chart V - Indefinite Verb

| Verb Stem | Indefinite Verb Theme | Aspect | Indefinite Verb Inf | flection |
| :---: | :---: | :---: | :---: | :---: |
| Same as for <br> Chart III- <br> Definite |  | $\pm 400$ <br> 401 <br> -háí <br> "inten- <br> tion | $+560-570$ tense | $\pm 660$ mood |
|  |  |  | 550 present <br> 561 -gí "2nd 3d | $661 \text {-nę }$ "doubt" |
|  |  |  | 562-go "2nd, 3d | $662-\mathrm{y} \text { द्ध }$ |
|  |  |  | $\begin{aligned} & s g \text { f." } \\ & 563-y e ~ " n o n-2 n d \\ & 3 \mathrm{~d} \text { sg"t } \end{aligned}$ | "detachment" |
|  |  |  |  |  |

Chart VI - Distant Past Verb


Chari VII - Perfective Predication

Definite Verb

Animate Derivation

Theme
(Section 412.1)
Descriptive
Adjectivized
Verb Stem
(Section 413)
+20 Classif -anim
20.1 - 5 主 "masculine singular"
20.2-¢о "feminine singular"
20.3-k6"a "plural"

| Inanimate Derivation |  |  |  |
| :---: | :---: | :---: | :---: |
| $\pm 10 \mathrm{dim}-1$ | +21 Classif-inam | $\pm 30$ dim-2 | $\pm 40$ plur |
| $11-d a^{?}$ | 21.1 -ba "cliff" | $31-d i$ | 41 -矣 ~ |
| "diminu- |  | "dimin." | -yą |
| tive" | 21.2 -be "fat" |  | "plural" |


| Definite verb theme （Section 412．1） <br> Descriptive verb stem 160 （Section 413） | Temporal－Spatial Derivation |
| :---: | :---: |
|  | +22 Classif－tem－spat $\pm 40$ plural <br> 22.1 －du＂place＂ $41-a \sim-y a$ <br> 22.2 －d⿱十口－＂time for＂ ＂plural＂ <br> 22.3 －to＂time when＂  |
|  | +22 Classif－tem－spat <br> 22.4 －ti ＂time＂ <br> 22.5 －hę？${ }^{\text {ą }}$＂opposite，behind＂ <br> 22.6 －hę̨é＂opposite，across from＂ <br> 22.7 －hธ̨̨ ${ }^{2}$＂quere＂ <br> $22.8-k 0^{7}$ \＆＂underside＂ <br> Abstract Derivation |
|  | +23 classif－abs <br> 23.1 －ye＂incompleted state＂ <br> 23.2 －se＂e＂completed state＂ |

411.1.1. Subordinate verb inflection type one
sub-1 $=+$ pn:500/510 $\pm /+$ sr:601
Subordinate verb inflection type one is composed of person-number inflection of verb suffix orders 500 or 510 , and switch reference (sr) 20 suffix 601 . The switch reference suffix is obligatory when suffix order $j 10$ occurs, and optional when order 500 occurs.

Person-number inflection order 500 indicates that the predication is simultaneous to that of the following clause and translatable as "as, while, during; in order to."
 y6gute tę't6gí wa?tide tǫbi. "As he was hewing the canoe, he dropped his machete."
 (there) talking."
 paddled and paddled, she took me."

Person-number inflection order 510 indicates that the predication is orior in time to that of the main clause. weade tíadeną kuyábi kbołi dahi?i. "When they had finished harvesting the corn, the white man came to buy it." Wekúbi ziáyaną dakíną yíkíną'bi híhowま. "Then the tapir had submerged in the river, we waited."
 "When she had run the needle through, her younger sister pulled it out the other side."

Switch reference suffix 601 -ną indicates that the following clause has a different participant functioning as subject.

Manuelbi Narciso nąk6ní ybgubi dáhili. Manuelbi huagina
Narciso taybbi. hą?ąka daih $\frac{1}{z} n a z ~ t o a ~ y o g u b i ~ ’ a i ~ t i ́ p a ́ ~$
wifbi. "Manuel was coming in a canoe with Narciso.
Manuel was poling, and Narciso was steering. As they
thus came, a motor launch made the waves rise up greatly."
411.1.2. Subordinate verb inflection type two
sub-2 $=$ +rel:520 icond:620
Subordinate verb inflection tyoe 2 consists of a relator suffix order 520 and condition suffix order 620.

Verb suffix order 520 indicates a type of relationship the subordinate clause has with the following clause. Suffix 521 -nj, "sequential" indicates that the following event occurs subsequently. No subject change is expected when order 620 does not occur.
 to the woods, found a peccery, shot him, carried him, and came (home)."

Verb suffix 522 -to "when" emphasizes the fact that the following event is already in process. Subject change is not preaictable on the basis of this suffix.
 Went up from the river and looked, the children vere eating tree grapes."

"At the time we arrived at the settlement, the sun was straight overhead."

Verb suffix order 620 indicates that the event conditions that of the following clause. Subject chanse is not predictable on the basis of this suffix order.

Verb suffix 621 -ka "if" indicates that the event of the following clause is contingent upon the predication with Which the suffix occurs. When the sequence -nika occurs, the implication is that the event is expected to happen. In the case of -tok\& a general cause and effect condition is implied, and may be translated "whenever." "If he arrives this afternoon. We will eat catfish."
 "If they set married, everyone will happily make a festival."
 rains, bring the clothes and hang them inside the house."
 "If you don't file the machete, it won't cut well."
 "Whenever the river floods, we bring the chickens up into the house."
tutbbi kakátoka zf wa? nąbi dal nęyí .
"Whenever the wind blows in, the children get sick."
 the firewood is green, we have to fan the fire a lot." Verb suffix 622 -tą'ą "concessive" indicates that the event expressed by the following predication has occurred contrary to expectation.
 he thought he killed the deer, he ran off alive and went." ?aidura saitotą? ${ }^{2}$ द̨ wa? beb wa?kí daini. "Even when he goes to the woods, he comes back without any meat." This suffix is a form-meaning correlate With nominal enclitic 72 (Section 313).
411.2. Adjectival verb construction
$v-02=+v n u-051: v t-d e f / v s-160$
The adjectival verb ( $v-02$ ) consists of an obligatory definite verb nucleus (vnu-051) slot filled by a definite verb theme (vt-def) or a descriptive verb sten (vs-160). The construction is not further inflected.
sęse saisi mą?ąna tus'pá. "I followed after the path the wild peccary had gone on."
 at the hole the armadillo Would come out of."
 chicken he gave me and ate it."
 I hewed for you just drifted off and went."
'awize wis yihana bagite tiwoheihsi? $\frac{1}{2}$. "Set out to meet him at the airport (ground where the airolane rises)."
411.3. Adverbial verb construction
$\nabla-03=+$ vnu-0z:vs
The adverbial verb (v-03) consists of an obligatory adverbial nucleus (vnu-03) slot filled by a verb stem (vs) of any type.
pik6 de?6tobi gané dáhi?1. "Ye cane descendins out of the clouds."
so"bną sai "áayeté do’tabi. "He thousht about the desire of going far away."
gWebesépsi ?ai gupa wąnǫhí. "It feels (to him) very bad from the inebriation."
411.4. Nominal verb construction
v-04 = +vnu-051:vt-def/vs-160 +nzr:20
The nominal verb (v-04) consists of an obligatory
definite verb nucleus (vau-051) siot filled by a deininite verb theme (vt-def) or a descriptive verb stem (vs-160), and an obligatory nominalizer (nzr) slot filled by noun suffix order 20 "classifier." The classifier suffixes may be either animate, inanimate, temporal, spatial, or abstract. The latter occurs only with verb constructions, but all the other categories occur with any type of nominal. Temporal suffixes $22.2,22.3,22.4$ designate the construction as a temporal (Section 340). All the inanimate, and some temporal and spatial suffixes occur optionally with noun pluralizins and diminutive suffixes (Section 422.1; Chart VIII, page 96),
 gone to sleep in the early morning woke up in the afternoon." sęse zine"id垂 ką̨se"e báhi"q. "It was where the peccary had slept in the early morning."

 to where you had not shot the wooly monkeys, I waited a long being time, and I saw the monkeys coing shouting with all their might."
 one that has been cut off." (Apposition, Section 311.1)
 the plantins of the food."
 the ones we hewed a long time ago are now beginning to rot out."

### 411.5. Declarative verb construction

There are six subtypes of the declarative verb construction, any of which fills the predication slot of the independent declarative clause (Section 222.1). Whichever of these occurs (except imperative) is determined by the mood predominating in the particular discourse, according to the patterns of discourse structure regarding speaker viewpoint (Section 630).
411.5.1. Definite involvement verb construction
v-051 = +vnu-051:vt-def/vs-160 +v-inf1-051:530/540
The definite involvement verb construction (v-0j1) consists of an obligatory definite verb nucleus (vnu-0ラ1) slot filled by a definite verb theme (vt-def) or a descriptive verb stem (vs-160), and an obligatory definite involvement verb stem inflection (v-infl-0ラ1) slot filled by verb suffix order 530 "present" or verb suffix order 540 "past." The suffixes of order 540 have allomorphs -hipi (3d masc. sing.), $-k \sigma^{\prime \prime}=\left(3 \mathrm{~d}\right.$ fem. sing). and - ? ${ }^{\prime}$ (non-3d sing.), which occur only following the shortened form of a morpheme of the shape CV1 or CVI (Section 150). In the occurrence of -? the shortened form of the preceding morpheme has the variant CVÍ.

The definite involvement construction indicates that the speaker or narrator identifies himself with the circumstances. This is the most common construction among independent verbs. Nhenever the subject is other than animate, the verb is inflected in the third person singular masculine, regardless of whether the subject is singular or plural.
 father said shouting, 'He jumped into the river and submerged. ${ }^{\prime \prime}$

 everyone went out and pulled some more manioc."
 bright,' I am thinking."
411.5.2. Imperative verb construction
v-052 = +vnu-052:vt-def +v-infl-052:imper/det-pres The imperative verb construction (v-052) consists of an obligatory imperative verb nucleus (vnu-0う2) slot filled by a definite verb theme (vt-def), and an obligatory imperative verb inflection (v-inf-052) siot filled by the imperative inflection set (imper) or the detachment inflection set of the present tense (det-pres).

The imperative inflection consists of an obligatory person-number inflection represented by verb suffix order 550, and two optionel de-emphasizing elenents reoresented by verb suffix orders 650 and 750 respectively. The deemphasis elements occur only with the first person imperative suffixes $551-z a$, and 552 -yų. If de-emphasis two (750) occurs. de-emphasis one (650) must occur. The imperative involves all persons and numbers in addition to different nuances of aspect.


'I'll smoke tobacco,' I bought two cartons (of cigarettes)."
bayuniz. "Let's have each other (in our thoushts)." (salutation at leave taking)


＂Since it＇s their canoe，let them tie it up．＂
＇adosote tánę？${ }^{\text {ac．}}$＂We must harvest the rice．＂
wa？ide męq̧za．＂I＇m determined to go fishing．＂

The detachment inflection（det－pres）consists of ob－ ligatory person－number suffix order 560 and obligatory suffix 662 －yą＂detachment．＂This construction occurs only with reference to the second person and bears the connota－ tion of a polite imperative．

```
gqृర̨de kebgoyą. "Pour me some beverage (please)."
bisimęte ho`ciyeys.⿸⿻一丿工⺝心. "Untie the vine (please)."
(second person plural)
tada wa?tide ?fৃhąq\mp@code{quyę. "Go get the manioc grater}
(please)."
```

411．う．3．Subjunctive verb construction
v－0ラ3＝＋vnu－0ラ3：vt－ind－1＋v－infl－0ラ3：ラ60
The subjunctive verb（v－0ラ3）consists of an obligatory subjunctive verb nucleus（vnu－0ラ3）slot filled by an in－ definite verb thene one（vt－ind－l），and an obligatory in－ definite verb inflection（v－inf1－0ラ3）slot filled by verb suffix order 560．This construction indicates that the circumstance is uncertain．

＂It may be that the wild jacuar mould eat thom．＂


 "If she comes back, we might see her again. If she doesn't come hack, we might not see her again."
 "Although she is taking the medicine, she has probably not gotten well yet."
411.5.4. Indefinite involvement verb construction

$$
v-0 j 4=+v n u-0 j 4: v t-i n d-2+v-i n f 1-0 j 4: j 70
$$

The indefinite involvement verb (0j4) consists of an obligatory indefinite verb nucleus (vnu-054) filled by an indefinite verb theme 2 (vt-ind-2) and an obligatory indefinite involvement inflection (v-infl-0j4) slot filled by verb suffix order 770. The indefinite verb theme 2 (vt-ind-2) has an obligatory single negative to indicate the positive. Double negative does not occur. This construction indicates that the speaker or narrator identifies nimself with the circunstanc $=$, but is not aware of the time the event occurred. Inflection occurs only in the near past tense and has no distant past counteroart.
ybguną ką̨̨ǵa da.1mąḱx. "I came sleeping in the canoe."

"The children went to turn over turtles."
 when)."

411．5．5．Detachment verb construction
v－05ラ＝＋vnu－051：vt－def／vs－160＋v－inf1－05ラ：det
The detachment verb（v－055）consists of an oblig̃atory definite verb nucleus（vnu－051）filled by a definite verb theme（vt－def）or a descriptive verb stem（vs－160），and an obligatory detachment inflection（v－infl－05ラ）slot filled by detachment inflection（det）．The detachinent inflection consists of the obligatory occurrence of person－number suffix order 560 or 570 plus detachment suffix 662 －yą． This construction indicates that the spearer or narrator alienates himself from the circumstances as a non－involved individual．It occurs predominately in myth narration， gossip，and hearsay contexts．
yả？dínçoi sakbyą．＂My wife has gone（but I don＇t know where）．＂
$z$ íbi čbgíyę．＂The child is laughing（but he is not akin to me）．＂
hą＇Ą̨资bi so＇tb wa？ná？du wí？wfhateyą．＂Then，they ran off as porcupines．＂
 meanles．＂

411．5．6．Distant past verb construction
v－056＝＋vnu－056：vt－dist＋v－inil－056：580／det
The distant past verb（v－0う6）consists of an obligatory distant past verb nucleus（vnu－056）slot filled by a distant past verb theme（vt－dist），and an oblisatory distant past
verb inflection (v-infl-056) slot filled by person-number suffix order 580 (distant-definite involvenent) or the detachment inflection consisting of order 560 plus detachnent suffix 662 -yą. This construction indicates that the speaker or narrator considers the events not relevant to the present circumstances, or as "water under the bricge." The detachment form of the distant verb construction occurs very infrequently.

 how our ancestors got married."
 used to shoot."


411.6. Confirmation interrogative verb construction $v-06=+v n u-06: v t-i n d-1+v-i n f 1-06: 560 / 570$

The confirmation interrogative verb (v-06) consists of an obligatory nucleus (vnu-06) slot filled by the indefinite verb theme $l(v t-i n d-l)$ and obligatory confirmation infleotion (v-infl-06) slot filled by verb suffix order 560 or 570. This type of interrogative expects the positive or negative type of answer. Three degrees of probability are possible in the verb theme construction (Section 412.2). saks. "Did he go""
sęhęmą̨̧̨yę. "Aren't they throwing it out?" (implies they should)
 they shouldn't)
411.7. Information interrogative verb construction
v-07 = +vnu-07:vt-ind-1 +v-infl-07:ig
The information interrogative verb (v-07) consists of an obligatory nucleus (vnu-07) slot filled by an indefinite verb theme 1 (vt-ind-l) and obligatory information interrogative verb inflection (v-infl-07) slot filled by an interrogative suffix set (ig), which includes either suffix order 560 or 570 , plus interrogative suffix 661 -nę "doubt." The construction co-occurs with one of various interrogative pronominal constructions filling the introducer slot of the information interrogative clause (Section 232.3).
keaka nęgzi"nę. "How did you catch it?"
gede "ųklmąte? $n e ̨$. "Why didn't they drink it?"
had6 táká ganeye?nę. "Up to where are you (plur.)
descending?"
 nę̨ị̂ ${ }^{\text {Písigo }}$ nę̨. "To whom did she give it?"
412. Verb theme composition

The verb theme is the basic element from which different verb construction types are formed. Their composition determines the distribution clause type within which they occur.

The most frequent is the definite verb theme (Section 412.1). Others of more limited distribution are the indefinite verb theme (Section 412.2), and distant verb theme (Section 412.3). Its basic composition includes the verb stem plus three orders of affixes (benefactive, negation, aspect) which occur optionally.
412.1. Definite verb theme
vt-def $=+$ vb:vs $\pm$ ben:200 $\pm$ neg: 300 土asp:400
The definite verb theme consists of oiligatory verb base ( vb ) slot filled by a verb stem (excluding descriptive verb stem 160), optional benefactive (ben) slot filled by verb suffix order 200 (201 -ká), optional negation (neg) slot filled by verb suffix order 300 ( 301 -mę $\mathcal{F}_{2}$ ), and optional aspect (asp) slot filled by verb suffix order 400. Its distribution includes all the dependent verb constructions except adverbial, as well as the definite, imperative and detachment constructions.

Suffix order 400 includes the following four affixes: 401 -hé "intention"
yogute tę̨tohaini. "He is setting out to hew a canoe." hą"s6de dutahanfiz daś"̇. "They set out pulling up manioc and they returned (came)."

Eपุ?hįde mąq̧hąz\&. "I intend with determination to fish guaraja."
?awif wifhaidu. "Place where the airplane goes taking off."

402 -si "completive" occurs only in nominal and adjectival Verb constructions.
sęse zine’idí kęîsidu. "place where the peccary slept at the time of dawn."
ha"y年 ${ }^{2}$ isisi kuda. "the chicken that Older Brother gave (me)"
hy̨? ${ }_{2} s i$ "kí "dead person" (lit: "one who finished being sick")
"ida ba? id舌 baipsi?kb"a "ancestors" (lit: "those who had been in old being time")

403 -de?a "almost" indicates that the event was not realized. It occurs only with independent inflection in the past tense. tq? ${ }^{2}$ de"awi "I almost fell."
kudi bánizka k6de"awi. "If I had the money, I would buy it."
pok8de"abi. "It almost rained."

404 -dá "emphatic"
"a1 "ok6dahi. "It's really raining hard."
sa6dábi ziaya. "The river was really swift."
412.2. Indefinite verb theme
vt-ind $=+v b: v s \pm$ ben:200 $\pm$ neg: 300 tneg: 300 tasp: 400
The indefinite verb theme has basically the same composilion as that of the definite theme. The difference is the inclusion of three degrees of certainty, involving the occurrence of up to two negative suffixes. The absence
of any negative suffix indicates the positive. One negative suffix indicates uncertainty. Two negative suffixes are needed to indicate negation.

This construction occurs in the subjunctive (Section 411.5.3), indefinite involvement (Section 411.5.4), confirmation interrogative (Section 411.6), and information interrogative (Section 411.7 ). In the case of the indefinite involvement a single negative suffix occurs to indicate the positive, but negation does not occur.
mą̧̧mą’̨gi. "Maybe he caught something." or "Didn't he catch anything?" depending on context.
de"wámąte. "I expect they fixed it up." (indefinite involvement)
gede nąs 6 huimęmą qiyę'nę. "Why aren't they shooting any wooly monkeys?"
412.3. Distant verb theme
vt-dist $=+v b: v s \pm b e n: 200 \pm$ nef: 300 +asp-d:480
The distant verb theme (vt-dist) consists of obligatory verb base (vb) slot filled by verb stem (vs), optional benefactive (ben) slot filled by verb suffix order 200 (201-kßi), optional negation (neg) slot filled by verb suffix order 300 ( 301 -mę'si), and obligatory distant aspect (asp-d) slot filled by verb suffix order 480 ( 481 - 7 ) plus nasalization on the preceding vowel or vowel cluster. 21

The distant verb theme occurs only in the distant verb construction (Section 411.5.6).

 yuâtą tî? ${ }_{2}$ g̨mę? $k 6$. "She had not yet arrived." toawite bqnę̨'his. "He turned the shotgun around." ªi híhá sew̨̛’ryyą. "He answered very firmly."
413. Verb stem composition

The verb stem has.eight distribution classes depending on the composition clause type it distinguishes (Section 210). It is assigned a decade symbol (10 through 80) corresponding to the composition clause type it identifies, as shown along the vertical axis of Chart I, pase 24. Verb stems consisting of a simple verb root are coded with a twodigit number.
ká (vs-10) "say"
yų?q̊ (vs-50) "be seated"
si"a (vs-40) "run out"
Verb stems of complex construction (verb root plus voice suffix order 100 , or verb stem plus descriptive verbalizer) are coded with a hundred symbol (Chart IX, page 115) preceding the same set of two-digit numbers. When the hundred symbol occurs with transitive, intransitive, progressive or stative verb classes, it corresponds to the unit symbol of the voice suffix code (101 middle, 102 active, 103 causative, 104 repetitive), which occurs in the stem construction.

```
sai (vs-130) "go" (intransitive)
m炙名 (vs-220) "bring (something) up" (transitive)
```

tui (vs-150) "be on top of" (stative)
tí"ye (vs-420) "sever repeatedly" (transitive)
da6 (vs-320) "cause to be brought" (transitive)
When the hundred symbol (1) occurs with the descriptive verb class, it indicates that the descriptive verb stem is derived from another verb stem by suffixation of the descriptive verbalizer -he’i.
ta'ye (vs-420) "keep
passing up"
mę (vs-60) "be red"
$z 1$ (vs-60) "be black"
ta"yehe"I (vs-160) "be surpassing"
mêhę̣ (vs-160) "have the quality of redness"
zhne? (vs-160) "have the quality of blackness"

The numerical coding scheme indicating possibilities of verb stem construction is illustrated in Chart IX, page 115. Simple stems are described in Section 413.1. Complex stems involve greater elaboration in Section 413.2.

The verb stem occurs as the base of all verb theme constructions (Section 412). In addition, it is the complete form which fills the predicate slot of the adverbial clause (Section 231.3).
413.1. Simple verb stems

Simple verb stems (designated by vs plus a two-digit number) consist of the simple verb root only, and are not further analyzable. They are classified on the basis of the composition clause types they manifest. Quotative (vs-10), equative (vs-70), and impersonal (vs-80) are all

Chart IX
Verb Stem Class Number Coding

| Simple verb stems |  | Complex verb stems (root plus voice suffix) 101 "mid." 102 "act." 103 "caus" 104 "rep. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Quotative | 10 | - | - | -- | ---- |
| Transitive | 20 | 120 | 220 | 320 | 420 |
| Intransitive | 30 | 130 | 230 | 330 | 430 |
| Progressive | 40 | 140 | 240 | 340 | - |
| Stative | 50 | 150 | 250 | 350 | - |
| Descriptive | 60 | 160\% | ---- | ---- | ---- |
| Equative | 70 | ---- | ---- | ---- | ---- |
| Impersonal | 80 | ---- | --- | ---- | ---- |

> *vs-160 consists of any verb stem olus descriptive verbalizer -he? (Section 43 ).
of the simple construction．The other classes are of either type，simple or complex．The descriptive verb stems are simple，except for those derived by suffixation of the des－ criptive verbalizer（Section 413．2．6）．
do"ta (vs-10) "think" (quotative)
ba.1 (vs-50, vs-60, vs-70, v-aux) "bel" (stative, descr.
equative, or auxiliary)
y壬 (vs-20) "want" (transitive)
hith6（vs－20）＂wait for＂（transitive）
bきま（vs－30）＂sit down＂（intransitive）
hų＇iq（vs－30）＂become sick，die＂（intransitive）
wahś（vs－40）＂become well，become alive＂（progressive）

413．2．Complex verb stems
Complex verb stem classes are defined on the basis of one or both of two factors：1）the class of the bound root and 2）the voice suffix that completes the construction． Class distinctions occurring among complex verb stems fall along the scale of transitivity（Chart IX，page 115）．

The basic formula summarizing the complex verb stem formation is：
vs－c＝＋vc：vr－b＋$+\mathrm{VO}: 100$
Complex verb stem（vs－c）consists of obligatory verb core（vc）slot filled by bourd verb root（vr－b），and ob－ ligatory voice（vo）slot filled by verb suffix crder 100. Further subdivision into variant construction types are described below．The first type is the most symmetrical．

Skewing is more predominant in the others．

413．2．1．Verb stem construction type one is composed of intransitive verb root（vr－30）plus voice suffix order 100 （101－i＂middle，＂ 102 －a＂active，＂and 103－0＂causative；＂ 104 ＂repetitive＂does not occur）．

The form involving the middle（＂do to oneself or for oneself＂）is intransitive．The other two are transitive．

| Middle | Active | Causative |
| :---: | :---: | :---: |
| sai＂go＂ | sá＂take＂ | sab＂send＂ （cause to go） |
| dai＂come＂ | dá＂bring＂ | $\begin{aligned} & \text { dab "send" } \\ & \text { (cause to come) } \end{aligned}$ |
| Wif＂rise＂ | was＂raise＂ | wat＂make raise |
| kę̧̧＂sleep＂ | － | $\begin{aligned} & \text { ką̧ "make sleef } \\ & (\text { as a child) } \end{aligned}$ |
|  | m㐘条＂take upward＂ | mí电＂cause to ascend＂ |

All of these stems are associated with a monosyllabic phonological unit．The pertinent syllable canon is $C V(V)$ （Section 140）．

413．2．2．Verb stem construction type two consists of in－ transitive verb root（vr－30）plus voice suffix order 100 ，in Which the form for the middle（101）is－a．The active form （102）is absent．The repetitive form（104）is－rkV．The final vowel，e for some verbs and a for others，is not phonologically conditioned．A bisyllabic form has only a change in the final vowel．The repetitive form is intransitive．

| Middle | Causative | Fepetitive |
| :---: | :---: | :---: |
| ca＂jump | cab＂make jump＂ （throw a spear or harpoon） | Ca？há＂hop around＂ |
| ＇etá＂go out＂ | ？et6＂drive out＂ | － |
|  | y雲k8＂make assemble＂ | y素號＂keep assembling ${ }^{\prime \prime}$ |

413．2．3．Verb stem construction type three consists of intransitive verb（vr－30）root plus voice suffix order 100. The middle form，which is an intransitive stem，may be recognized by either of three vowels：－i，－e，or－i．The active and causative forms for this set are mutually ex－ clusive．Although the suffixes 102－a and 103－0 are generally recognizable，there is some deviation fron the general pattern．The repetitive suffix 104 involves inter－ calation of glottal stop betreen the first vorel and the final consonant of the active stem form，and a change in the final vowel from a to e．The repetitive form is intransitive．

| Middle | Transitive | Causative | Repetitive |
| :---: | :---: | :---: | :---: |
| go'1 "return" | $\begin{aligned} & \text { go'ya "give } \\ & \text { back" } \end{aligned}$ | - | go'ye "return repeatedly, be contrary to" |
| gahé "descend" | - | gact "lower" | - |
| hępę "cross" | hęą "take across" | - | - |
| kiks "become startled" | . - | kiv6 "scare" | - |
| $\begin{aligned} & \text { kyyy } y_{1}^{\prime} \text { "move } \\ & \text { away" } \end{aligned}$ | - | kity "remove" | - |
| bq̨n尔"turn oneself" | bqุnę "turn something" | - | bq尹nę̨ :I turn over and over" |
| tq̊if "fall" | tą "drop, plant" | $\begin{aligned} & \text { tog "drop } \\ & \text { make fain" } \end{aligned}$ | - |
| nę̉? ensnared" | nę "overcome. take control of | - | - |

413.2.4. Verb stem construction type four consists of a transitive verb root (vr-20) plus voice suffix order 100 (101-i ~ -e ~ -u "middle," 102 -a "active." 103-a~-0 "causative." and 104 -p plus final vowel change to e "repetitive"). All the resultant forms are transitive.

| Middle | Active | Causative | Repetitive |
| :---: | :---: | :---: | :---: |
| "ą1 "eat" | - | ${ }^{\text {Pąq }}$ "feed" | - |
| we't "bear <br> a name | - | we? yb "give <br> a name tol | - |
| ye'ye "learn" | - | ye ${ }^{\text {P }}$ y6 "teach" | - |
| ${ }^{2}$ ųk ${ }^{\text {c }}$ drınk" | - | ${ }^{2}$ yqusá "give <br> a drink to" | - |


413.2.5. Verb stem construction type five consists of a progressive verb root (vr-40) plus voice suffix order 100 (101-i ~ -e ~ -a "middle," 103-a ~ -0 "causative"). Active and repetitive forms do not occur. The middle form of the stem is progressive and the causative form is transitive.

Middle
$k^{W}$ ęnę "become dry"
yaya "become extinguished"
"1da "grow old, mature"

Causative
$k^{W}$ ęną "make dry"
yayo "extinguish"
'id6 "raise, bring to maturity"
413.2.6. Verb stem construction type six consists of a stative verb root (vr-50) plus voice suffix order 100 (101
 "caucative"). The middle form of the stem is stative, the active form is intransitive, and the causative form is transitive. The repetitive forms do not occur.

| Middle | Active | Causative |
| :--- | :--- | :--- |
| tui "be upon" | tua "get upon, <br> alight" | tí "place upon" |
| de "be hanging" | dea "hang oneself" deb/dets "hang |  |
| dap something" |  |  |

413.2.7. Repetitives without counterparts

A large number of stems with glottal stop following the first vowel have the semantic component of repeated action, but have no middle, active, nor causative counterparts.

| Transitive Stems | Intransitive Stems |
| :---: | :---: |
| hą ${ }^{\text {Preç }}$ "mix" | W主"Wi: "run" 22 |
| $k^{W}{ }^{\text {a }}$ ? de "die out" | ko'k6 "cough" |
| yu"yt "sprinkle" | tq'to "tremble" |
| sa'pi "mix with the hands" |  |
| tą ${ }^{\text {P }} \mathrm{n}$ 告 "Se\%" |  |
| yepde "tear" |  |
| gipto "crate" |  |

420. Noun

Siona nouns are basically of four classes: animate, inanimate, spatial and temporal. The noun root is without number disignation (except for a few variations in internal structure), and bears the connotation of generality, e.g. "people in general," "canoes in general." Specificity with respect to number and gender is indicated by any of the derivational constructions the noun root enters into, whether suffixation (Chart VIII, page 95) or expansion into a noun specifier phrase (Section 331). Each noun class is further subdivided on the basis of its occurrence with the various derivational constructions indicating specificity.
421. The animate noun class, subdivided on the basis of derivation for specificity, is of three types. The first type of derivation involves the noun suffix order 20 (20.1 -gí "masc. sg.," 20.2-go "fem.sg.," 20.3-k6"る "plural"), with variations described below. Nouns designating humans of the social ingroup only may occur with this derivation. The second type is the noun specifier phrase construction, of which wa"kx "creature (tiasc.sg.)" and variants waik 6 (fem. sg.) and wa?ną (plural) occur in a specifier relationship to the head noun. Nouns designating animals normally occur with this set, of specifier nouns, but semantic connotations of "exclusion" and "familiarity" apply respectively to human nouns of the social outgroup and to human nouns of the social ingroup when they enter into this collocation.

The third type is distinguished by its occurrence in a noun phrase construction, of which wa'1 "meat, flesh" functions as specifier and indicates plurality. Specificity in the singular and generality are covertly implied by the context of the noun, since ro specifier noun occurs in those cases. Nouns desisnating supernatural beings, invisible (spirits) and visible (celestial bodies) may enter only into this construction type. Nouns designating humans of the social outgroup may also occur with wari in this construction. In any case the connotation is derosatory. Chart $X$ illustrates the major animate noun classes and the types of derivational constructions they enter into.
421.1. Ingroup human noun is designated subclass I (an-1). 421.1.1. Noun stem subclass la (an-1a) is composed of a simple noun root (anr-la), Which designates the item in a general sense, and which may be derived by addition of noun suffix order 20 (20.1 -gí "masc. sg.," 20.2-50 "fem. sg.," 20.3-ro"a "plural") to indicate specificity. Either the general or the specific form may occur as head of a noun phrase.

General<br>bęq "<br>nąhę "Erandchjildren"<br>wa "in-lans"<br>wa' he "people whose spouses have died"

Chart X
Animate Noun Specification and Pluralization


Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
421.1.2. Noun stem subclass 1 lb ( $a n-1 b$ ) is composed of a verb stem derived by addition of noun suffix order 20 to indicate specificity. The verb stem without the noun derivation may not occur as head of a noun phrase. This construction is treated apart from the nominalized verb theme (Section 411.4), since the former does not function as the predication of an embedded clause.

General
bqsis (vs-40) "to reach puberty"
 be high"

```
"1da (vs-140) "to `1dago "old woman"
grow, mature"
yo`he (vs-60) "be yo"helro"a "younger
behind"
"1dago "old woman"
yo"hels6"a "younger siblings"
```

Specific
bq̧śgì "youth (masc)"

421.1.3. Noun stem subclass ic (an-1c) is characterized by final vowel alternation in the basic form to distinguish masculine and feminine. The plural is formed by addition of noun suffix $20.3-k \sigma^{\prime}$ a to the masculine form of the stem. This class consists of only two different nouns indicating "older sibling."
 address and referential forms.
 tial forms only. ${ }^{23}$
421.1.4. Noun stem subclass $1 d$ (an-ld) is composed of three animate noun stem types (ans-1dx, ans-1dy, and ans-1dz),
which indicate the singular form．These may be pluralized by the noun seaw $\frac{1}{2}$ ，which functions as specifier of the Noun Specifier Phrase（Section 331）．

421．1．4．1．Noun stem subclass 1dx（ans－ldx）is on the order of the specific derivation of an－la（Section 421．1．1．）with gender distinctions in the singular．The plural form with suffix $20.3-k 6$ pa does not occur．

| pi ${ }^{\text {ck6 }}$＂aunt（FaSi）＂ |  |
| :---: | :---: |
| pix kagí＂father＂ |  |
| paipuago＂mother |  |

421．1．4．2．Noun stem subclass ldy（ans－ldy）is composed of a simple noun root．

| męmiz＂child＂ |  |
| :---: | :---: |
| taita＂father，daddy＂ | taita sę̧riz＂daddies＂ |
| disht＂wife＂ | dîh hǫ sę̧wiz＂wives＂ |

421．1．4．3．Noun stem subclass 1 dz （ans－1dz）is composed of proper nicknames of people，adapted from their equivalents in the language from which they were borrowed．

```
7 quę (Ermelinda)
tąniz (Estanislao)
sodi (Isolina)
?aude (Aurelio)
bábi (Bobby) babi są̧⿱亠乂⿰亻⿱丶⿻工二又寸 "Bobby and his crowd."
(1.e., the four Wheeler boys, the
extrovert among them being Eobby)
```

421.2. Noun stem subclass $2(a n-2)$ is composed of nouns which designate animals and humans of the social outgroup (a distinction which varies with individuals and clans). Specification is derived by addition of wa?ki "creature (masc. sg.)" or one of its variants waikb (fem. sg.) and wa'nę (plural), as specifier of the Noun Specifier Phrase (Section 331).
421.2.1. Noun stem subclass 2a (an-2a) consists of simple noun roots. These are further subdivided into two classes: those which refer to animals (an-2ax), and those which refer to humans (an-2ay). This subdivision is based on the fact that the human nouns (of the social outgroup) may also be specified in the plural by wa? "meat, flesh" in a derogatory sense, whereas aninal nouns may not. Animals

General
yai "jaguar, dog" gó́ "tortoise"
hoh6 "frog, toad" wake "cow"

Humans
kuya "foreigner"
paidi "priest"
gricgo "North American"
kí"y系 "Nitoto people"
kuya "foreigner"
paidi "priest"
griggo "North American"
ki7y玍 "Witoto people"

Specific
yai wa'ną "the jaguars, dogs" goí wa'k6 "a female tortoise" hohb wa"kí "a frog"
waka wa"nę "the cows"
kuyá wa"ną "the foreigners" paldi wa? kí "the priest" grice wa'ko "the N.A. lady"


Nouns desiçnating humans of the social ingroup may be specified by warki, etc., but the connotation is one of familiarity rather than exclusion.
421.2.2. Noun stem subclass 2 b is of Imited occurrence, and refers only to animels. It consists of an inanimate noun root 1 , plus classifier suffix order 21.
tq. kebo "species of monkey" tq"kebo wa"kí "a monkey"

421.3. Noun subclass 3 (an-3) is composed of two stem subclasses, which designate an item in either the general or the specific sense, depending on context. Pluralization is designated by addition of wa'i "meat, flesh," which occurs as specifier of the Noun Specifier Phrase (Section 331). Nouns of this class include only supernatural beings. Nouns designating humans of the social out-froup may be pluralized by wail instead of being specified by wa.'kf, etc. The connotation is always derogatory. Animals are never pluralized by wa'i. since that collocation designates the meat of an animal.
421.3.1. Stem subclass 3 a consists of simple noun root 3 a (anr-3a) and includes only invisible beings (spirits):

| wati "demon" | wati wa"! "demons" |
| :--- | :--- |
| kukt "demon which | kukl wa? " ${ }^{\text {demons" }}$ |

421.3.2. Stem subclass $3 b$ is derived from a verb root or noun root plus noun suffix 20.1-gi (masc) or 20.2-go (fem) (20.3-k6'a does not occur). and includes only visible beings (celestial bodies), which are subjects of mythology:
yęyજ̨̨gi "the one that caves yąyęg壬 wa? 1 "months" in, moon"

mę"č6go "star" mą?č6go wa?1 "stars"
This group of noun stems fall into the inanimate category in the minds of the younger generation of speakers. See the statements on suffixes 21.9 and 21.10 (Section 422.1).
421.4. Proper nouns and kinship nouns

Although proper nouns ( $n-p$ ) and kinship nouns (an-k) have been mentioned as members of the ingroup human subslass (Section 421.1 ), they also fall into a distinct structural role by virtue of their occurrence in the vocative slot on the clause level (Section 223.9). Proper nouns do not enter into the noun phrase construction, as other noun classes do, because they are not modified. However, they do enter into the nominal construction (Section 310) and occur in the perfective nucleus slot of the perfective clause (Section 240).
wat (an-k) "nephew (male ego= ErSo; female ego= SiSo)" Wi'yagł (an-k) "nephew (male ego= SiSo; female ego= BrSo)" wágí (an-k) "in-la\%"
grefera (an-k) "uncle (MOBr)"

```
gपृ`h1, da (in-p) "Guare ja-fish lasoon"
bęhą́ (an-p) "Penjamin"
kuda gifq (an-p) "Chicken Foot (nickname)"
mę`t垀 Ki`壬 (an-p) "Heavenly parrot (Eanisterium name)"
```

422. The inanimate noun class (in) is likewise subdivided on the basis of derivation for specificity, and involves two major construction types. The most common type (Section 422.1 ) is derived by suffixation of classifiers indicating some feature of shape or function. The other type of construction (Section 422.2 ) involves derivation for specificity by addition of a specifying noun to either inanimate noun root 1 (inr-1) or inanimate noun root 2 (inr-2). The specifyina noun occurs as part of the Noun Specifier Phrase (Section 331).
422.1. Stem subclass 1 (ins-1) consists of either noun root 1 (inr-l) and optional derivation by noun suffix order 21. or verb stem (vs) and obligatory derivation by noun suffix order 2l. The classifier suffix itself indicates singular. Pluralization is signaled by suffix order 40 (41-ą ~ - yą̨). The construction may be further expanded by simultaneous suffixation of orders 10 and 30 (suffixes 11 -da? and 31 -di) to indicate diminutive. 24 The diminutive may also have a connotation of endearment or reflection of modesty, e.g. sąm̧̧dap bid there are most Iikely 5 or 6 (see Shant VIII, page 95).

The construction involving a verb stem plus obligatory suffixation of order 21 is distinguished from that of the nominalized ver theme (411.4). in that the former may not function as tie redicate of a nominal clause.

Examples of the inanimate noun stem 1 (ins-l) construction illustrate each of the classifier suffixes of order 21 as follows. All roots are inanimate noun roots unless otherwise indicated.
21.1. -ba "having a flat vertical face"

wea "corn" Weaba "a stand of corn.
cornfield"
ya"di "straight yardiba "a section of grained wood" straight grained wood (e.s. bamboo) spiit and flattened. for a wall"
sizki "knee" sfariba "a mnee"
gųhiz "tooth" gųhiza "a necklace of wild animal teeth"
21.2. -be "having animal fat" (only one example documented)

```
wi"ya "refuse"
wi'yábe "fat, lard"
```

21.3. -bí "having a protruding shape"

| sifhţ "head" | sizinçibi "a head" |
| :---: | :---: |
| "ohe "milk" | 'ohebi "breast" |
| męhą "sanct" | męhębs "a sandbar: |
| mitic "thorn" | mjabeq "a thorn patch" |
| gita "stonach" | Étábi "an abdomen" |
| '1ss "pineapple" | 'isibi "a pineapple fruit" |

verb stem：
bęną（vs－60）＂be muddy＂bąnf̨̨̧⿱㇒士口＂mud hole，swamp＂
？${ }^{2} k^{W e}$（vs－120）＂eat
without chewing，dis－ solve in mouth＂
ţ̨（vs－320）＂make fall＂tǫbí＂a drop of liquid＂
tui（vs－150）＂be upon＂tufbi＂a cap＂
Also：čq̧hర̨bき＂placenta，flower on the banana racime＂；
gपृ？दُる壬＂bone＂；dîbí＂chunk，section sliced off＂；
gatabi＂rock＂；htbí＂group，herd，flock＂；tabí＂pillar， club＂；záabs＂piece of high ground for planting＂；
pábí＂stack of leaves，a book＂；tudubí＂fiber carrying bag＂；ziabí＂an egg＂．

21．4．－bo＂having an overhead canopy，cave－like＂
＂6＂plantain＂？Sbo＂plantain field＂
yi？6＂mouth＂yi？bbo＂inside part of the mouth＂
zupa＂axe＂zupabo＂an axe head＂（Which has a hole for the handle）
tis？ke＂curve＂tiakebo＂bend in the river＂ （from the viewpoint of traveling along the river with jungle arching overhead）
21.5 －da＂lagoon－like＂
sita（ $\mathrm{vs}-60$ ）＂be sitáda＂lagoon＂ spread out＂
（see also：sitámo＂tree root＂）
gų？hiz＂species of fish＂gur hid．a＂a lagoon named
after gų ${ }^{\circ} \mathfrak{z}_{2}^{\prime \prime}$
21.6. -di "having mesh"
hąg "hammock" hą̧̨đí "a hammock"
y6 (vs-20) "to net y6dí "a fish net" fish"
21.7. -do "hollowed out"

| sot6 "clay" | sot6do "clay pot" |
| :---: | :---: |
| gizinę "metal" | gizinądo "a kettle" |
| zia "egs" | ziado "a nest" |
| gęhę "ear" | gęhర̨do "an ear" |
| tui (vs-150) "be upon" | tuido "a hat" |
| sa?á (no occurren | sa?ado "an entranc |

21.8. -ga "round, flat disc"
"ą̨ "food" "ą̧ga "a cassava cake"
"壬k6 "medicine" ?ék6ga "a pill"
21.9. -gi "sun or moon" (in the speech of the younger generation only). See Section 421.3.2. yąyâ "to cave in" (vs-130) yąyąge "the moon"

${ }^{\frac{1}{2}}{ }_{\frac{1}{2}}$ su (vs-30) "to shine" $?_{\frac{1}{2}}$ sígit "the sun"
21.10. -go "star"
mą ${ }^{\text {č6 } 6 ~ " s t a r s " ~}$
mą ${ }^{\text {coc }}$ Ggo "a star" mą"č6gqą "the stars"
21.11. -gu "for transporting"
y6 "canoe" ybgu "a canoe"

kẫo "land vehicle" károgu "a car, truck"
" 6 "plantain" $\quad$ "bgu "a racime of plantains"

wati＂demon＂ | Watigu＂a drum（used for |
| :--- |
| transporting demons to a |
| feast）＂ |

męhą＂sand＂

> męḩ̧gu "a sandbar (for walking on)"

21．12．－mę＂Iine－like＂
gînné＂metal＂
bisi＂vine＂

G主nąmę＂Wire＂
bisime＂a vine for tying，
a rope＂
yきi＂kapok，cotton＂y¥imę＂a thread＂
wit6＂having to do with fishing＂
čghş＂placenta＂
gita＂stomach＂
wit6mę＂a fishing line＂
čq̨hǫmę＂an umbilical cord＂
gítámę＂an intestine＂

 realm＂ realm＂
g专n冬＂metal＂g雲nę̨mif＂the sky＂
21．14．$-m q$＂root－1ike＂
behi＂belladonnal＂behimq＂the root of the belladonna＂
？$x^{2 k 6}$＂medicine＂
sitá．（vs－60）＂be spread out＂
？ikbme＂a medicinal root＂
sitámq＂a tree root＂

21．15．－sę？द̨＂for grabbing＂
wito＂having to do with witbsę？${ }^{\text {Ge }}$＂a fishhook＂ fishing＂
yųka＂palm fiber＂
yųkésę＂ę＂trousers＂（good to wear when twisting the fiber into string）

```
21.16. -wa "having an edge"
    na?6 "leaf"
    ymda "border"
    de?A "tray. plate"
    g怱s6 "thigh" g青s6wa "the thigh, thighbone"
    paf "gunwale of a
    boat, buttress of a
    treeli
    hą?s6 "manioc" hą?s\deltawa "a root of manioc"
    ga? (no occurrence) ga'wa "a wheel"
21.17. -wi "enclosed container"
```



```
    kartúču "shotgun shell" kartucuwí "a shotgun shell"
    toa "fire" toawí "a gun"
    kxi "manioc plant" kíwi "a field of manioc"
    węká "bamboo" Wękewȧ "a section of bamboo"
```



```
21.18 -ya "strearn of water"25
    zi& "river" ziáya "a river"
    gąt⿱㇒士己位"cane" gątz!ya "cane river" (the
    Putumayo).
    ha?6 "leaf" ha?bya "leaf river" (the
    Caqueta)
    mą̆ wąs6 "species of
    fish"
    toa "caimita fruit"
    bęnę "a sweet pod
mę wąsరya "a tributary to
    the Putumayo"
    toaya "a tributary to the
    Putumayo"
    bęnęyą "a tributary to the
    Caqueta" (Sp: Penella)
```

21．19．－－专＂having permanent roots＂

| sųki＂tree＂ |  |
| :---: | :---: |
| gųhs＂tooth＂ | guh fr y if＂a tooth＂ |
| $\begin{aligned} & \text { bęné "a sweet pod } \\ & \text { fruit" } \end{aligned}$ | bęnş̧ẏ⿱夂⺀，＂sweet pod fruit tree＂ |
| ？${ }_{\text {ches }}$＂palm fruit＂ | ＂运nęy娄＂palm fruit tree＂ |
| ča？nadi＂fire ant＂ | ča＂kiadiy完＂tree where fire ants abound＂ |

21．20．－yo＂shaft－1ike＂

| ną？mí＂point，top， end＂ | nap？miyq＂the point，end， crown of a roof＂ |
| :---: | :---: |
| wit6＂having to do with fishing＂ | wit6yo＂fishing pole＂ |
| wąs6＂pole＂ | wąs6yo＂a pole＂ |
| zęmé＂liver or tongue substance＂ | zęmęyq＂the tongue＂ |
| ＂号k6＂taic＂ |  |
| m雪6（vs－320）＂make ascend＂ | mizayy ＂a finger＂ |

422．2．Stem subclass 2 （ins－2）consists of inanimate nouns to which shape or function is not relevant．They do not occur with classifier suffix order 21 ，but may be expanded to designate diminutive dy suffixation of order 30 （ $31-\mathrm{d} \ddagger$ ）． This noun class is further subdivided into two types，the first of which（ins－2a）may occur with a specifying noun in a noun specifier phrase（Section 331）．The other type（ins－2b） may not occur with a specifying noun，but it may fill the qualifier 3 slot of a noun phrase（Section 326）．
422.2.1. Stem subclass 2a (ins-2a) has as its complete membership mass nouns. They may not. be pluralized, but may be specified by an inanimate specifier noun ( $n-s p$ ).

$$
\begin{aligned}
& \text { wa?1 "meat" wa?1 mą?ka "a piece of meat" }
\end{aligned}
$$

$$
\begin{aligned}
& \text { hęká "firewood" } \\
& \text { baya "honey, sweet } \\
& \text { stuff" } \\
& \text { yo6 "work" yo6 mą"kádêą́a "chores" }
\end{aligned}
$$

422.2.2. Stem subclass 2 b (ins-2b) does not include mass nouns and may be pluralized by suffixation of order 40

$$
\begin{aligned}
& \text { (41-yą): } \\
& \text { Wis"e "house" } \\
& \text { zi6 "field" } \\
& \text { kş "cloth" }
\end{aligned}
$$

423. Spatial noun class ( $s n$ ) includes designations of place which may not be inflected for diminutive. The spatial noun includes five subclasses of stems:
423.1. Stem subclass 1 ( $s n-1$ ) is derived from any root except noun by suffixation of 22.1 -du "place." Pluralization may ocour by adaition of suffix 41 -at

| Pai "much" | "aldu "woods" |
| :--- | :--- |
| ?a6 "want, desire" | ?q6du "drean place" |

423.2. Stem subclass 2 (sn-2) has only one example, which is derived from a descriptive verb stem (vs-60) by suffixa-
tion of classifier 22.3 －to．Pluralization may occur by addition of suffix 41 －yą：
de?6 "be good" de?bto "region"

423．3．Stem subclass $3(s n-3)$ is derived from a verb stem or inanimate noun root by suffixation of classifiers 22.5
 clear what distinction in meaning may exist between these four suffixes，if any．Each functions as a nominalizer in very much the same way．Each occurs only with a single root．Pluralization does not occur：

| 22.5 －hą̉7ุ̨ | yo？hehą̨？ ＂behindness＂ | $\begin{aligned} & \text { kyo?he (vs-60) } \\ & \text { "be behind") } \end{aligned}$ |
| :---: | :---: | :---: |
|  | ＂the surface＂ | $\begin{aligned} & (<\text { kg (ins-2b) } \\ & \text { "cloth") } \end{aligned}$ |
| 22.6 －hర̨冖̧ |  ＂above－ness． topside＂ | $\begin{aligned} & \left(<? \frac{3}{2} \frac{4}{2}(v s-60)\right. \\ & \text { "be above") } \end{aligned}$ |
| 22.7 －hǫpQ |  | $\begin{aligned} & \left(<7 \frac{1}{2}(\mathrm{dem})\right. \\ & \text { "this") } \end{aligned}$ |
| $22.8-\mathrm{kópa}$ | yihákó？ <br> ＂underside＂ | （くyỉhá＂ground＂） |

423．4．Stem subclass $4(\operatorname{sn}-4)$ is derived in the same way as the inanimate noun class 1 （in－1）．Inflection for di－ minutive and plural may not occur．The data is limited to the following occurrences：

```
sa?n冬W舌 "inside"
sidibs "downriver"
go?g6wi "upriver"
```

423．5．Stem subclass 5 （ $\mathrm{sn}-5$ ）consists of simple spatial noun root 5 （snr－5）．Inflection for diminutive（31－di） and plural（ 41 －ą～－yą）may occur：

$$
\begin{array}{ll}
\text { we?se "outside" } & k^{W} \text { ęyę "near" } \\
\text { so?6 "far" } & k^{\text {pąpó "side" }}
\end{array}
$$

424．Temporal noun class（ $t_{n}$ ）is distinguished from other noun classes in that it may enter into a temporal phrase construction（Section 350）with yade＂now，＂in demonstrative function．The temporal noun includes two subclasses of stems．

424．1．Stem subclass 1 （tn－1）is derived from a noun root or a verb stem by suffixation of the following temporal－ spatial suffix order 22．Inflection for diminutive does not occur．

```
    22.2 -d娄 "time for"
        7ok6 "water,rain" .'ok6dfo "rainy season"
        "支nę̨ "palm fruit" "年nęd垂 "palm fruit season"
    22.3 -to "time when"
```



```
        "become darlk"
        mp⿸户又一\mp@code{A (vs-230) "to miąto "tomorrow"}
        shine"
        [note also ?aito > ?a1 "much" (emphatic agreement)]
    22.4.-t⿱丶⿱一土丷⿱㇒⿴囗⿱一一夊心 "time previous"
        ng̨`{% "become dark" nę?f2ti "yesterday"
```

424.2. Stem subclass $2\left(t_{n}-2\right)$ consists of a temporal noun stem 2 (tns-2), which is without derivation, but which may be pluralized by addition of suffix 41 - yą:

| ?y̧q̧̧guse "day" | "द̨yç "year" |
| :--- | :--- |
| yąmí "night" | sęmąną "week" |

425. Specifier noun

Specifier nouns ( $n-s p$ ) are either animate (an-sp) or inanimate (in-sp), according the gender of the head nouns they specify. Either singular or plural is indicated, except in the case of séwíz (Section 421.1), wari (Section 421.3), and sakó? (Section 431), which indicates only the plural. They occur as fillers of the specifier slot of the noun specifier phrase (Section 331) and the nominal specifier phrase (Section 332). For examples see Sections 421, 422 and 431.

The following collocations, analyzable as nominal specifier phrases, have special semantic connotations:

besá wa?kí, etc. "quickly"
ke wa?kf, etc. "quickly"
te? 6 wapke etc. "alone"
430. Pronoun

The four basic classes of pronouns are distinguished generally in the same way nouns are: animate, inanimate, spatial and temporal. An additional class, interrogative,
may encompass any of these four. The four classes are distinguished by the type of classifier suffix (Chart VIII, page 95) with which they are marked. Pronouns fill the nominal core slot of the nominal construction (Section 3ll), the head slot of the nominal specifier phrase (Section 332), and the perfective nucleus slot of the Perfective Clause (Section 240).
431. Animate pronouns (pr-an) are further subdivided into simple and derived forms. Simple forms represent the first
 the first persons plural: mą等 "we inclusive" and yikina "we exclusive." The second person plural míz ${ }^{2} \mathcal{Z}_{2}$ sakota is analyzed as a nominal specifier phrase (Section 332), in Which mín $^{7} \frac{7}{2}$ functions as head and sahb?a (occurring only with the plural form) functions as animate specifier noun (Section 425).

The third person forms are derived from the demonstratives (Section 450) by suffixation of animate noun classifier 20.


| bágo "she" | ? ${ }_{\text {f }}$ ko "this one" | hą ${ }^{\text {²ggo "that one" }}$ | keso "yonder one" |
| :---: | :---: | :---: | :---: |
| bakó?a "they" |  | hą"ąkợa "those" | kexó?a "those yonder" |

Another pronominal form hą̧̧̧i?ku "oneself" is unique in its derivation, since it is the only case in which a form identical to 402 -si "completive" is suffixed to a demonstrative.

432．Inanimate pronouns（ $\mathrm{pr}-\mathrm{in}$ ）consist of a demonstrative with or without suffixation of inanimate noun classifier set 21 ，depending on the classification of the antecedent， with which the pronoun agrees．See Chart VIII，page 96. babi＂the protruding thing＂ hą？’̨̨yq＂that shaft shaped thing＂． P罟等＂this thing having an edge＂ keda．pdídi⿱宀㠯 管＂those little meshed things yonder＂ hąㄹą＂that item＂（hą’ąde káwí＂I said that．＂） hą＂ą́ka＂thus＂

433．Spatial pronouns（pr－s）ccinsist of a demonstrative plus the spatial noun classifier suffix 22.1 －du．
badu＂the place＂
kedu＂that place yonder＂
hą？द̨̧u＂that place＂
？${ }_{\frac{1}{2}} d u$＂this place（a particular spot）＂
The spatial pronoun that means＂here，in this general


434．Temporal pronouns（pr－t）consist of a demonstrative plus optional temporal noun classifier suffix 22.1 －d $\frac{4}{2}$ ， or of the temporal demonstrative yude＂now．＂All of these may fill the temporal core slot of the temporal construc－ tion（Section 341）．Occurrence of some of the function enclitics（Section 313）with these results in special semantic connotations．If suffix 22.1 does not occur，one
or more of the enclitics must occur．
hą？${ }^{\text {acdequ }}$＂that time then＂
hą？ąd士＂first＂（with reference to temporal or spatial）
kedi＂right then＂
yudeda＂about now．about then＂
yudeda．＂d土＂immediately＂
hą＂ądựdeba＂first of all＂
The temporal pronoun du？du＂first＂functions in much the same way as yude＂now＂，but it does not occur with nominal enclitic 7ラ－di＂conciseness．＂

435．Interrogative pronoun（or－is）fills the introducer slot of the information interrogative clause 0 （Section 232．3），and at the same time functions as subject，one of the various complements to the predicate，or one of the demonstrative，possessor，number or qualifiers of a noun in a noun phrase construction（Section 320）．All inter－ rogative pronouns except ņ̧＂Who＂and keaka＂how＂may occur with noun classifier suffix order 20.
ge＂what，which＂geginiz sabye？ne＂which（peison） shall I send？＂
had6＂where＂had6kt？a＂which ones（where－from ones）？＂
The demonstrative ke＂that yonder＂may occur with the suffjx－he？ 1 ，identical in form at least to the descriptive verballzer（Section 413）．to mean＂how many．＂
kehe"iko"abi daiye"nę "How many (people) are coming?" keheri zoe "how long"
kehe? ito "when"
kehéridęa $\mathrm{k}^{W}$ ękéde?ne. "How many hollowed out things did they count?"
440. Modifiers

Modifiers are treated as one general category in the grammatical description, whether they modify a verb or a noun. The modifier class (Section 444) may occur with either.
441. Adjective (adj) fills the qualifier 2 slot of the noun phrase (Section 325), and the perfective nucleus slot of the perfective clause (Section 240). It may be suffixed with any of the noun classifier order 20 and function as a pronoun.

The adjective may be inflected to agree in gender with the noun it modifies. If the noun is absent in the phrase or clause construction, but implied by context, the adjective functions pronominally and must be inflected by classifier suffix order 20.
hai "big" haisę?ę "the big ons (hoov)"

Coa "small" čoedt "the small one (hammock)"
zf "small" $\quad z_{2}$ wa "the small one (leaf)"
For expression of other qualities, the adjectival verb construction occurs (Section 411.2). In that case it is analyzed as the filler of the adjectival predicate slot of

Clause 02 （Section 231.2 ）and may be complemented by other clause level elements．

442．Numeral（num）forms fill the number（Num）slot of the noun phrase（Section 324）．They may be inflected to agree in gender with the noun they modify．If the head noun is absent from the clause construction but implied by context，the numeral functions pronominally and must be inflected with classifier suffix order 20．The numeral class consists of the candinal numerals and other quan－ tifiers such as si＂a＂all，＂and ha？ta＂many．＂

Counting is done on the fingers of both hands，be－ ginning with the little finger．
te?e "one"
sąmta "two"
sąmatte＂three＂
gahese＂ega＂four＂（the one descended to）
te？e＂雲t尔＂five＂（one hand）
tepe＇古t任 te？＂＂six＂（one hand and one）
te＂e＂各tf sąmy＂seven＂（one hand and two）
te？e ？${ }^{\frac{1}{2} t} \mathrm{t}_{\mathrm{I}}$ sąmųte＂eight＂（one hand and three）
te？e ？${ }^{\text {fata }}$ ti gahese＂ega＂nine＂（one hand and the one descended to）
si？â sadáyą＂ten＂（all hands）
Counting beyond three involves complex and lengthy grammaticel constructions，a system not too frequently needed in the Siona culture until the advent of Colombian

Spanish influence. Now that the Siona participate in the national economy, counting and calculation of figures is frequent. Therefore, numerals beyond three are borrowed from Spanish, but Siona classifier suffixes are retained. 443. Qualifier ( $q$ ) is a class of modifiers with one member se'ega "only." It fills the qualifier one slot of the Nominal construction (Section 312). bagł se"ega mąsini. "Only he knows." yuka "oyasi"kb se?ega bakb"t. "She was only the one who twisted the palm fiber (string)."
444. Modifier (mod) is a class of particles which may modify either a noun or a verb. It consists of two members d6 "Just that and nothing more" and gade "completely" (Section 321).
d6 dá? ${ }^{\prime}$. "I just came (the trip was uneventful)."
 daughter Teresa came to meet (me)." d6 g"Tahá gąnşwis. "I just got tired out walking." ("In vain I went, finding no game in the woods.") gade saisi"ki behi"i. WHe was one who had gone for good."
gade bą̂ wa"ną bas? ${ }^{\text {a }}$. "They were entirely people (ingroup)."
445. Adverb (adv) fills the manner (A) slot of a clause or the perfective nucleus slot of the perfective clause (Section 240).
te?e "alone" besa "fast"
These forms have nominal specifier phrase counterparts (Section 332) which have essentially the same meaning with an added connotation of familiarity (Section 421). te? ${ }^{6}$ wa?ku "alone" besa wa?kb "fast, quickly"
450. Demonstrative (dem)

There are two subclasses of demonstrative roots. The general subclass, labeled (dem), consists of four members, which occur as fillers of both the demonstrative (D) slot of the noun phrase (Section 322) and the temporal demonstrative (TD) slot of the temporal phrase (Section 351). The temporal demonstrative subclass ( $t$-dem) consists of one member, which fills only the temporal demonstrative (TD) slot of the temporal phrase.
451. The general subclass of nominal demonstratives is as follows:
ba "that just now referred to"
hą'夺 "emphatic reference, out of view"
"舌 "this, nearby"
ke "that, distant, within view"
These forms may be inflecied the same as noun roots, in which case they function as pronouns (Section 430).

The uninflected demonstrative occasionally functions as an inanimate pronoun (Section 432). .
 object."
gę̧̨h告"舌 badł. "Tie it up, that meshed object (haminock)."

bade ?acavi. "I heard it."
452. The temporal demunstrative root (t-dem) yude "now. this time" complements only temporal nouns (Section 424). yude yąnî "this night, tonight" yude ną"ร̨to "this afternoon" It may occur with or without various kinds of suffixes or enclitics and functions pronominally (Section 434). yudéyą "in these days, in these moments" (-yac "inan. plur." suffix 41, Chart VIII, pa.ge 95) yudénę̨ "perhaps now" (-nę "doubt." verb suffix 661 Chart V, page 93)
460. Function word (f) consists of two members: tixa "until, toward" and nęironif "Nith," which occur as fillers of the function slot of the Nominal construction (Section 313.2). This class is in mutually exclusive distribution With the function enclitic set (Section 313.1). It indicates the grammatical function of the clause level tasmeme it is associated with.

Fither goal (Section 222.1) or time (Section 223.8) is signaled by tara, depending on whether it bears the spatial or temporal implication.
yb sa’ado tika "toward the canoe entrance (port)" bagi sataye tíka "until he wakes up"
 Accompaniment (Section 223.1) is the primary signal of nąkoniz. Secondarily it signals instrument (Section 223.4).
 toabo nąkont "with the corn grinding stone"
470. Interjection (inj) is limited to one particle yua "now, then" which functions to highlight the clause or some specific element in the clause (Section 223.3). The enclitic 65 -da (Section 313.1) occurs optionally with this form to reinforce the punctuality connotation. The enclitic 72 -tą'ą occurs optionally with yuá. The resulting phonological form yuata means "not yet," and occurs only in the context of a negative verb form.
 agouti) and wade him submerge (into the river)."

 his house."
480. Intensifier (int) is limited to one particle 'ai "much, extremely" and occurs as the filler of the intensifier slot of any of the clause types (Section 223.5).

```
’ai kahi bágí. "He talks much."
```



```
in great quantity."
'ai ba"1 zibde tęt6wí, "ile cleared a very big (much
being) field."
```

490. Miscellaneous forms, which are rather loosely incorporated into the syntax, are cited here more for the sake of human interest than for structural description. These are conjunction, exclamatory word, onomatopoetic word, and special response utterances, all of which give colorful connotations to the communication and add style to a narrative.
491. Conjunction is a class consisting of Spanish borrovings y "and," o "or," and pero "but." Although Sione has other gramatical devices to signal these concepts, they are used occesionally as a result of heavy influence from the trade language. They function predoninantly as clause and sentence connectives rather than as coordinates between nouns.
492. Exclamatory word is a class of forms indicating surprise of various kinds. These are verbal responses to some linguistic or social contexts and are entirely of trade language origin.
```
?aaa (prolonged vovel with some rising intonation)
"Yes, now I understand."
```

Tbpa (often uttered with long o vowel) "Sudden surprise" (in response to a very unexpected event) 'ui "Expression of surprise to an event reflecting catastrophe, danger or harm." (Spanish: iuy!)
493. Onomatopot tic words reflect imitations of sounds produced by certain animals or natural phenomena. These are identified as discourse subtypes and occur as quotations (Section 222.5).
?eee (prolonged vocoid with rising intonation) "noise a demon makes underground"
$\tilde{R}{ }^{2}$ (prolonged voiced uvuler trill) "sound produced by a boa or anaconda"
gaiček, ga"ček, ga"ček... "sound of a person swallowing liquid"
sęe, sę̨̨ (each syllable bears rising intonation)
"sound of a panpipe flute"
494. Special responses are cited as follows:


This form is usually accompanied by a shrug of the shoulders, wag of the head, raising of the eyebrows. It of ten precedes weśy yi "I don't know."
 patterns) "J.s that so"

These latter forms, each one progressively more forceful, are frequently uttered by the listener to assure the narrator of his interest in the story and to encourage him to continue.
?aito "Of course, certainly."
hai? ${ }^{\text {a }}$ "Yes, I understand."
" $\frac{1}{2} h_{1} \frac{1}{2} \frac{1}{2}$ "Yes, that is true."
500. Sentence structure

The term sentence encompasses tro types of syntactic units, the complete sentence anci the fragmentary sentence. Within the context of discourse, the two are closely related. The complete sentence (Section 510) involves an arrangement of one or more clauses in sequence, so that the final clause is one of the independent types (Section 232), unless a dependent clause occurs as an afterthought (Section 210). The fragmentary sentence (Section 520) is without predication, an element which is implicit in linguistic and social context, and occurs most frequently as a response to a circunstance initiated by another participant. Both types of sentence bear final intonation patterns in common.
510. Complete sentences

In order to fuifill the definition of grammatical completeness this type of sentence in its minimal form may be a single independent clause, which in turn may be represented by a single verb with inflection of the independent type. The most common pattern, however, is the occurrence of several subordinate clauses in sequence, followed by one independent clause, which provides the signals for person, tense, mood, and often aspect for the entire sentence. The occurrence in the final clause of such information covering all the clauses of the sentence is characteristic not only of Siona but of all the rucanoan languages. 26 The different ways subordinate clauses unite in sequence
(Section 512) do not constitute bases for distinguishing sentence types, since there are no distributional differences among them. The occurrence of each is accompanied by the same final intonation pattern.

Criteria for distinguishing sentence types arise from the independent base tagmeme (Section 5ll), which occurs finally in the construction.
511. Sentence types

Three types of complete sentences are distinguished: the declarative, the confirmation interrozative and the information interrogaiive. All of these types are distinguished by features of distribution within a higher structural level, discourse, by the independent clause type (Section 232) filling the independent base of the sentence, and by the pattern of intonation occurring in se.rtence final position.
511.1. Declarative sentence

S-dec $= \pm(\text { B-sub:Cl-01/PCl-s })^{n}+$ B-dec:Cl-05/PCl-d
A declarative sentence ( $\mathrm{S}-\mathrm{dec}$ ) consists of an optional subordinate base (B-sub) tagmeme, which is manifested by a subordinate clause (Cl-O1) or a subordinate perfective clause (PCl-s), and which nay occur an unilimited number ( $n$ ) of times; plus an obligatory declarative base ( $\mathrm{E}-\mathrm{dec}$ ) tasmeme, which is manifested by a declarative clause ( $01-05$ ) or a perfective declarative clause (PCl-dec). See Sections
231.1, 232.1, 241 and 242.

The declarative sentence occurs in any type of discourse without restriction as to position in the discourse. The intonation pattern which occurs sentence finally is the downglide, characterized by high pitch on the last stressed syllable of the final stem and low pitch on all the succeeding syllables.


```
(son-) in-law came to get (her), my wife went."
```


is a jaguar he catches animals of the woods and eats
(them)."
[?quar pixifbi titáni. "The anaconda growls."
 the hole and was hidden."

Occasionally, a dependent clause occurs following the declarative base tagmeme, in which case the information is presented as an afterthought to what precedes. Downglide intonation occurs following both the independent base and the dependent base in the afterthought position. Clause Ievel tagmemes also pattern as afterthought elements (Section 210).

$$
\begin{aligned}
& \text { "Ie sharpened (his) machete and toox up his rork, as } \\
& \text { the sun was rising." }
\end{aligned}
$$


fell into the river, when the river bank caved in."
511.2. Confirmation interrogative

S-c-ig $= \pm(\mathrm{B}-\mathrm{sub}: \text { Cl-01/FCl-s })^{\mathrm{n}}+\mathrm{B}-\mathrm{C-ig}: C l-06 / \mathrm{PCl}-\mathrm{ig}$
The conffrmation interrogative sentence (S-c-ig) consists of an optional subordinate base (B-sub) tagmeme, which is manifested by a subordinate clause (C1-01) or a subordinate perfective clause (PCI-S), and which may occur an unlimited number ( $n$ ) of times; plus an obligatory confirmation interrogative base ( $B-0-1 \mathrm{~g}$ ) tacmeme manifested by a confirmation interrogative clause ( $21-06$ ) or an interrogative perfective clause ( PCl -is). See Sections 231.1, 232.2, 241 and 243.

Although it is mathematically possible for any number of subordinate base tagmemes to occur, most of ten no more than one or two occur in this sentence type. The confirmation interrogative sentence occurs only in conversational discourse as a closure to the speech of a given participant in the dialogue, and is a signal for the addressee to begin speaking. The intonation pattern closing this sentence type is a downglide, similar to that of the declarative sentence, except that the final stem syllable is of notably higher pitch.
 up the meat, take it to the river and wash it?"
$B-c-i g$
hưkx. "Did he die?"
B-c-ig
hegi. "Is he docking?"

a great deal, is she getting wet?"

511.3. Information interrogative sentence

S-inf-ig = $\pm \mathrm{B}-\mathrm{sub}:$ Cl-01/PCl-s $)^{n}+\mathrm{E}-$ inf-ig:Cl-07
The information interrogative sentence (S-inf-ig) consists of an optional subordinate base (B-sub) tagmeme, which is manifested by a subordinate clause (CI-OI) or a subordinate perfective.clause (PCI-S), and which may occur an unlimited number ( $n$ ) of times; plus an information interrosative base (E-inf-ig) tagmeme manifested by an information interrogative clause (C1-07). See Sections $231.1,232.3$ and 241.

Although it is mathematically possible for any number of subordinate base tagmemes to occur, it is most usual to have only one or two. If a subordinate clause is closely knit to the main clause it precedes, the interrogative introducer tagmeme (Section 232.3) occurs at the beginning of the subordinate clause instead of at the beginning of the interrogative clause.
making fun of him?" (Rhetorical question indicating
rebuize)
 by drinking the drug?" (Rhetorical question indicating negative insistence, i.e. "I certainly have nothing to gain by drinking the drus.")

Unless the information interrogative is rhetorical the sentence type occurs only in conversational type discourse to close the speech of a given participant. The sentence final intonation pattern is the upslide, which is characterized by low pitch on the penultimate syllable of the sentence and high pitch on the ultima.

Rhetorical questions are understood occasionally on the basis of context alone, however, and certair forms always identify the question as rhetorical. These are:
géde yo'b- plus verb suffix 501, 502, or 503 (Chart III, page 92), followed by the remiainder of an interrogative sentence. Second person subject indicates rebuke by the addressor. Third person subject indicates disapproval by the addressor.
keaka nę- plus verb suffix 501, 502, or 503 (Chart III. page 92), followed by the remainder of an interrogative sentence. This form indicates negative insistence by the addressor.

Examples of these questions are given above.
Rebuke, disapproval and negative insistence are the main types of elocutionary force displayed in rhetorical questions.

Forms of the information interrogative other than those cited above usually expect an informative answer from the addressee.
[ B-sub ] [E-inf-ig] gede wis"wfhí gęnqyę?nę. "Why (for what) are they running and moving about?" i.e., "Why are they running around confused?"
 you are not pulling up manioc, why do you want my manioc grater?"
[ Badonag gatide ${ }^{\text {B }}$ nę. $]$ Where dic they hide?"
512. Subordinate base

The subordinate base tagmeme, which occurs optionally any number of times in a sentence, is identical for all three complete sentence types. It is manifested by a subordinate clause of either the perfective (Section 241) or the nonperfective (Section 231.1) construction. It is associated with clause final upglide intonation, which is characterized by low pitch on the penultimate syllable and high pitch on the ultima.

Connectivity relationships between a subordinate clause and the one following are classified as loose knit or close knit.
512.1. A clause has a loose knit connectivity relationship with the following one when its verb construction indicates
a subject change by occurrence of suffix 601 -na "sifitch rererence" (Section 411.1.1), or when subject change may occur but is not marled in the verb construction. The latter situation is the case when suffix order 620 (Section 411.1.2) or a subordinate perfective clause (Section 241) occurs. In such circumstances none of the non-predication elements of that clause is tied in with the following clause.
 the emetic. I protably won't vomit."

gone far, he won't come (back) for a while."
 money is $a l 1$ gone, with what are we to buy clothes?"
 "When he finished making the canoe paddle, she poured beverage and gave it to him."
512.2. A clause has a close knit connectivity relationship With the following one when the verb construction indicates that the following clause will have the same subject, as in the case of the time related inflection without surfix 601 -na, "switch reference," and in the case of suffix $521-n i$ "sequential" without suffix order 620 (Section 411.1.2). In such circunstances a clause may be linked to the followine one in either of three ways:

1) A given nominal element manifesting the object tagmeme in the first clause may be marked for instrument instead of object and function as instrument tagmeme for the following clause.
 alive, and I cut a stick and killed him with it." The noun tixabi "stick," marked with enclitic 6l -bi for instrument, functions as the object of tinyoni, and as the instrument of Wa ? ${ }^{\text {? }}$.
2) In the case of an information interrogative sentence the interrogative introducer tagmeme of the final clause occurs as the first element of a close knit clause sequence oreceding the interrogative clause.
 get it and go?"
 long are we going to wait and not see her?"
3) A subordinate clause marked for switch reference may occur parenthetically after the first nominal element or immediately preceding the verb of another clause. The parenthetical clause contains information out of focus to the main plot of the discourse.

"I put it in a half gourd, and, when she mixed hot pepper with it, I drank it."
513. Special patterns of intonation

The narration or conversation may reflect the emotions of the speaker in special situations via the type of intonation used. Two significant patterns have been noted: 1) stimulation to excitement and 2) expression of disapproval.
513.1. Stimulation to excitement is reflected by extra high pitch, with vowel lengthening on the penultimate syllable of a subordinate clause, and low pitch on the ultima plus a significantly long pause. This intonation pattern is prominent in cases where the narrator is developing a build up in his plot and is stimulating the listener to anticipate it. slowly, listened quietly, then I saw the tapir, and drew near to him, and I raised the gun, and I shot him."

A variation on this pattern adds emphasis to the stimulation to excitement. The extra high to low downglide in pitch occurs entirely on the final syllable of the subordinate
 above).
513.2. Expression of disapproval is reflected only in conversation by use of a series of ascending pitch levels on the last three or four syllables of each declarative clause of the speech. Specifically, the speaker expresses disapproval
of the event he is relating by using this intonation pattern．


## 520．Fragmentary sentences

Fragmentary sentences are characterized by absence of overt predication，although they are accompanied by the same sentence final intonation pattern described for the declarative（Section 511．1）and the information interroga－ tive（Section 511．3）sentence types．The pattern corres－ ponding to the confirmation interrogative（Section 511．2） does not occur．The absence of overt predication is com－ pensated for by the event implied in the immediate context， linguistic or social．In the examples below the linguistic context is given first，and the fragmentary sentence response follows．

$$
\begin{aligned}
& \text { "Where are you goine?" "House." }
\end{aligned}
$$

$$
\begin{aligned}
& \text { "Go see your older sister." "Ok." } \\
& \text { gq̨sade ’ayah咢’垂. had6ną. } \\
& \text { "Put the palm (spec) fruit inside." "where?" }
\end{aligned}
$$

```
kehe`1to sáte?nę.
    秓悉娄垂.
"When did they go?"
- "I don't know."
```



```
had6.
"Eat some more, Younger Brother." "Where at?" (assent)
```

600. Discourse structure ${ }^{27}$

A general understanding of discourse structure in Siona became necessary in order to compose translations of the Holy Scriptures into smooth flowing. intelligible laneuage. Single sentences out of context are understandable per se, but when they are arranged in a discourse without regard for discourse structure, the commurication is stilted and unnatural. This analysis has been done with an awareness that emic differences in types of discourse exist. The two principle distinctions isolated thus far in the study are narrative and dialosue. These are referred to from time to time throughout this section.

The positing of gramatical strusture on a level beyond the sentence, that is, the discourse level, is very fruitful in accounting for these variations and in predicting the types of sentences and their interrelationship within the dotal framework of discourse and to generate a body of languase acceptable to the native spealers of Siona.

The levels of gramatical analysis presented here for sentence and below (clause, phrase, word, etc.) have been dealt with in terms of concatenations and relationshios in strings. Constituents have been further analyzed as strings of tagmeres on the next lower structural level. and stated in terms of their distribution within the nort higher structural level. The fact that a discourse is comoosed of strings of sentences with different kinds of connectivity relationships is an ex-
tension of this principle. Definite patterns of relating sentences to each other as they occur along the line of events in a discourse are stated in Section 610.

Besides the structure of discourse in terms of strings of sentences, or larcer blocks such as paragraph or episode, other aspects of grammar on this level involve the system of participant identification and role designation (Section 620), and speaker or narrator viewpoint (Section 630). These other aspects of discourse structure fall outside the realm of segmentation and string relationships, but they involve patterns that cut across various levels of the gramatical hierarchy.

## 610. Sentence connectivity

The relationshio of sentences to each other within the context of discourse is influenced by the discourse phase in Which they occur: opener, build up, climax. or closure. The types of relationchios differ in accordance with shifts in episode, introduction of new elements, elaboration on inforination at a given noint, and reference to information previously stated. Connectivity relationships focus on the linkage of events to each other as elements of the whole narrative or dialogue. Sentence connectivity in Siona is displayed structurally by two basic phenomena: the presence or absence of a linking element. The linking element indicates the line of relationship between two events or blocks of events. The absence of it indicates that elaboration of an event is to follow.
611. The Iinking element

The linking element is either a clause, a temporal pronoun
 linking clause is of either the subordinate (Sections 231.1 and 241) or the nominal (Section 231.4) construction type, and it occurs initially in a sentence that is related to a precedins one. Its verb theme is the same as that of the independent clause of the sentence it is related to (the antecedent sentence).

The connectivity relationship may be between individual sentences in sequence, or between larger units of the narrative, such as parasraph, chapter or episode, in which case there is a significant turning point in the narrative. The scope of the relationship is sisnaled by the internal composition of the linking element. A significant turning point in the narrative occurs when 1) hą "ąra "thus" occurs in the manner slot of the linking clause, 2) a temporal pronoun occurs as the first element of the clause following the linking clause, and/or 3) the antecedent sentence is not the immediately preceding one. A structural definition of the kinds of units larger than a sentence is still a matter of study. Paragraph and episode are possibilities, but there may be others. When the linking element consists only of the linking clause composed of a single verb construction, and the antecedent sentence is the immediately preceding one, the connectivity relationship is between individual events in a chain. Relationships involving simul-
taneity, sequence, condition, or concession are indicated by. the suffix orders 500 and 600 (Chart III, Dage 92) that occur inflected to the verb theme of the linking clause.
612. Elaboration

The absence of the linking element at the beginning of a sentence indicates that that sentence is an elaboration on the preceding one. If the independent clauses of the two sentences have the same verb filling their predicate slots, the elaboration is in terms of elements which complement the predicate. such as nominals, temporals or adverbials. Althouch the grammatical structure allows for such elements to be included in a single sentence, the presentation of information over the course of two or more sentences drats focus on the event, since the verb is repeated, and provides an element of redundancy in the narrative. If the information is nem and pernaps unfamiliar to the listener, overloading of the comunication channels 28 tends to be avoided.

If the independent clauses of the tro sentences have different verbs, the second verb provides further semantic clarification on the first one.

Sentences occurrins as components of the discourse opener and closure are rithout the linking element. The opener consists of an initiel sentenos and any that elaborate on it. It presents the initiatins circunstances, if not the general theae of the narrative. Thjrd person participants introduced in the
opener are identified via a noun phrase or nominal clauss construction, not via a pronoun. Such participants are central. to the narrative and are marked for foous.

The closing sentence consists of a single clause to signal the end of the narrative.
si"abi kokå. "The story is finished."
gąyąyę̨?
613. The distribution of sentence types within discourse

Two different types of discourse, narrative and dialosue, contrast with regard to the types of sentences which occur at given positions within them. Eoth types of discourse accommodate the declarative sentence (Section jll.I) in the same way, however, the interrogative type sentences (Sections 511.2 and 511.3), unless they reflect rhetorical questions, occur only in dialogue discourse. They function as closures to the speech of a given participant and provide the signal for the addressee to begin speaking.

Only the dialosue discourse contains fracmentary sentences (Section 520). These occur as openers to the speech of a given participant in response to the speech of another participant.
62.. Participant identification and roie desicnation

At various points alons the event line 29 of a narrative participants key to the main theme are designated by various lexical representations. These are correlated with different
grammatical constructions (noun phrase, nominal clause, pronoun, etc.) and grammatical functions (subject, goal, object, instrument, etc.). In many cases the participant is indicated apart from any overt lexical form by context and verb inflection. The ways participant roles are distinguished throushout the course of a narrative are described in terus of grammatical patterns on the discourse level (Section 621). At the same time a pattern of enclitic marking indicates the degree of focus given to the nominal elements of a discourse (Section 622). The correlation of these tro patterns is demonstrated by the fact that participants central to the main theme of the narrative are identified by a different set of signals than those peripheral to the narrative, and that only the key participants are designated as in focus.
621. Patterns of participant identification

Participants peripheral to the narrative function as setting and are considered incidental to the plot formation. These occur only once or twice each during an episode and are not referred to pronominally. Participants central to the plot formation are introduced at a given point alons the event Iine and are identifiable sentence by sentence throughout a particular phase of the narrative. First and second person partioipants are desisnated almost entirely by a pronoun. Third person participants, which may be either animate, inanimate, spatial or temporal, are designated by noun phrases and
nominal clauses，as well as by pronouns．
A key participant is alvays introduced into the discourse by a nominal which characterizes the participant role as far as it is relevant to the narrative．If the socio－cultural context provides ample information for participant identifica－ tion，often a minimal noun phrase is sufficient：
yí＂生 dizihb＂my wife＂
？${ }^{\text {字S系gig }}$＂the sun＂
gąt壬ya bąُ̧＂Mild Cane River people＂
wiee＂house＂
If the immediate situation requires identification of a participant in detail，the nominal construction is more com－ plex：
si’色 warns，buenaz vista bą̨（apposition）＂everyone of the Euena ta people＂
 Agkoní（plural participant）＂the children，the one called Julio，along sith that person called，Hernbsene＂ yai wapla sister weregibi＂the dog，the one naned Sister＂ yさ̉lúną ’avį̧̨ daise’ede，hą’ade＂our airplane trip （here）．that＂

Once the participant is introduced，only the information necessary for distinguishing from other participants need be incorporated into the nominal construction，although more information is often added as a tendancy to maintain a level of redundancy．
saisik6＂abi＂those who had gone＂

$$
\begin{aligned}
& \text { bagibi "he" } \\
& \text { hą'ąde "that" } \\
& \text { If only one key participant is involved in an episode, }
\end{aligned}
$$ the normal pattern is first, the occurrence of a nominal characterizing the participant and afterward, the occurrence of a pronominal referent about once each sentence to identify the participant.

If two key participants are involved, each is introduced by a characterizing nominal. If they are of different gender or noun class, pronimal reference is clearly distinguished by the overt differences in the pronoun forms. If they ars of the same gender or noun class, ambisuity is resolved by 1 ) the switch reference suffix 601 -nģ (Chart III, page 92) to indicate change in subject from one participant to another, 2) the use of a noun phrase or nominal clause to identify a participant Whenever there is a switch in the grammatical role associated With that participant, and 3) the contert of the immediate situation or of tribal culture patterns regarding behavior and attributes of particular participanis. These three devices are activated more fully when several ley participants are involved in the eplsode at the same time. Thensver a new participant is introduced into the narrative, an identifying nominal, instead of a pronoun, is used to refer to another participant that follows the introduction.

## 622. Focus

- Focus on key participants of a discourse is indicated by the pattern of enclitic marking, which occurs on the nöinal. elements (Section 313.1). These enclitics vary according to the grammatical role (subject, object and goal) of the nominal. Chart XI indicates the general scheme of enclitic occurrence to mark focus. Two degrees of focus occur for animate nominals. The absence of an enclitic on subject and object indicates that these elements are out of focus. A goal out of focus is marked with -de.

When each participant is traced through the discourse, the patiern of enclitic marking on the pertinent nominal elements is correlated with the grammatical role in each situation. The participants which are central to the narrative occur with enclitic markers as shown in columns 1 and 2 of Chart XI. These are the sane as the nominal elements marked for focus and correlated with non-linguistic behavior in dialogue. The participants which occur without enclitic markers pattern as setting to the main theme of the narrative and are considered peripheral thereto. Focus is the primary function of these enclitic markers. The fact that they indicate grammatical function as well is secondary, since the imediate situation and the socio-cultural context are the more heavily relied on to determine the gramatical role, especially when the enclitic is absent. As the grammatical role of the participant

Chart XI - Enclitic marking for fows

| - | Emphatic <br> Focus | Normal Focus | Non Focus |
| :---: | :---: | :---: | :---: |
| Animate: |  |  |  |
| Subject | -8а | -bi | $\phi$ |
| Object | -rif | -de | $\phi$ |
| Goal | -nę | $-\mathrm{n} 1_{2}$ | -de |
| Inanimate: |  |  |  |
| Subject | x | -bi | $\phi$ |
| Object | x | -de | $\phi$ |
| Goal | X | -na | -de |

changes, the enclitic marker conforming to the proper grammatical category is selected, and the primary semantic connotaition of focus is maintained.

Occasionally there are instances when none of the nominal elements are in focus, in which case the events indicated by predication are in the center of attciation.
630. Speaker or narrator viewpoint

The viewpoint of the speaker or the narrator involves his own relationship to both the circumstances and to the listener or addressee. His relationship to the circumstances (Section 631) determines the selection of particular verb constructions over the span of the narrative. His relationship to the listener (Section 632) determines to some extent the degree of redundancy, characterization of participants, and the amount of elaboration he builds into the narrative.
631. The narrator's relationship to the circuastances

The viewpoint of the speaker or the narrator to the circumstances of the narrative sets the stage for the patterns of mood and tense occurrence in the independent verb constructions throughout the discourse. The categoriss of mood are 1) definite involvement, indicating that the speaker associates hinself with the circumstances and is aware of their occurrence (Section 411.5.1); 2) indefinite involvement, indicating that the speaker associates hinself with the circumstances. but due
to his participation in other activity he is not aware of the time these events take place (Section 411.5.4); and 3) detachment, indicating that the speaker considers himself alienated from the circumstances and not responsible for their occurrence (Section 411.5.5). The definite involvement and detachment categories enter into constructions for basic types of tense, which are 1) irmediate, indicating that the events have a bearing on present oircumstances, and 2) distant (past), indicating that the events have no application to the present and are merely history or "water under the bridge" (Section 411.5.6).

The viewpoint indicated in the opening sentence of the narration is basic to the whole discourse. There may be intermediate shifts in viewpoint from tire to time, and whatever one prevails determines which pood-tense construction occurs with the main verb of each sentence included in that span of viewpoint.
632. The narrator's relationship to the listener

The narrator's relationship to the listener has to do with the former's knowledee of how well informed the latter is to the background of the events. A person narratins 2 given episode would present the information one way to his wife and in other ways to his children, to other members of his cominunity, to Indians of the social outgroup. and to the linguistic investigator who is making a taped recording of it. Any attempt to define structural patterns for reduniancy level,
degree of elaboration and characterization of participants has not been done. The main observation here is that a person tends to present information in a more amplified manner, depending on how well informed he knows the listener is about it. Instead of leaving certain elements implicit in the narration, he states them explicitly so that the listener may be more sure to understand his communication.

Converse application of this factor is very helpful in translatins of new material into Siona. Information about hygiene, history, society and economy of the nation, and passages from the Eible involve concepts and situations new to Siona thinking. If these people are to understand the comunication, the transiator must evaluate the extent to which certain elements need to be made explicit.

1. As per औason (1950), pages 259-261; MeQuown (1955); and Waltz and Wheeler (in press), Section 4.1.
2. A summary of the history of the Nestern Tucanoan tribes is given in Steward (1948), pages 739-74. See also Ortiz (1965).
3. Some manuscripts are cited in Tovar (1961), pages 209218. All are cited and evaluated in Ortiz (1965), pases 134-136.
4. Castellvi (1934.a and $\dagger 1952$ ), Castellvi and $\exists$ spinosa (1958), Igvalada and Castellvi.(1940), Eeuchat and Rivet (1911), and Rivet (1914).
5. Field notes of Manuel Jost Casas y Manrique, Bogota (unpublished).
6. The grammatical analysis has been facilitated by use of a concordance of the Siona text inaterial compiled on the IBM 1410 computer at the University of Oklahora by the Linguistic Information Retrieval Project of the Summer Institute of Linguistics and the University of Oxlahoma Research Institute, and sponsored by Grant GS-270 of the National Science Foundation.
7. For a textbools presentation see Elson and Pickett (1964). Longacre (1964) has been a guide as a field manual. The basic theoretical foundation has come from Pike (19ó rev) and Pike (1964 and 1965). A recent application of tagnemics to field investication is found in Natteson (1967). See also Nares (1968).
8. Wheeler and Wheeler (1962a) and Wheeler (1962), pages 249-250. This presentation introduces several changes in symbolism from that presented in the 1962 material.
9. The fortis-lenis, rather than the simple-glottalized distinction (which I have stated in the 1962 articles). is posited for two reasons: 1) The historical development of the glottalized consonants emerged very recently; they are not attested in any of the other I'ucanoan languages (Sea Waltz and Wheeler. in press). 2) The feature of islottalization is only faintly perceptible in all the sets except the alveolar stop, where retroflexion is also prominent.
10. Envi.ronments for glottal effect (laryngealization) are further specified in Wheeler and Wheeler (1962a), page 103.
11. Further treatment of the phonological phrase (or rhytha group) is found in Pike (1947), pages 89-91.
12. Glottal effect on vowels. which is conditioned by adjacent. glottal stop, is indicated by a small glottal hook [ ${ }^{n}$ ] above the vowel.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
13. No morphophonemic alternation occurs across word boundaries, a feature that forms the basis for defining the word on phonological grounds. Otherwise the word is defined as the minimum elicitable form.
14. Chomsky (1965), pases 16-18. Compare also the presentations given on transformational paradigns by Eanker (1964). pages 7-39.
15. Pickett (1960), pages 18-20.
16. Longacre (1964). page 17.
17. The occurrence of the allornorph -ts is conditioned by secondary word stress on the preceding syllable. The same conditioning prevails for homophonous verb suffiyes -de ~ -te, presented in Shart III. pace 92.
18. Longacre (1964), page 18.
19. Wise (1968). pages 181-184.
20. Jacobsen (in press).
21. If the previous syllable has glottal stop onset. that glottal stop is reduced. If the vovel of that syllable is 1, it is reduced.
22. A comparison of wi"wi "run." wa'wí "scratch the ground (as a fowl does)." and wis "arise" suggests that "motion with
the legs" is a common semantic component of wi-. Such an analysis would lead to the morpheme divisions of win-wi and wa? ${ }^{\text {-wf. }}$. Similar comparisons can be made between other forms. Although there is no general pattern in the language to account for such morpheme divisions, the situation indicates the possible existence of one at an earlier stage diachronically. Comparaiive evidence tends to support this hypothesis. See Matteson (in press), especially Sections 2.1. 4.1, and 6.2.
23. These forms are the only ones in which nasalization does not carry through to the following vowel, according to the morphophonemic rule given in Section 150 。
24. The noun hobo "village," derived by classifier suffix 21.4 -bo, has horbodi as its diminutive form,
25. Names of tributaries to the Caqueta, Putunayo and Napo systems abound in the ending -ya/-ña, as per designations on maps of the region.
26. Grammars of other Tucanoan languages, either in final manuscript form or in the prosess of completion by members of the Summer Institute of Linguistics are as follows. For the Mestern languages are: Orejon - Dan and Virginia Velie, Perl; Secoya - Orville and Mary Johnson, Ecuador; Coreguaje Dorothy Cook and Carolyn Muller, Colombia, For the Eastern
languages, which are all of Colombia, are: Carapana - Ronald and Lois Hetzger, Cubeo - J.K. ānd Neva Salser, Guariano Nathan and Carolyn Naltz, Desano - James and Karion Hiller, Northern Earasano - Joel and Nancy Stolte, Southern Earasano Richard and Connie Smith. Tucano - Betty Welch and Birdie West, Tatuyo - David and Janice Whisler, Tuyuca - Janet Earnes and Sheryl Takagi.
27. This section is a further elaboration of the ideas presented in Nheeler (1967). Principle applications of discourse analysis influencing this presentation are found in Vise (1968), Longacre (1968), Cromack (1968), Gleason (1968), Grimes and Glock (in press), and Loriot (1957).
28. Nida (1964), pages 140-142.
29. Gleason (1968), pages 40 ff.

## BIBLIOGRAPHY

Arango Bueno, Teresa
1963 Precolombia, introducción al estudio de 10 . aborígenes, Instituto Colombiano de Antropología, Editorial Minerva, Bogotá, pages 121-122, plates IX, XII.

Banker, John E.
1964 "Transformational paradigms in Bahnar clauses," Mon-Khmer studies I, Publication No. l of the Linguistic Circle of Saigon.

Bauchat, Henri and Rivet, Paul
1910 "Afinités des langues du sud de la Colombie et du nord de l'equateur," Le Musẻon, Louvajn, Vol. 11, pages 33-68, 141-198.

1911 "La famille Betoya ou Tukano," Mémoires de la Société Linguistique de Paris, Vol. 17, pages 117-136, 162-190.

Brinton, Daniel G.
1891 The American Race, New iori.

1892 "Further notes on Betoya dialects from unpublished sources," Proceedings of the American Philosophical Society, Vol. 30, pages 271-278.

Casas y Manrique, Manuel José
1939- Unpublished field notes on the Inga, Coreguaje, Awshiri, Yucuna, Eno and Siona languages, Instituto Colombiano de Antropologia, Bogotá.

Castellvf, Fray Marcelino de
1934a Manual de investigaciones lingüisticas para
usos de los investigadores del Departamento de Nariño y las regiones del Caquetá, Putumayo y Amazonas, Pasto.

1934b "Las investigaciones linguísticas y etnográficas de la misión del Caquetá," Boletín de Estudios Históricos, Pasto, Vol. 5, pages 199-213.

1938 "Materiales para estudios glotologicos," Bolet1n de Estudios Históricos, Pasto, Vol. 7.

1962 Censo indolinguístico de Colombia, Amazonia Colombiana Americanista, Bogotá.

Castellvi, Fray Marcelino de and Espinosa, P. Lucas Pérez 1958 Propedeútica etnioglotolb́rica y diccionario clasificador de las lenguas Indo-Americanas, Consejo Superior de Investigaciones Cientificas, Madrid, (Tucanoan family, pages 122-124).

Chamberlain, Alexander Francis
1913 "Linguistic stocks of South American Indians (with distribution map)," American Anthropologist, Vol. 15, pages 235-247.

Chomsky, Noam
1965 Aspects of the theory of syntax, M.I.T.
Press, Cambridge.

Chantre y Herrera, José
1901 Historia de las misiones de la Compañía de
Jesus en el Marañón español (1637-1767), Wadrid.

Cromack, Robert
1968 Cashinahua discourse structure, unpublished doctoral dissertation, Hartford Seminary Foundation.

Elson, Benjamin F. and Pickett, Velma B.
1964 An introduction to morphology and syntax, second edition, Santa Ana.

Friede, Juan
1945 "Reseña etnográfica de los Macaguajes de San Joaquín sobre el Putumayo," Boletín de Aroueología, Bogotá, Vol. l, pages 553-565.

Fulop, Marcos
1955 "Notas sobre los términos de parentesco de
los Tucano," Revista Colombiana de Antropolojía,
Bogota, Vol. 4, pages 121-165.

Gleason, H. A., Jr.
1968 "Contrastive analysis in discourse structure,"
in: James E. Alatis, Ed., Report on the nineteenth annual meeting on linguistics and language studies,
Washington, No. 27, pages 39-63.

Greenberg, Joseph H.
1956 "General classification of Central and South American languages," in: Anthony F. C. Wallace, Ed., Men and cultures, selected papers of the Fifth International Congress of Anthropological and Ethnological Sciences, Philadelphia, pages 791-794.

Grimes, Joseph E. and Glock, Naomi
In press "A Saramaccan narrative pattern," to appear in Language.

Hardenburg, Walter E.
1910 "The Indians of the Putumayo, Upper Amazon," Man, Vol. 1.0, pages 134-138, London.

1912 The Putumayo, the Devil's paradise; travels
in the Peruvian Amazon region and an account of the atrocities committed upon the J.ndians therein, Iondon.

Igualada, P. Francisco de and Castellví, Fray marcelino de
1940 "Clasificación estadistica de las lenguas
habladas en el Putumayo, Caquet́a y Amazonas," Amazonia
Colombiana Ámericanista, Centro de Investigaciones
"CILEAC," Vol. 1, NOS. 3-4, Bogotá, pages 92-101.

Jacobsen, William H., Jr.
In press "Switch reference in Hokan Coahuiltecan," Mouton, The Hague.

Jijón y Caamaño, Jacinto
1941-1945 El Ecuador interandino y occidental antes de
la conquista castellana, Vols. 1-4, Editorial Ecuatoriana, Quito.

Kaufman, Terrence
1966 Languages of South America, manuscript.

Longacre, Kobert E.
1964 Grammar discovery procedures, Janua Linguarum Series, Mouton, 'lhe Hague.

1968 Discourse, paragraph and sentence structure
in selected Philiopine languages, final report to the
U. S. Department of Health, Education and Welfare,

Contract No. 0-8-062838-U391, vols. 1-3.

Loriot (Iauriaut), James
1957 "Some problems in translating paragraphs
idiomatically," the Bible Translator, The American
Bible Society, New York, pages 166-169.

1964 "A selected bibliography of comparative
American linguistics," International Journal of
American Linguistics, Vol. 30.1, pages 62-80.

Loukotka, Cestmír
1967 South American Indian Languages, University
of California Press, Los Angeles.

Mason, John Alden
1950 "The languages of South American Indians,"
in J. H. Steward, Ed., Handbook of South American
Indians, Washington, BAE-B 143, Vol. 6, pages 157-319.

Matteson, Esther
1967 Bolivian Indian grammars, University of
Oklahoma Publications in Linguistics, No. 16, Normen.

In press Comparative studies in Amerindian languages,
Janua Linguarum Series, Mouton, The Hague.

Mequown, Norman A.
1955 "The indigenous languages of Latin America,"
American Anthropologist, Vol. 57, pages 501-570.

Nida, Eugene A.
1964 Toward a science of translating, E. J. Brill,
Leiden.

Noble, G. Kingsley
1965 Froto Arawakan and its descendants,
International Journal of American Linguistics,
Publication 38, Vol. 31.3 (extensive bibliography of
Northwestern South America, pages 155-120).

O'Leary, Timothy J.
1963 Ethnographic bibliography of South America,
Human Relations Area Files, New Haven.

Ortiz, Sergio Elias
$\therefore 958$ Estudios sobre linguistica aborigen de
Colombia, Biblioteca de Autores Colombianos, Bogotá.
(*)mmentary on Siona manuscripts, pages 413-503)
$1965^{\circ}$ Lenguas y dialectos indígenas de Colombia,
Historia extensa de Colombia, Vol. l, Tomo 3, Academía Colombiana de la Historia, Bogota.

Parks, Douglas
1965 Bibliography of recent (and some earlier)
South American linguistics, manuscript.

Pickett, Velma B.
1960 The grammatical hierarchy of Isthmus Zapotec,
University of michigan doctoral dissertation, Ianguage,
Vol. 36, No. 1 (Part 2).

Pike, Kenneth L.
1947 Phonemics, a technique for reducing languages to writing, Ann Arbor.

1964 "Beyond the sentence," College Composition
and Communication, Vol. 15, pages 129-135.

1965 "Discourse analysis in tagmeme matrices," Oceanic Linguistics, Vol. 3, pages 5-25.

1967 rev Language in relation to a unified theory of the structure of human behavior, Mouton, The Hague.
Vol. 1, 1954; Vol. 2, 1957; Vol. 3, 1960; Santa Ana.

Pinell, Fray Gaspar de
1928 Excursión apostólica por los ríos Putumayo,
San Miguel de Sucumbios, Cuyabeno, Caquetá, y Caguán,
Bogotá.

Preuss, Konrad Th.
1923 "Vorlage einer etnographischen Sammlung von
den Kágaba, Uitoto, Tama und Coreguaje," Zeitschri.ft
fur Etnologie, Berlin, Vol. 55, pages 91-93.

Rivas, Luis Antonio
1944 "Apuntaciones sobre la lengua Siona," Revista de Historia, Pasto, Nos. 3-4.

Rivet, Paul
1914 "La famille Betoya ou Tukano (note complémentaire)," Mémoires de la Société Linguistigue de Parīa, Vol. 18, pages 91-95.

Rivet, Paul and Loukotka, Cestmír
1952 "Langues de I'Amerique du Sur et des Antilles," in: A. Meillet and M. Cohen, Les langues du monde, Paris, pages 1099-1160.

Rocha, Joaquín
1905 Memorandum de viaje, regiones amazonicas,
Bogotá.

Rowe, John Howland
1951 Map of indigenous tribes and languages of
South America.

1953 "Linguistic classification problems in South
America", in: Papers from the Symposium on American
Indian Linguistics, University of California Publications
in Linguistics, Vol. 10, pages 1-68.

Schuller, Rudolf
1930 "Materiales para el estudio de las lenguas aborígenes del Sur de América," International Journal of American Linguistics, Vol. 6, pages 34-36.

Simson, Alfred
1879 "Notes on the Piojés of the Putumayo," Journal of the Anthropological Institute of Great Britain and

Ireland, Vol. 8, pages 210-222.

1886 Travels in the wildes of Ecuador, on the
exploration of the Putumayo River, London.

Steward, Julian H.
1948 "Western Tucanoan," Handbook of South American
Indians, Washington, BAE-B 143, Vol. 3, pages 737-748.

Swadesh, Maurici (Morris)
1958 "La lingüística de las regiones entre las
civilizaciones mesoamericanas y andinas," Congreso Internacional de Americanistas, Costa Rica, Vol. 33.

1959 Mapas de clasificación lingüistica de Néxico
y las Américas, Universidad Nacional Autóroma de México.

1963 "Discussion and criticism on 'Aboriginal
languages of Latin America' (Tax), "Current Anthropology, Vol. 4, pages 317-318.

Tessmann, Gunter
1930 Die Indianern Nordost-Perus, Hamburg.

Tovar, Antonio
1961
Catálogo de las lenguas de América del Sur, Editorial Sud Americana, Buenos Aires (Bibliography, pages 203-370).

Triana, Miguel
1907 Por el Sur de Colombia; excursión pintoresca y
cientifica al Putumayo, Garnier Hermanos Editores, Paris.

Voegelin, C. F. and Voegein $\overline{\text { V }}$. M.
1965 Languages of the world: Native America, Fascicle
Two, Anthropological Linguistics, Vol. 7, No. $7 \cdot$

Waltz, Nathan E. and Wheeler, Alva
In press "Proto Tucanoan," in: Esther Fatteson, Ed.,

Comparative studies in Amerindian languages, Janua Linguarum Series, Mouton, The Hague, Section 4.

Wares, Alan C.
1968 Bibliography of the Summer Institute of
Iinguistics, 1935-1968, Santa Ana.
Wheeler, Alva
1962 "A Siona text morphologically analyzed," in: Benjamin F. Elson, Ed., Studies in Ecuadorian Indian languages I, University of Oklahoma Linguistic Series, No. 7, Norman, pages 248-268.

1965 Riusu cocareba, San Marcos toyase'e'ë (The Gospel of St. Mark), Bogotá (mimeo).

1967 "Grammatical structure in Siona discourse," Lingua, Vol. 19, No. 1, pages 60-78.

Wheeler, Alva and Wheeler, Margaret
1962a "Siona phonemics (Western Tucanoan)", in: Benjamin F. Elson, E., Studies in E'cuadorian Indian languages I, University of Oklahoma Linguistic Series, No. 7, Norman, pases 96-111.

1962b Cartilla Siona I, II, III, IV, Instituto Lingüístico de Verano, Quito.

1969 Cartilla Siona V, VI, VII, VIII, Instituto Lingüístico de Verano, Editorial Townsend, Lomalinda, Meta, Colombia.

Wise, Mary Ruth

- 1968 Identification of participants in discourse, unpublished doctoral dissertation, University of Michigan, Ann Arbor.


## Early Siona manuscripts

The following list; comprising all the known documents recorded by Franciscan missionaries on the Siona language, are cited and evaluated by Ortiz (1965), pages 134-136. The English translation of his comments is mine.

1. "Diccionario y doctrina en lengua Zeona." A manuscript of 416 pages, foliated; cited in Acosta, Joaquín: Compendio histórico del descubrimiento y colonización de la Nueva Granada en el siglo décimo sexto, pages 437-438, Paris, 1848. Acosta's remarks: "This is the most general language of the Amazon tributaries, especially of the Caqueta and Putumayo."
2. Another smaller manuscript (124 pages) on the same language, cited in the same publication, page 438.
3. Uricoechea, E., "Vocabulario de la Lengua que Usan los Indios de estas misiones--del Colegio de Popayan--Se Supone Ser la Lengua Ceona" in: Castillo y Orozco, Fugenio, cura de Tálaga: Vocabulario Páez-Castellano, Catecismo, Nociones Gramatjcales, i dos platicas, con Adiciones y un Vocabulario Castellano, page $x x$, Paris, 1886.
4. Arte de Lengua de las Misiones del río Napo de la Nacion Quenquehoyos, e Idioma General de los Más de ese Rio, Payohuates, Genzehuates, Ancoteres, Encabellados. Juntamente tiene la doctrina cristiana en dicha lengua y en la del Ynga, al remate -- in: Brinton, Daniel G. (1892).
5. A vocabulary of the general language of the Indians of the Putumayo and Caqueta -- in: Jiménez de la Espada, Marcos, Revista de Archivos, Bibliotecas y Museos, 49 pages, Madrid, 1904.
6. Manuscritos del Siona O Zeona -- in: Lenguas de América, Manuscritos de la Real Biblioteca, Vol l, pages 308-79, Madrid, 1928.
7. Vocabulario de Lengua de los Yndios q(ue) Pueblan los Ríos Putumayo y Caquetá a Solicitud del Colegio Apostblico de S. Diego de Quito--cited in Schuller, Rudolf (1930).
8. Mention is made of the existence of a grammar and vocabulary of the Ceona language in the Biblioteca Nacional de Bogotá -- in: Rocha (1905), page 137.
9. "Father Joaquin de San Joaquin wrote a dictionary and grammar of the Zeona language in the year 1600 " quote from Otero Muñoz, Gustavo, "Historia de la Literatura Colombiana," Boletín de Historia y Antigüedades, Vol. 21, page 166, Bogota, 1934.
10. "Franciscan missionaries (O.F.M.) Fray José de S. Joaquín Barrutieta and Fray José Carvo authored a work in El Colegio de Misiones de \&iuito at about 1728 or 1729 , entitled 'Un Vocabulario Extenso y Datos Gramaticales del Siona,' at that time the general language of the Putumayo. They produced more than twelve copies, which had been inventoried in that library, and today I find no more than this termite eaten one, and the manuscript inventory, on this day August 5, 1791," according to a citation on an old manuscript in the possession of Dr. Paul Rivet (1938), page 381.
11. "These same Franciscan missionaries authored another manuscript, which we cite as the same vocabulary as the preceding one with a few variations, in the Biblioteca Nacional de Bogotá, entitled: Diccionario y Catecismo de la Lengua Zeona del Putumayo. A remark on the flyleaf says: '-B. -O. -N. Biblioteca Nacional de Bogotá- (1855) -E. -5 -No -12 -Mis. -23 -XIV -37.' It contains 122 pages, with parchment covers, of which 15 are extant and belong to the same Biblioteca Nacional de Bogotá." Citation from Castellvi (1938), page 381.
12. Vocabulario de la Lengua que Usan Los Indios de estas Misiones, followed by a Doctrina Cristina and other material giving information on the Ceona language: l plate blank, 4 plates unnumbered, 58 numbered plates, parchment covers. Biblioteca Nacional de Bogota: Published by Ortiz, Sergio Elías (1942).

A further statement by Ortiz (page $135-36$ ) reads as
follows: "Count de la Vinaza, in his Bibliografia Española de Jenguas Indigenas de América (Madrid, 1892), has cited two manuscripts on Ceona. These have been included in the above list, but we want to cite them here to avoid confusion.
"a) Item 1.13, p. 324. Diccionario y Catecismo en Lengua Zeona. A manuscript of 410 pages, Bogota, Biblioteca Nacional, autographed and presented by General Acosta. (Same as No. l, above).
"b) Item 1016, page 281. Vocabulario de la Iengua de los Indios que Pueblan los Ríos de Putumayo y Caqueta Hecho a Solicitud del Colegio de Misiones de San Biego de Quito. A manuscript of 26 pages. Preceding the Vocabulario is a 'Dedicatory Prayer. Rivet and Schuller say this manuscript is the same one that Marcos Jiménez de la Espada published (same as No. 5 above) and Ortiz judges that it is the same one that Schuller fourd in Popayan, in Dr. Guillermo Valencia's library (same as No. 7, above).

