STUDIES I

with articles by

w. cameron townsend
colin c. delgaty
ray elliott
clarence and katherine church

edited by

benjamin olson

Linguistic series

Number five

A Publication of the Summer Institute of Linguistics
of the University of Oklahoma

Norman 1960
© Summer Institute of Linguistics 1961

Enero, 1961

Esta edición consta de 700 ejemplares

Derechos Reservados
por el
Instituto Lingüístico de Verano
Héroes 53 México, D. F.
7C5920.
This publication contains four articles on Mayan languages written by members of the Summer Institute of Linguistics. The article by W. Cameron Townsend was written in 1926 and is published here as an historical document on the 25th anniversary of the founding of the Institute by Townsend. The grammar has never been published, though it was once duplicated (rephotograph) for students. For inclusion in this volume the original format has been changed and regularized. A foreword by Kenneth L. Pike discusses these matters and the value of Townsend's work.

The other three articles were written recently using a different theoretical approach. Each of the authors has done extensive field work on the Mayan language he is describing, acquiring a speaking knowledge of it as a second language. In these three articles the notion of the tagmeme as the basic unit of grammatical description has been used. However, each author uses a different matrix for description and approaches the material somewhat differently.

Delgaty discusses in great detail the structure of verbs giving minute restrictions of occurrence. He finds it convenient to illustrate these by setting up a number of charts representing different kinds of verb structures. From each chart the occurring morpheme sequences are represented by formulas; one or more formulas are derived from each chart. The result is 21 charts and 34 formulas. An examination of these will give in minute detail the morphemes of the verb phrase, their potential combinations, and their restrictions. A composite chart of verbal morphemes is an appendix to the paper.
Elliott, on the other hand, gives an overall view of clause structure, but does not discuss in detail the syntactic classes which are fillers of the clause-level slots.

It is my guess that most of Delgaty's charts would be descriptions of classes of verbs which fill nuclear (or predicate-like) slots in different clause types. Thus, Delgaty would find in Tzotzil many more clause types than the four Elliott finds for Ixil. On the other hand, some of these differences would be treated by Elliott as different sentence types, rather than different clause types. These differences constitute certain differences in approach.

It is hoped that future papers by the authors will treat these matters more fully; that Elliott will examine in greater detail the verb structure of the various clause types, and that Delgaty will explore the clause. Such information will be welcome additions to comparative Mayan grammar.

The paper by the Churches explores the noun phrase. They find two types of noun phrases based on internal structural differences.

It is hoped that these papers will be a contribution to Mayan studies, particularly comparative Mayan grammar.
Table of Contents

I. Cakchiquel Grammar
   W. Cameron Townsend .................................... 3
   Foreword by Kenneth L. Pike .............................. 3
   Introduction ................................................. 9
   I Prefixes .................................................. 12
   II Root Stems ............................................... 41
   III Suffixes ................................................ 65

II. Tzotzil Verb Phrase Structure
   Colin C. Delgaty ............................................ 83
   0. Introduction ............................................. 83
   1. Predicate with transitive verb stems ............... 84
   2. Predicate with intransitive verb stems ........... 103
   3. Predicate with positional verb stems ............. 111
   4. Predicate with substantive stems ................. 114
   5. Predicate with descriptive stems ................. 118
   6. Allomorphic variations ............................... 122

III. Ixil (Mayan) Clause Structure
     Ray Elliott .............................................. 129
     0. Introduction .......................................... 129
     1. Clause types .......................................... 131
     2. Clause-level tagmemes ................................ 142

IV. The Jacaltec Noun Phrase
    Clarence and Katherine Church ......................... 159
    1. Noun phrase types ...................................... 159
    2. Constituent tagmemes ................................... 163
CACCHIQUEL GRAMMAR

by W. Cameron Townsend
Foreword

This Cakchiquel monograph by Professor W. Cameron Townsend is printed as an historical document of peculiar relevance to the Summer Institute of Linguistics on this, its twenty-fifth anniversary year. It is, in general, this material which provided the bulk of grammatical theory and practice for the first two years of the Institute--1934-1935.

As for myself, I first met an Indian language in this material in the second of these years--not in this precise form, since this document was prepared in 1926 and no copies were known to exist by 1935. It is only recently that a copy loaned years ago turned up in Guatemala. Yet it was this general data which introduced some of us to a typical model of an American Indian language.

Unfortunately, the single most effective bit of the Cakchiquel of those days is not seen in the monograph itself. That which made the deepest impression on me was a chart which must have been developed some years after this manuscript was written. In the 1935 material the prefixes were neatly lined up in contrastive columns, followed by the stem column and columns of enclitics in sequence. Most impressive of all was a specific physical model. Townsend had his students prepare a piece of cardboard with a row of "windows" cut into it, one for each of the classes of suffixes, stem, and enclitics. A strip of paper had written on it the specific column of affixes or morphemes which was appropriate to one of the slots. Each slot had its appropriate morphemes on such a slip. By lowering or raising the respective vertical strips he was able to make show through the cardboard windows any one of thousands of theoreti-
cally possible verb forms.

This was a performance impressive to one used only to Latin and Greek models. The impact was substantial. I sometimes wonder if this early exposure helped build the psychological set of mind which later made a slot-class tagmemic theory congenial to me. Certainly, in my view, this was a substantial achievement for one who had had no formal training in linguistics.

The cardboard model is no longer accessible—presumably it is buried in some attic trunk. Yet a couple of years later Townsend published a brief article which gives an illustration analyzed, calling this model to mind.

Because of its special interest, and since it is not in the 1926 monograph, I give the illustration and its analysis here, translated from Compara-
cciones Morfológicas Entre Cakchiquel y Nahuatl (Investigaciones Lingüísticas, Vol. 4, Nos. 3-4, pp. 324-31):

Xquebencamisabextaj-ka-na-can-- 'With an instrument I will go to kill them rapidly—in reference to a downward movement, and in reference to something expected and finished by that act, I will leave'

Analysis

1 2 3 4 5 6 7 8 9 10 11 12
Xqu--e--be--n--cam--isa--be--xta--j--ka--na--can

(1) Xqu--future time.
(2) e—third person plural of substantive verb, indicating that the object is plural and third person.
(3) be—verb 'to go', indicating that the agent goes away in order to act.

(4) n—abbreviation of the pronominal-possessive prefix nu indicating that the agent is singular and in first person.

(5) cam—verb root signifying 'to die'.

(6) isa—causative suffix.

(7) be—instrumental suffix.

(8) xta—rapidative suffix.

(9) j—indicator of active voice.

(10) ka—auxiliary verb indicating action in downward direction.

(11) na—auxiliary verb indicating necessary action.

(12) can—enclitic indication that the action is finished or left or abandoned.

The monograph, does not, to be sure, appear at all like a modern descriptive treatise. Its chosen style was that of sets of pedagogical rules for learning to speak the language, its audience missionaries without linguistic training, and its techniques unpolished. In spite of its avowed goal of seeing the Cakchiquel structure in reference to its own internal logic and regularities, furthermore, it seems to fail at some important points. Perhaps the chief of these may be the postulation of a copula in such forms as at utz you good. This assumed component, perhaps derived from the form of Spanish and English translation 'You are good', leads to a complexity in deriving pronouns which might be avoided by starting in the reverse direction—with the pronoun as basic. The presence of a simple predication type without any verb would simultaneously take care, then, of his items such as utz (ri) juan (the) John good i.e.
John is good; at utz you good, i.e. you are good; and pedro achin Peter is a man. (Illustrations taken from Section I.4 of his manuscript.)

It is not clear, in retrospect, how much help Townsend received from printed sources. A dozen manuscript descriptions of Cakchiquel were in existence before 1885, however, and one of these was translated and published in the USA (A Grammar of the Cakchiquel Language of Guatemala, translated by Daniel G. Brinton, Proceedings of the American Philosophical Society, 21. 345-412, 1884). This one reached Townsend's attention before 1926. A comparison of the two seems to show Brinton's influence in identification of various inflectional and derivational morphemes—and similar joint absence of recognition of others.

These details, however, do not add up to the structural view which Townsend was struggling toward in the monograph of 1926, and reached more fully in the 1937 data quoted. Above all, Brinton's work does not show the kind of verb structure portrayed by Townsend's cardboard model, which in succinctness is a far cry from the usual diffuse presentation (as in Brinton) of conjugations written out verb by verb, tense by tense, to fill a Latin mold, without any hint as to the basic simplicity of a flexible pattern of slot-and-class sequence.

Between the 1926 and 1937 materials, however, other influences had been brought to bear. In 1935, for example, about the time I saw his cardboard model, Townsend had been reading grammar materials in Boas' Handbook of American Indian Languages, 1911 and 1922. Probably these descriptions, or others of similar type, provided some of the stimulus for this further development.
We now turn to orthography and phonetics. Townsend had a deep understanding of the social climate in which he was operating, which led him to an orthography fairly well adapted to Spanish. This kind of approach, alone, has survived the test of extended, widespread social acceptance in Spanish America.

He, himself, never felt at home in phonetics, and never enjoyed trying to teach it. Nor would he care to claim any scientific contributions from, or elegance in, the phonetic part of the monograph. Every summer, from the beginning of the Institute, he had others handling this area. It is all the more remarkable, therefore, that he learned to utilize readily the necessary implosive back velar stops which contrast with the glottalized (egressive) front velar stops—and to pronounce some of the other sounds difficult for Americans.

The task Townsend faced was a formidable one—by sheer determination to break into a complex language system vigorously, systematically, and fruitfully without conceptual tools to help him. It is little wonder that in his dreams he created an institute where all such "hard-way" experience could be pooled, and ladled out to young people thirsting for it. The result is known to linguists—a strong institute, standing on his shoulders, reaching for the stars—2,000 languages to be carefully, scientifically described. Two hundred begun.¹ Worlds yet to go.

Kenneth L. Pike
Ann Arbor, Michigan
March 18, 1960

¹The Anniversary Bibliography of the Institute lists 413 technical books and articles (phonemic statements, grammars, dictionaries), plus 771 educational items (primers, readers,
health books, etc., representing work in 140 languages. In addition, translations of at least one portion of Scripture—say a Gospel of Mark, the Lord's Prayer, the Beatitudes, or the entire New Testament—have been published in 64 languages, in collaboration with the Wycliffe Bible Translators.

The Institute has modern grammatical studies in process in languages of this Mayan family. For description of a verb structure, for example, see Tzeltal Noun and Verb Morphology, by Marianna Slocum, International Journal of American Linguistics, 14.77-86, 1948.
Cakchiquel Grammar

INTRODUCTION

1. The form of Cakchiquel upon which this grammar is based is that spoken in San Juan Comalapa, Department of Chimaltenango, Guatemala. This form is understood readily from Solola to San Juan Sacatepequez inclusive, but each town varies somewhat.

2. The first prerequisite for learning Cakchiquel is to forget the way our European languages are developed, especially the verb tenses and modes and try to get the Cakchiquel point of view. It is very logical and regular in its development. The number of root words in the language is very small, but an almost unlimited number of derivatives can be formed by the use of prefixes and suffixes. Get thoroughly acquainted with the prefixes and suffixes and learn the root words and the language will be easy. One can understand words he has never heard before merely by recognizing the root and the suffix.

3. The accent ALWAYS falls on the last syllable unless the word has been borrowed from the Spanish.

4. The word order in a sentence is ordinarily as in English: subject...predicate...object: ri vaquix diquitej ixim the cattle eat corn juan xbe pa tinamit John went to town An intransitive verb however, may come either before or after its subject: juan yalan diquicot or yalan diquicot ri juan } John is rejoicing greatly A thing possessed is mentioned before the posses-
Mayan Studies I

sor:
ri rulef jun achin a man's land.

5. The alphabet used is as close to that of Spanish as possible.
a has two sounds: one as in 'father' and the other as in 'along'.
b is as in English 'bone', except at end of word when it is hard to distin-
guish from p.
c before a, o, u or before another consonant has the sound of the Eng-
lish k; before e or i it is pro-
nounced like g.
ch ch' is like the English ch in 'cheese'.
d is as in English 'done'.
e has two sounds: one as in 'weight' and the other as in 'met'.
f at the end of a word is an aspirate. Elsewhere it is only in Spanish words.
g is as in 'gas'.
c' (g') is pronounced like k while one is thinking guttural g.
h is always silent, is used to separate vowels.
i has two sounds: one as in 'police' and the other as in 'it'.
j is like the h in 'hat'. At the end of a word it is an aspirate.
k is pronounced with the mouth and throat open and air is breathed harsh-
ly against the roof of the mouth.
k' is pronounced while air is being in-
haled through the open mouth. The throat is then opened with a snap.
l, m, n are as in English.
Cakchiquel Grammar

o is as in 'for'.
p q are as in English.
pr is as in English except at the end of
a word when it often sounds like sh,
s is as in 'sassafras'.
št is as in English.
št' is as above but exploded, rarely used.
tz is as tx would sound in English.
tz' is as above but exploded.
u is the same as oo in 'too' except
between g and e or i when it is silent.
v is pronounced between y and w in English.
w is sometimes used instead of v and
pronounced as in English.
x is like sh in English.
y is as in 'young' except at end of
word when it is an aspirate.
Mayan Studies I

1. The Cakchiquel language is based upon primitive roots.

2. These roots are inflected by prefixes to show person and number of the possessor in the case of a noun and to show tense and mood as well as the person and number of the subject of a verb.

3. Fundamentally, there are only two kinds of prefixes. One is verbal, while the other is like a possessive pronoun.

4. The verbal prefixes are derived from the little verb denoting existence, state or condition, similar to our verb "to be". It has only six forms and, indeed, the third person singular is never used by itself (save with one exception when it means "yes" or "it is", "si", ja). The forms are as follows:

<table>
<thead>
<tr>
<th></th>
<th>(I) am</th>
<th>(you) are</th>
<th>(they) are</th>
</tr>
</thead>
<tbody>
<tr>
<td>yin</td>
<td>am</td>
<td></td>
<td></td>
</tr>
<tr>
<td>at</td>
<td>(you) are</td>
<td>ix (you) are</td>
<td>(or je)</td>
</tr>
<tr>
<td>ja</td>
<td>(it) is</td>
<td>e (or je)</td>
<td>(they) are</td>
</tr>
</tbody>
</table>

These forms may be used alone as the verb "to be" with nouns, participles and adjectives as follows.

With nouns:

<table>
<thead>
<tr>
<th></th>
<th>(I) am a woman</th>
<th>(you) are a woman</th>
<th>(she) is a woman</th>
<th>(we) are women</th>
<th>(you) are women</th>
<th>(they) are women</th>
</tr>
</thead>
<tbody>
<tr>
<td>yin</td>
<td>ixok</td>
<td>(I) am a woman</td>
<td>(you) are a woman</td>
<td>(she) is a woman</td>
<td>(we) are women</td>
<td>(you) are women</td>
</tr>
<tr>
<td>at</td>
<td>ixok</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ri) ja</td>
<td>ixok</td>
<td>(I) am a woman</td>
<td>(you) are a woman</td>
<td>(she) is a woman</td>
<td>(we) are women</td>
<td>(you) are women</td>
</tr>
<tr>
<td>oj</td>
<td>ixok</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ix</td>
<td>ixok</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e</td>
<td>ixok</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Cakchiquel Grammar

With participles:

- yin cosnek (I) am tired
- at cosnek (you) are tired
- (ri) ja cosnek (he, she, it) is tired
- oj cosnek (we) are tired
- ix cosnek (you) are tired
- e cosnek (they) are tired

With adjectives:

- yin utz (I) am good
- at utz (you) are good
- ri ja utz (he, she, it) is good
- oj utz (we) are good
- ix utz (you) are good
- e utz (they) are good

Like "soy", "eres", "es", etc., in Spanish, these forms do not require the use of the nominative pronouns but may take them if desired, in which case special emphasis is given, as:

- at utz or rat at utz you are good

The third person singular form is not used when the subject is not a pronoun, as:

- utz ri juan John is good (ri is the definite article.)

- cosnek ri achin the man is tired
- jari juan that is John (here ri is a demonstrative pronoun and therefore ja is used.)
- pedro achin Peter is a man

Whenever adjectives or participles are used as nouns (like "nosotros los buenos iremos") the proper form of this verb should be used as:

- roj oj utz xcojbe we good people will go
- ri e cosnek e tzuyul the tired people are seated
Mayan Studies I

These forms are correctly used with nouns to show their person and number where in other languages like English and Spanish the verb "to be" or "ser" should be wholly out of place, as:

quixam-pek ix walg'ual come here you
children of mine (The father speaking. The
mother would say ix wal.)
rix ix ixoki ix cosnek you women are tired

5. From these six forms are derived the nominative pronouns. The first person singular form yin (in the Comalapa dialect upon which we are basing this grammar) is taken over as it is to become the first person singular nominative pronoun. The rest are formed by prefixing the definite article ri eliminating in three cases the "i" as:

yin or ri yin I (literally the I am)
rat you or thou (literally ri at the thou art)
rija he, she or it
roj we
rix you
rije they

6. From the same six forms of the verb "to be" are derived the verbal prefixes used with intransitive verbs as well as, in part, the prefixes used with transitive verbs. We will first study the intransitive prefixes leaving the transitive ones until after we have studied the pronominal prefixes since these latter have a part in their formation.

\[In\] many other towns it is "in''. In some towns ren or rin (a combination of ri and yin) is used.
Cakchiquel Grammar

7. The Intransitive Verbal Prefixes for the Indicative Mood Present Tense are:

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vowel</td>
<td>Consonant</td>
</tr>
<tr>
<td>1st person</td>
<td>guin-</td>
</tr>
<tr>
<td>2nd person</td>
<td>gat-</td>
</tr>
<tr>
<td>3rd person</td>
<td>d-</td>
</tr>
</tbody>
</table>

Chart I

With the exception of the third person singular it can be easily noted that the prefixes are formed by placing a g- before the forms of the verb "to be" as: g + yin = guin, g + at = gat, g + oj = goj, g + ix = guix, g + e = gue.

Since the third person singular form ja is rarely used, it is also omitted in the formation of the verbal prefixes and d- or di- is used instead of the g- and is prefixed directly to the verbal root. When the verbal root begins with a consonant, the singular prefixes are slightly different so that the method of formation is not seen so clearly, but that is due to the elision of the -n- and -t-. An example of a verb beginning in a vowel and another beginning in a consonant will help fix the prefixes in the mind. We will include the nominative pronouns to show their similarity to the prefixes although, as in Spanish, they are not necessary.
Mayan Studies I

Verbal Root -oc meaning to enter (begins with vowel)

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>yin guinoc</td>
<td>I enter</td>
</tr>
<tr>
<td>rat gatoc</td>
<td>you enter</td>
</tr>
<tr>
<td>rija doc</td>
<td>he, she or it enters</td>
</tr>
<tr>
<td>roj gojoc</td>
<td>we enter</td>
</tr>
<tr>
<td>rix guixoc</td>
<td>you enter</td>
</tr>
<tr>
<td>rije guehoc</td>
<td>they enter</td>
</tr>
</tbody>
</table>

Verbal Root -pe meaning to come (begins with consonant)

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>yin guipe</td>
<td>I come</td>
</tr>
<tr>
<td>rat gape</td>
<td>you come</td>
</tr>
<tr>
<td>rija dipe</td>
<td>he, she, it comes</td>
</tr>
<tr>
<td>roj gojpe</td>
<td>we come</td>
</tr>
<tr>
<td>rix guixpe</td>
<td>you come</td>
</tr>
<tr>
<td>rije guepe</td>
<td>they come</td>
</tr>
</tbody>
</table>

It will be seen that the Indian thinks of the idea expressed by the verb as a state or condition in which the subject is, was or should be. Ordinarily, therefore, he states his subject, then the verbal prefix which in the case of intransitive verbs is one of the yin, at, -, oj, ix, e forms preceded by the sign of the present tense, indicative mood g-, and then the verb. The latter are written together because they are pronounced together. yin guin oc I am entering is therefore yin guinoc.

8. The yin, at, -, oj, ix, e, forms used by themselves before a noun, participle, or adjective have no past or future forms. The tense is shown only by the context as:

yin cosnek ivir I was tired yesterday
ri achin e utz churak the men will be good tomorrow
Cakchiquel Grammar

When used as verbal prefixes however, they are preceded by g- as sign of the present, x- as sign of the past and xqu- as sign of the future, so that the following prefixes are formed (the third person singular being an exception takes d- or di- in the present, x- in the past and xt- or xti- in the future. The Intransitive Verbal Prefixes for the Indicative Mood Past and Future Tenses are:

**INTRANSITIVE VERBAL PREFIXES**

**Indicative Mood**

**Past Tense**

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root</td>
<td>Consonant</td>
</tr>
<tr>
<td>1st person</td>
<td>xin-</td>
</tr>
<tr>
<td>2nd person</td>
<td>xat-</td>
</tr>
<tr>
<td>3rd person</td>
<td>x-</td>
</tr>
</tbody>
</table>

**Future Tense**

| 1st person | 2nd person | 3rd person |
| xquin- | scat- | xt- |
| xqui- | xca- | xti- |

**Chart II**

9. The Imperative or mood of volition, which expresses a command or wish not yet fulfilled, (it has two other uses which we will study later) takes another set of prefixes which is also derived from the yin, at, - , oj, ix, e forms. They are:
Mayan Studies I

INTRANSITIVE VERBAL PREFIXES
Imperative or Mood of Volition

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vowel</td>
<td>Consonant</td>
<td>Root</td>
</tr>
<tr>
<td>1st person</td>
<td>quin-</td>
<td>qui-</td>
</tr>
<tr>
<td>2nd person</td>
<td>cat-</td>
<td>ca-</td>
</tr>
<tr>
<td>3rd person</td>
<td>t-</td>
<td>ti-</td>
</tr>
<tr>
<td></td>
<td>koj-</td>
<td>quix-</td>
</tr>
<tr>
<td></td>
<td>que-</td>
<td></td>
</tr>
</tbody>
</table>

Chart III

10. Illustrations of the usages of the prefixes given in paragraphs 8 and 9 follow. They may be used before any intransitive verb. For our illustrations we will take -oc to enter as an example of the intransitive verbs beginning with a vowel and -pe to come, as an example of those beginning with consonants:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>yin</td>
<td>xinoc</td>
</tr>
<tr>
<td>rat</td>
<td>xatoc</td>
</tr>
<tr>
<td>rija</td>
<td>xoc</td>
</tr>
<tr>
<td>roj</td>
<td>xojoc</td>
</tr>
<tr>
<td>rix</td>
<td>xixoc</td>
</tr>
<tr>
<td>rije</td>
<td>xehoc</td>
</tr>
<tr>
<td>yin</td>
<td>xipe</td>
</tr>
<tr>
<td>rat</td>
<td>xape</td>
</tr>
<tr>
<td>rija</td>
<td>xpe</td>
</tr>
<tr>
<td>roj</td>
<td>xojpe</td>
</tr>
<tr>
<td>rix</td>
<td>xixpe</td>
</tr>
<tr>
<td>rije</td>
<td>xepe</td>
</tr>
<tr>
<td></td>
<td>I entered</td>
</tr>
<tr>
<td></td>
<td>you entered</td>
</tr>
<tr>
<td></td>
<td>he, she, it entered</td>
</tr>
<tr>
<td></td>
<td>we entered</td>
</tr>
<tr>
<td></td>
<td>you entered</td>
</tr>
<tr>
<td></td>
<td>they entered</td>
</tr>
<tr>
<td>yin</td>
<td>xinoc</td>
</tr>
<tr>
<td>rat</td>
<td>catoc</td>
</tr>
<tr>
<td>rija</td>
<td>toc</td>
</tr>
</tbody>
</table>

yin quinoc I should enter (it is so willed)
rat catoc enter, or you should enter (it is so willed)

rija toc let him enter, he should enter (it is so willed)
Cakchiquel Grammar

roj kojoc or kujoc or kujoc let us enter, or we should enter
rix quixoc enter, go in, you should enter
rije quehoc let them enter, they should enter

These volitional forms should be used wherever there is an act of willingness expressed yet to be fulfilled. A few examples follow:

juan, catoc pa jay John, enter the house
nivajo cni quepe chuvak I wish for them to come tomorrow
acuchi xtisamaj ri juan? where shall John work?
tisamaj pa tinamit let him work in town

Since these first paragraphs are principally to acquaint the student with the prefixes used, we will not yet go thoroughly into the subject of tenses and moods.

11. The student has now learned all the primary prefixes for intransitive verbs, but there are two more derived sets. One is really an auxiliary verb but is written as a prefix because it is pronounced as a part of the main verb. -be is the verb root to go. It may be interposed between the regular intransitive prefixes (in any of the four sets we have studied) and the main verb as: gui be wer, written guibewer I am going to sleep or guibecarun I am going fishing. When the main verb begins in a vowel, the -be is interposed between the gui- and -n- of the first person singular prefix and between the ga- and -t- of the second person singular prefix, whereas in the third person singular di- is used instead of just the d- otherwise found before intransitive verbs beginning in a vowel, e.g.,
Mayan Studies I

yin guibenoc I am going to enter
rat gabetoc you are going to enter
fija dibehoc he is going to enter
roj gojbehoc we are going to enter
rix guixbehoc you (pl.) are going to enter
rije guobehoc they are going to enter

Verbs beginning with a consonant:

yin guibewer I am going to sleep
rat gabewer you are going to sleep
rija dibewer he is going to sleep
roj gojbeucer we are going to sleep
rix guixbeucer you (pl.) are going to sleep
rije guebercer they are going to sleep

By following the rule given above the student will be able to form the past and future tenses and volitional mood of this auxiliary form for himself and it should be used whenever the subject has to go elsewhere in order to fulfill the action of the verb or wherever the auxiliary verb "go" can be used in English.

The second derived prefix seems to have originally been an auxiliary verb also, but now all that remains is an -o- interposed between the prefix and the main verb. It shows that the subject came from somewhere else in order to perform the action of the verb. It therefore seems to be the remains of -oka to arrive which must formerly have been used as an auxiliary verb like -be. The -o- is joined directly to the main verb unless this begins in a vowel, in which case the -n- of first person and -t- of second person come after the -o- and before it are used the prefixes which go before the intransitive verbs beginning with vowels. Examples of one verb in the present tense will suffice to enable the student to form the other tenses.

20
Cakchiquel Grammar

yin guinosamaj I am come to work
rat gatosamaj you are come to work
rija dosamaj he, she, it is come to work
roj gojosamaj we are come to work
rix guixosamaj you are come to work
rije guetosamaj they are come to work

12. Before we can take up a study of the prefixes used with transitive verbs, it will be necessary to acquaint ourselves thoroughly with the possessive pronominal prefixes as they form a part in the composition of the transitive verbal prefixes. There are two sets, one for use before nouns beginning with vowels and the other for use before nouns beginning with consonants. They are written as part of the noun because they are so pronounced and are really a declension of the noun. They indicate the person and number of the possessor or recipient of the utility of the noun. The Possessive Pronominal Prefixes used with vowel-initial nouns are:

POSSESSIVE PRONOMINAL PREFIXES
Used With Vowel-Initial Nouns

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st person</td>
<td>v- my</td>
<td>k- our</td>
</tr>
<tr>
<td>2nd person</td>
<td>av- your</td>
<td>iv- your</td>
</tr>
<tr>
<td>3rd person</td>
<td>r- his, her, it</td>
<td>c-or qu- their</td>
</tr>
</tbody>
</table>

Chart IV

-achoch home is used to illustrate their function.

vachoch my house   kachoch our home
avachoch your home ivachoch your home
rachoch his home   cachoch their home

The Possessive Pronominal Prefixes used with consonant-initial nouns are:

21
Mayan Studies I

POSSESSIVE PRONOMINAL PREFIXES
Used With Consonant-Initial Nouns

<table>
<thead>
<tr>
<th>1st person</th>
<th>nu-</th>
<th>my</th>
<th>ka-</th>
<th>our</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd person</td>
<td>a-</td>
<td>your</td>
<td>i-</td>
<td>your</td>
</tr>
<tr>
<td>3rd person</td>
<td>ru-</td>
<td>his, her, its</td>
<td>qui-</td>
<td>their</td>
</tr>
</tbody>
</table>

Chart V

nu- and tata father are contracted to form nata my father.
ri and nu- and te mother are contracted to form rinte my mother.
ri and nu- and chec (chak'?) younger brother, sister are contracted to form rinchech my younger brother, sister.

-tinamit town illustrates the use of consonant initial possessive pronominal prefixes.

nutinamit my town katinamit our town
atinamit your town itinamit your town
rutilinamit his town quitinamit their town

It should be noted in passing that the plural prefixes given above do not indicate the plurality of the noun which they inflect but only that of the possessors. katinamit refers to one town which is the home or birthplace of all those included by the ka- our. To show the plurality of the inflected noun by the possessive pronominal prefixes there are two ways. If the noun be one like "home" or "town" of which the possessors can only have one apiece, the distributive plural indefinite article tak- is interposed between the prefix and the noun, if the latter begins in a consonant, and is separated from both by hyphens: ka-tak-tinamit our towns. If the noun begins with a vowel, the tak- is placed before the prefix and separated

22
from it as: ap tak kachoch in our homes. If the
inflected noun be one like -ach'alal brother or
-achbil companion of whom the possessors can
have several in common then the plurality of the
thing possessed is shown by bringing into use the
proper form of the verb "to be" as: ekachbil our
companions and ix kach'alal you brethren of
ours or (you) are our brethren.

13. It should be borne in mind that these pre-
fixes may at times indicate not actual possession
but only the recipient of the utility.

When asking for a drink of water one would
say: taya juba nuy give me a little water, not
indicating at all that the water did not belong to
the one solicited but merely that the water was to be
used by the asker. If he should ask for water not
for himself but for his children he would say: taya
juba quiya ri e valc'ual give my children some
water.

14. a. These possessive pronominal (p.p.)
prefixes are used before the participles of transi-
tive verbs both when the latter are used as nouns
and when they are used to form the perfect preterit
tense of verb. When the definite articles ri this
or that or re this modify it, then the participle
is substantive: ri nuk'alajin my testimony, that
which I have testified, ri nubin that which I
have said. Without the articles, the p.p. pre-
fixes form with their participles the perfect pre-
terit tense of the verb, as:

nutzeton e g'iy tinamit I have seen many
towns
vag'axan e utzilej ch'abel I have heard
beautiful words
Mayan Studies I

b. They are also used before the gerund form of the verb as:
    rija xpe chi katzetic he came to see us
    xipe chucolic I came to save him (chi + ru = chu)

15. These p.p. prefixes are used before certain words which are not ordinary nouns but which to the Cakchiquel must be like nouns. In this paragraph we will study the four such words which are used with the p.p. prefixes without the preposition chi which we will consider later in the paragraph. They are:
   a. -ichin which might be translated possession (though it is never used by itself) and from which are formed the genitive pronouns as follows:
       vichin mine, for me (lit. my possession)
       avichin yours, for you
       richin his, hers, its, for him, etc.
       kichin ours, for us
       ivichin yours, for you
       quichin theirs, for them
       jare vichin this is mine
       tabana jun chaquet quichin juan y pablo
       make a stool for John and Paul
       re ya re ivichin rix this water is
       yours, or for you

The third person singular, richin, is used like "para" in Spanish as: rija xpe richin disamaj he came to work.

b. -oma, which, though meaning nothing by itself might be translated behalf or account in the sense of on account of and from it are formed the following ablative pronouns:
Cakchiquel Grammar

voma  by or for me  koma  by or for us
avoma by or for you  ivoma by or for you
roma by or for him,  coma by or for them
e tc.

cristo xqyen voma yin Christ died for me
gojcoltej roma rija we are saved by him

The third person roma is also used for because as in the following sentence: ri achin xtzu ye
roma cosnek the man sat down because he was
tired.

c. -onojel though not used by itself might be
translated totality or entirety and from it are
formed the following inclusive pronouns:

ronojel  all or it all
konejel  we all (our totality)
ivonojel   you all
conojel they all

ninizmaj rig’in ronojel nug’ux I believe
with all my heart
konojel oj sachnek roma ri mac we are
all lost through sin

The third person singular form, ronojel, is used
before collective and certain inanimate nouns in-
stead of the third person plural, as: ronojel
vinek all people; ronojel ri ixim all of the corn

d. -ig’in is sort of a prepositional root
giving the idea of companionship or at times instru-
mentality. From it are formed the following set
of ablative pronouns:

vig’in  with me  kig’in  with us
avig’in with you  ivig’in with you
rig’in with him, etc. quig’in with them

25
xquibe avig'in I will go with you; xink'at ri trig'o rig'in jun machet I reaped (cut) the wheat with a machete; jesús xujunimaj-ri rig'in dios Jesus made himself equal to God; ri judios xech'on rig'in oyoval the Jews spoke with anger.

16. The p.p. prefixes are combined with the preposition chi to and the vowel -e which possibly here means person to form the dative pronouns:

chue (chi + ve) to me  chike (chi + ke) to us
chave (chi + ave) to you  chive (chi + ive) to you
chire (chi + ra) to him  chique (chi + que) to them

Taya chue give it to me; tabij chique tell them

-ij though not used alone might be translated back in the sense of in the rear. It with the p.p. prefixes and the preposition chi forms the following accusative pronouns:

chuvij (chi + vij) back of me, against me, about me, concerning me
chavij (chi + avij) back of you, etc.
chirij (chi + rij) back of him, etc.
chikij (chi + kij) back of us, etc.
chivij (chi + ivij) back of you, etc.
chiquij (chi + qui) back of them, etc.

Juan g'o chiquij ri achiha John is behind the man; manjun ditiquir chuvij yin he cannot do anything against me; ri e tzibatel-can ri chirij rija the Scriptures concerning Himself.

The preposition chi also is used with the p.p. prefixes before the noun vech face or the front of a person or thing to form the following (chi is written separately except when before a vowel):
Cakchiquel Grammar

chi nuvech  to my face or before me
chavech (chi + avech)  to your face or before you
chi kavech  to our faces or before us
chivech (chi + iвеч)  to your faces or before you
chi quivech  to their faces or before them

juan g'o chi kavech John is in front of us;
tabajij chuvech cruz nail him to the cross.
chi always combines with the p.p. prefixes
which begin with vowels. cabiyin chavech (chi +
avech) go to your home. It also combines with
the ru- of the third person singular to form chu
as in chug'ux to the heart and chuwa over its
surface and chuchi at the edge or mouth or
brink. Chi is also used with the substantive in-
finitive: guibe chutzetic rinte I am going to see
my mother.

17. We are now prepared to study the use of
the possessive pronominal prefixes after the yin,
at, -, oj, ix, e forms, after which we will
see how they combine in forming the prefixes for
transitive verbs. First, yin, at, etc. are used
before nouns declined by the p.p. prefixes asfol-
lows:

rix ix valg'ual you are my children (father
speaking)
rix ix val you are my children (mother speaking)
oj kachalal-ke we are brethren
pet y rover e nutzi Pet and Rover are my dogs

They are also used before past participles of
transitive verbs. Participle beginning with con-
sonant:

27
Mayan Studies I

at nucolon  I have saved you (lit. you are my saving)
oj acolon  you have saved us
ixrucolon  he has saved you (pl.)
riba kacolon  we have saved him
e icolon  you have saved them
yin quicolon  they have saved me
cristo yin rucolon  Christ has saved me.

Participle beginning with vowel:
yin royon  he has called me (I am his calling)
at royon  he has called you
oj royon  he has called us
ox royon  he has called you
e royon  he has called them
ix royon  riching xquixoc raig'ual  he has called you to be his sons

The verb -oc is used in the sense of come to be something that you weren't before.

18. From these last forms it will be easy to see how the transitive verbal prefixes are formed. To the Cakchiquel the transitive verb represents an action whose owner is the subject and he treats it therefore as a substantive, declining it with the possessive pronominal prefixes according to the number and person of the subject or owner of the action. The object is thought of as being in the condition or state brought about by the subject, and so to the transitive verb preceded by the proper pronominal prefix is prefixed the form of the verb "to be" which corresponds to the number and person of the object of the verb, and to this is prefixed the sign of the present, past, future, or volitional mood. Let us take for example the
transitive verb **-col** to save. Let us go through the procedure step by step to form the sentence "Christ saves us." The verb is **-col**. The subject or possessor of the action is Christ, so we use the third person singular possessive pronominal prefix. Since the verb **-col** begins with a consonant this will be **ru-**. We prefix it to **-col** and get **rucol** (which is not used alone). The object of the verb or the ones who are entering into the state or condition expressed by the verb as now modified are "us"; "We are being saved by Christ." (i.e. "we are his saving.") Let us prefix the **oj we are**, then, to the **rucol** and we get **ojrucol** (which also does not occur alone). The action of the verb is in present time and the sign of the present is **g-** for all except the third person singular which is **d-**. **oj** is first person plural so that we use **g-** and prefix to **ojrucol** getting **gojrucol** he saves us. The past tense becomes **xojrucol** he saved us, the sign of the past tense being **x-**. The future would be **xcojrucol** he will save us, **xc-** or **xqu-** being the sign of the future (except in the third person singular where it is **xti-**).

A simpler rule for forming the transitive verbal prefixes is to first write the intransitive verbal prefix corresponding to the number and person of the object of the verb and its tense and mood. This is followed by the possessive pronominal prefix corresponding to the person and number of the subject. Then write the verb itself. Let us write "bring (2nd per. sing.) the horses" according to this rule. The mood is volitional or imperative. The object of the verb, "the horses," is third person plural. The third person plural imperative prefix is **que-** (paragraph 10). The subject is
"you" (2nd sing.). The second person singular possessive pronominal prefix is a- when preceding a consonant. We therefore write a after que, separating it from the preceding vowel with a silent h which gives us queha. Then we write the verb which is g'ama-pe (bring). Thus our complete verb is quehag'ama-pe. Then we write ri quiej the horses which gives us the sentence, quehag'ama-pe ri quiej bring the horses (or mules).

We see that the verb we have formed is really transitive, for it includes both its subject and its object, but for convenience' sake we will call these compound prefixes transitive verbal prefixes. Since these prefixes have to correspond both to the person and number of both subject and object and also to the tense and mood of the verb, there are very many forms. They are all formed exactly according to our rule except that when the subject is in the first person singular, in- is written instead of nu- before verbs beginning with a consonant and in- is interposed between the intransitive verbal prefix and v- (possessive pronominal prefix corresponding to words beginning with vowel when possessor is first person singular) when the verb begins with a vowel, as:

\begin{verbatim}
xatimcol I saved you (instead of xanuco1)
gatimvajo I love you (instead of gatimva1o)
\end{verbatim}

There are also two important though slight variations in the formation of the transitive verbal prefixes. When the object is the third person singular, intransitive prefixes d- and di- are not used according to whether the verb begins with a consonant or a vowel but according to whether the p.p. prefix does. When the subject is first person singular
Cakchiquel Grammar

singular the intransitive prefix d- and nu- becomes ni- or nim-. In the latter case the d- at the beginning of a word in Cakchiquel always has a rather nasal character. There are other changes by elision, notably when the object is third person singular and the subject the same, dru- is contracted to du-, but since the student will probably memorize all the transitive prefixes we will tabulate them making note of all elisions. We will give only the present and future tense forms. The student will be able to form the others by changing the sign of the present g- and d- to x- for the past, and to qu- and t- for the volitional or remembering to use the proper intransitive prefix according to our second rule. The Transitive Verbal Prefixes (Vowel-initial verb stem; present tense) are:
Mayan Studies I

TRANSITIVE VERBAL PREFIXES
(Vowel initial verb stem - present tense)

Object being first person singular

Singular
Subj., 1st per. 
2nd per. guinavajo you love me
3rd per. guirajo he loves me

Plural
Subj., 1st per. 
2nd per. guinivajo you love me
3rd per. guicaio they love me

Object being second person singular

Singular
Subj., 1st per. gatinvajo I love you
2nd per.
3rd per. gatrajo he loves you

Plural
Subj., 1st per. gatkajo we love you
2nd per.
3rd per. gatcajo they love you

Object being third person singular

Singular
Subj., 1st per. nivajo I love him, etc.
2nd per. davajo you love him
3rd per. drajo he loves him

Plural
Subj., 1st per. dikajo we love him, etc.
2nd per. divajo you love him
3rd per. dicajo they love him

Object being first person plural

Singular
Subj., 1st per. 
2nd per. gojavajo you love us
3rd per. gojrajo he loves us

32
Cakchiquel Grammar

**Plural**
Subj., 1st per.  
2nd per.  gojivajo  **you love us**  
3rd per.  gojcajo  **they love us**

Object **being second person plural**

**Singular**
Subj., 1st per.  guixinvajo  **I love you**
2nd per.  
3rd per.  guixrajo  **he loves you**

**Plural**
Subj., 1st per.  guixkajo  **we love you**
2nd per.  
3rd per.  guixcajo  **they love you**

Object **being third person plural**

**Singular**
Subj., 1st per.  guenvajo  **I love them**
2nd per.  guehavajo  **you love them**
3rd per.  guerajo  **he loves them**

**Plural**
Subj., 1st per.  guekajo  **we love them**
2nd per.  guehivajo  **you love them**
3rd per.  guecaajo  **they love them**

Chart VI
Mayan Studies I

We will also give an example of a verb beginning with a consonant, putting it in the future tense in order to better accustom the student. The Transitive Verbal Prefixes (Consonant-initial verb stem; future tense) are:

**TRANSITIVE VERBAL PREFIXES**
(Consonant initial verb stem - future tense)

<table>
<thead>
<tr>
<th><strong>Object being first person singular</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Singular</strong></td>
</tr>
<tr>
<td>Subj., 1st per.</td>
</tr>
<tr>
<td>2nd per. xquinatzet <strong>you shall see me</strong></td>
</tr>
<tr>
<td>3rd per. xquinrutzet <strong>you will see me</strong></td>
</tr>
<tr>
<td><strong>Plural</strong></td>
</tr>
<tr>
<td>Subj., 1st per.</td>
</tr>
<tr>
<td>2nd per. xquinitzet <strong>you shall see me</strong></td>
</tr>
<tr>
<td>3rd per. xquinquitzet <strong>they will see me</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Object being second person singular</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Singular</strong></td>
</tr>
<tr>
<td>Subj., 1st per. xcantzet <strong>I shall see you</strong></td>
</tr>
<tr>
<td>2nd per.</td>
</tr>
<tr>
<td>3rd per. xcarutzet <strong>he will see you</strong></td>
</tr>
<tr>
<td><strong>Plural</strong></td>
</tr>
<tr>
<td>Subj., 1st per. xcantkatzet <strong>we shall see you</strong></td>
</tr>
<tr>
<td>2nd per.</td>
</tr>
<tr>
<td>3rd per. xcatquitzet <strong>they will see you</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Object being third person singular</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Singular</strong></td>
</tr>
<tr>
<td>Subj., 1st per. xtintzet <strong>I shall see him</strong></td>
</tr>
<tr>
<td>2nd per. xtatzet <strong>you will see him</strong></td>
</tr>
<tr>
<td>3rd per. xtutzet <strong>he will see him</strong></td>
</tr>
<tr>
<td><strong>Plural</strong></td>
</tr>
<tr>
<td>Subj., 1st per. xtikatzet <strong>we shall see him</strong></td>
</tr>
<tr>
<td>2nd per. xtitzetz <strong>you will see him</strong></td>
</tr>
<tr>
<td>3rd per. xtiquitzet <strong>they will see him</strong></td>
</tr>
</tbody>
</table>
Cakchiquel Grammar

Object being first person plural

<table>
<thead>
<tr>
<th></th>
<th>2nd per.</th>
<th>3rd per.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singular</td>
<td>xcojatzet</td>
<td>xcojrutzet</td>
</tr>
<tr>
<td>you will see us</td>
<td>he will see us</td>
<td></td>
</tr>
<tr>
<td>Plural</td>
<td>xcojitzet</td>
<td>xcojqquitzet</td>
</tr>
<tr>
<td>you will see us</td>
<td>they will see us</td>
<td></td>
</tr>
</tbody>
</table>

Object being second person plural

<table>
<thead>
<tr>
<th></th>
<th>2nd per.</th>
<th>3rd per.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singular</td>
<td>xquixintzet</td>
<td>xquixrutzet</td>
</tr>
<tr>
<td>I shall see you</td>
<td>he will see you</td>
<td></td>
</tr>
<tr>
<td>Plural</td>
<td>xquixkatzet</td>
<td>xquixquitzet</td>
</tr>
<tr>
<td>we shall see you</td>
<td>they will see you</td>
<td></td>
</tr>
</tbody>
</table>

Object being third person plural

<table>
<thead>
<tr>
<th></th>
<th>2nd per.</th>
<th>3rd per.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singular</td>
<td>xquentzet</td>
<td>xquehatzet</td>
</tr>
<tr>
<td>I shall see them</td>
<td>you will see them</td>
<td></td>
</tr>
<tr>
<td>xquerutzet</td>
<td>he will see them</td>
<td></td>
</tr>
<tr>
<td>Plural</td>
<td>xquekatzet</td>
<td>xquehibitze</td>
</tr>
<tr>
<td>we shall see them</td>
<td>you will see them</td>
<td></td>
</tr>
<tr>
<td>xquequitzet</td>
<td>they will see them</td>
<td></td>
</tr>
</tbody>
</table>

Chart VII

The prefixes used when the object is in the third person singular are the most common and should all be thoroughly memorized.
Mayan Studies I

19. The auxiliary verb -be, to go, may be used with all the foregoing prefixes to give the same idea as it gives to intransitive verbs. It is inserted between two pronoun prefixes as:

xqueberutijoj he will go to teach them
xberug'ulu she went to meet him
diberusacha he is going to lose it

This last example does not hold for Comalapa, for when the object is third person singular the b- is not used. Thus instead of diberusacha as is said in most towns, in Comalapa we have derusacha. The Comalapa forms using the Auxiliary Prefixes for transitive verbs beginning with a consonant are:

<table>
<thead>
<tr>
<th>Object being in third person singular</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Singular</strong></td>
</tr>
<tr>
<td>Subj., 1st per.</td>
</tr>
<tr>
<td>2nd per.</td>
</tr>
<tr>
<td>3rd per.</td>
</tr>
<tr>
<td><strong>Plural</strong></td>
</tr>
<tr>
<td>Subj., 1st per.</td>
</tr>
<tr>
<td>2nd per.</td>
</tr>
<tr>
<td>3rd per.</td>
</tr>
</tbody>
</table>

This holds true for all save the past tense where the full -be is used. Likewise the -o- auxiliary is used as with intransitive verbs (paragraph 11). For example, we will take the verb -col to save, and give the forms for the present tense:
Cakchiquel Grammar

Singular

Subj., 1st per. noncolο I am come to save it
2nd per. dohacolo you are come to save it
3rd per. dorucolo he is come to save it

Plural

Subj., 1st per. docacolo we are come to save it
2nd per. dohicolo you are come to save it
3rd per. doquicolo they are come to save it

20. It will be noticed in paragraph 18 that no forms are given for the reflexive transitive verbs. These are treated throughout as though the object were singular third person and so these prefixes are used, followed by the reflexive pronouns which consist of -i with the possessive pronominal prefixes for vowel-initial nouns:

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>-vi myself</td>
<td>-ki ourselves</td>
</tr>
<tr>
<td>-avi yourself</td>
<td>-ivi yourselves</td>
</tr>
<tr>
<td>-ri himself</td>
<td>-qui themselves</td>
</tr>
</tbody>
</table>

The reflexive verbs, then, are formed as follows:

Singular

nicol-vi I save myself
dacol-avi you save yourself
ducol-ri he saves himself

Plural

dikacol-ki we save ourselves
dicol-ivi you save yourselves
diquicol-qui they save themselves

The reflexive pronouns are also used to form the reciprocal verb as:

diquiyui-qui they have dealings together
dikatijoj-ki we teach one another
diquiboj-qui they hit one another
Mayan Studies I

The verb -xibij to frighten with the reflexive comes to mean to be afraid:

nixibij-vi I am afraid
man xixibij-ta-ri he was not afraid

From the last example we learn the rule that the negative particle ta is always interposed between the verb and its reflexive. Nouns of mutual relationship in plural possessive take the reflexive:

oj kach'alal-ki we are brothers
  e cachbil-gu they are companions

The last nouns with the reflexive when they follow the preposition chi give the idea of each other or one another:

guesig'in chi cachbil-qui they called one to another
ivaken chi ivachbil-ivi one another's feet

Very similar to this last usage is that of chi kavech, chivech and chi quivech after verbs of speaking or conversing:

dijalala chivech converse one to another
diquibila chiquevech said one to another

21. Achok is an interrogative pronoun which is prefixed to che, oma, ichin and ig'in as follows:

¿achokche? to whom?
¿achokoma? by whom? or for what cause?
¿achokichin? whose?
¿achokvech? before whom? to whom?
¿achokig'in? with whom?

22. Xaba is a generalizing pronominal prefix which is used before chique, quichin:
Cakchiquel Grammar

xabachique to anybody
xabaquichin anybody's

23. The number jun one is prefixed to certain words, in which cases it loses its final -n. These words must be learned by memory. Some of them are:

jug'ulah (compound word formed from jun and g'ulaj) a pair; juketaj a bundle of grass or wood carried over shoulders; juperaj a half of a blouse or of a double ball of panela; jutas an upper room; jupach' a brood; jupug' a litter of pigs, etc.; jupaj a syllable; jutzobaj a drove, group; jucach a bite; juvi a plant; jutelaj an armful of wood; jutusaj a sown field; juk'et a sheaf, bundle of straw; juximaj a tied bundle; jurap a blow or lick (punishment); jumolaj a change of clothes; juram a log; juchacaj a thing on stilts; jumul eternity, once for all.

The numerals above one are not joined to these nouns:

dahari peraj two halves of a blouse; oxi g'ulaj three couples.

The distributive or generalizing article tak is inserted between ju and the noun it modifies to form the plural.

jutakg'an each side; jutakba various pieces (to be distributed); jutakperaj various heads of panela; jutakg'ulaj various couples.

24. The auxiliary raj nearly might be thought of as a prefix. It is used before a verb to show that the act was about to be effected but was not.

ri cajcoyal raj xg'okpitej ruvech the net was about to break
25. The particle aj when joined to certain words as a prefix denotes profession or condition. With names of places it denotes birthplace. It is like the suffix -er in English.

ajg'asi debtor; aj new york New Yorker; rajig' ri herodes Herod's servant; ajtijonel teacher
Cakchiquel Grammar

II
ROOT STEMS

Now that we have become acquainted with the many prefixes of the Cakchiquel language we will take up the study of the root stems. First of all we will study the conjunctions, definitive adjectives, prepositions and adverbs, for few of them are ever inflected either by prefixes or suffixes.

26. The Cakchiquel language has very few conjunctions. They seem to be almost unnecessary to the Cakchiquel economy. The following have been adopted from the Spanish and are in quite common use. They are used the same as in Spanish: y and, ni nor, pero but, (y is often used also in the sense of but). The following are the most common pure Cakchiquel conjunctions: stape notwithstanding, g'in and (used in counting), xa but (used when fact expressed in following clause is regretted), vi if, richin in order that, romare (ri) for this or that reason, g'a well then, chi that.

xg'ulvachitej chi e g'o chiri it happened that they were there.

27. The following are the most common definite adjectives:

jun one, a, an, cahi two, oxi three, etc.; nabey first, rucan second, rox third, etc.; ri the, (ri before and after a noun means that, as in ri achin ri that man), re this; (repeated after the noun, re ach re this man); jujun each one, caca two each, oxox three each, cajcaj four each, voholitak five each, vaquitak six each, etc.

41
Mayan Studies I

This last form of counting is used in quoting a price which applies generally to a number of things and also when something is being distributed in equal numbers to various recipients:

¿jarupe cajel ri sakmolo? *how much are the eggs worth?*
caca peso jujun two pesos *apiece*
tayavakxakitak turas jujun *give eight peaches to each one*
manjun no one (manjun achin dok' *no man cries*)
jun chic another, other
juba chic more
juba oc few
jani-la many
sibilej many
g'y much
tak the (in a plural and distributive sense)

28. Cakchiquel also has very few prepositions. Often one is dependent upon the context to know just what the preposition means. There are only two simple prepositions. They are:

a. pa to, from, at, etc., (before words beginning with a vowel it becomes pan).

g'o ixim pa tinamit there is corn at Tecpan
juan xbe pa xelahu John went to
pedro xpa pa boko Peter came from
xtzak pa ya fell into the water
xmuk pan ulef it was buried in the ground

b. chi to, of, into, at. This preposition always precedes the gerund in a purpose clause, as:
Cakchiquel Grammar

xquimol-qui chi rag’axanic they gathered to hear him

The word jujunal always takes chi and shows that the action is inclusive:

chi quiujunal xepe each one came

Certain words take chi after verbs of going to or coming from:

xixpe chi choy you (pl.) came from the lake
ej chi kachoch let us go home

After aj and before these same words it means of in the sense of pertaining to:

aj chi rachoah ri david he was of the house of David
rije aj chichoy they live by the lake (are of the lake)

It combines with la to form chila over there. It combines with other words to form other prepositions:

chuchi (chi quichi) at the edge of
chupan (chi quipan) among us, etc.
chi kacojol (chi icojol, chi quicojol) among us, etc.
chire to
(taya chire re juan give it to John)
chuvech before
chirij behind, about
(xubig chavij he said it about you)
chuva over

Before vowels chi loses the i and is joined to the word it modifies. Before ru both the i and the r are lost and the form chu results. It is a case of elision and not inflection of the pre-
Mayan Studies I

position chi which gives the real prepositional character to the compound words. The root stems -ig'in with and -oma by, have a prepositional significance but they are inflected with the possessive pronoun prefixes as explained in paragraph 15 sections b and d.

29. The following are the most common adverbs:
   a. Conjunctive adverbs: achejel as, tok when, jari-tok then, g'a till, g'asta (derived from Sp. hasta) until, acuchi where, roquic while.
   b. Interrogative adverbs: all interrogative sentences begin with an interrogative adverb, or achique which, or the particle la.

¿aroma xpe ri achin? Why did the man come?
¿achique vuj davajo? Which paper (book) do you want?
¿la guinavajo? Do you love me?

c. Of time: chanim soon, vacamin now, chicx already, jantape always thus far, junalic for all the time, jupalic once for all.
   ya before a verb and yan after signify that the action is to take place immediately. Only the latter should occur in an interrogation and the answer should be ya only if it is to be done immediately.

¿la dibe yan ri juan? is John going right away?

ya right away

d. Of place: chiri there, chila over wonder, ak'anej upward, nej far, nakaj near.

e. Of manner: utz well, jabel prettily,
Cakchiquel Grammar

quere this way, queri that way, junan together or equally, sekal slowly, chanim quickly, chuika also.

f. Of degree: yalan very, xa juba little, nig'aj half.

g. Modal: xu can it be (used in interrogation when one is puzzled about something):

xu man rat ta ri cristo if you are not the Christ

tsak xu jare ri cristo if perhaps this is the Christ

tsak perhaps; lehek perhaps (used after a verb to show it is of uncertain execution; ja yes; matixo thanks.

h. Negatives: mani no; nek none; manek there is none; xe only; ni neither, nor; g'ajani not yet (when the thing is going to actually take place in answering a question g'ajani is abbreviated to jani) majani not yet (when there is no certainty of occurrence).

30. The negative verbal particles man and ta are very important and should be studied carefully. Adverbs are compared like adjectives.

a. man is used before the volitional mood to denote a prohibition or negative purpose.

man catzuye-ka do not sit down
richin man quiachatej that I should not be delivered

b. A verb is made negative by putting man before it and ta after it:

man xpe ta he did not come

In Comalapa, manek is sometimes used before a verb to form a negation:
Mayan Studies I

ri manek stunimaj he that believeth not

When a clause is begun by ni nor, the verb of the clause is made negative without man and ta:

man gueticon ta ni guek aton they neither sow nor reap

c. In a condition contrary to fact ta is used after vi if and after the verb of the result (apodosis):

vi ta xa dinimaj moises, guininimaj ya yin had ye believed Moses, ye would have believed me

d. ta is sometimes placed after the verb of the condition (protasis) also:

vi ta g'o ta inimabel g'ux achihel jun runak' mestancia xtibij ta if ye had faith as a grain of mustard seed, ye might say...

e. man ta before a verb shows that the action might not have taken place although it did. It forms a negative potential:

¿kuben ta (supposition) chi man ta xquen? (negative potential) could he not have caused that he should not have died?

f. man loses its negative action on the verb when the volitional mood is used after the adverb g'a. It then shows that the action of the verb has not yet taken place but within the immediate future must come about. When the length of time is specified, even though a long time, it is considered immediate:

g'a g'o caji ig' man toka ri k'atoj there are yet four months till the harvest; g'a juba man
Cakchiquel Grammar

quig'ule within a little while I will marry, or I will marry soon.

g'ajani is used in the same sense:

tok g'ajani tisker before dawn

In this way an immediate future tense is formed, i.e., by using the volitional mood after either negative adverb man or g'ajani. Without the negative adverb and with an expression of time, an immediate past tense is formed:

vacamin ri rox k'ij tig'ul vachitej-vi re today is the third day since these things happened; g'a juba quig'ule I married just a little while ago; g'a juba ting'ul jun vuj a little while ago I received a letter.

31. Under the subject of prefixes we have already studied most of the pronouns except the following:

juley others; ch'aka the rest, others; manjun no one (not one); achique which; la that one.

32. In the whole Gospel of John there are used only about forty descriptive root adjectives. All the rest are derived from verbs or nouns according to rules we will learn later. Root adjectives are governed by rules of their own. They generally precede the nouns they modify but may also follow them:

rex-che oak tree(green); meba achin poor man; k'alaj ch'abel clear speech; jubul ruxla sweet smelling.

Some few adjectives preferably follow their nouns as for instance: k'atzen: ri g'aslen k'atzen Life Eternal.
Mayan Studies I

When just preceding the noun, most root adjectives take the suffix -ilej as in ri utzilej achin the good man, but in cases like the following -ilej is omitted:

at utz juan you are good, John

A few other examples follow: chakij dry, chakijilej dry; ch'am sour, ch'amilej sour; choj straight, chojilej straight; cof strong, covilej strong; rij old, rijilej old; tzil dirty, tzililej dirty.

nim may become either nima or nimalej big, before the noun. nima has a plural form nimak when used before a noun as does also chutin small, chutik (pl.). This last loses its final n before the noun: chuti ala small boy.

Ordinarily in forming the plural, the adjective undergoes no change but tak is placed between the adjective and the noun: k'alaj tak tzij clear words, rijilej tak achihua old men.

With the incomplete verb to be yin, at, oj, etc. the adjectives should follow: yin rij I am old, at utz you are good, ix nim you are big, e chutin they are small, rija itzel he is bad, oj chajchoj we are clean.

We have already learned that the third person singular of this verb ja is seldom used so that when the noun is in the third person singular the adjective in its root form comes first followed by ri and then the noun:

utz ri juan John is good
latz ri bey the road is narrow
g'ayef re samaj re this work (task) is
difficult

The comparative is formed by using chuvech ri or que chuvech ri (que adopted from Spanish)
Cakchiquel Grammar

after the adjective. yalan is used before the adjective to make a strong comparison. mas, borrowed from Spanish, is sometimes used before the adjective.

juan yalan nim que chuvech ri pedro John is bigger than Peter; juan mas nim (or juan nim) que chuvech ri pedro John is bigger than Peter.

To form the superlative, yalan is used alone before the adjective:

yalan utz rinte my mother is very good

Sometimes the adjective is merely repeated:

tzil, tzil ri tziek the cloth is very dirty
e utx, utx ri achin ri that man is very good

Adjectives are not inflected for gender.

33. About one hundred root nouns are used in the Gospel of John. Other nouns are derived either from root nouns, adjectives or verbs as we will learn later under the study of suffixes.

a. There are a few compound nouns. Of these there are three classes. The first we have studied already under the subject of prefixes. These are formed by prefixing aj- to a noun as: aj + pop mats, ajpop a maker of mats; aj + ig' month, ajig' servant, one who works by the month. These compound nouns denoting profession may be inflected by the possessive pronoun prefixes as: vajig' my servant, avajig' your servant, rajig' his servant, etc.

The second class are very few in number: kitzij truth, it is formed of ki sweet and tzij word; ruvachulef earth; pa on and vi head,
Mayan Studies I

nupavi my hat.

The third class are personal and take two possessive pronoun prefixes as a general rule; runak-nuvech my eyes. If this were written as two words (contrary to the way it is pronounced) it would mean, the grains or seeds (nak) of my face (vech). These words are declined as follows:

runak-nuvech my eyes runak-kavech our eyes
runak-avech your eyes runak-evech your eyes
runak-ruvech his eyes runak-quivech their eyes
k'atoy-tzij ruler
runimabel-nug'ux my faith (obedience)

These nouns take a hyphen.

b. Root nouns may be inflected by the possessive pronoun prefixes and some take suffixes to show plurality. The first class of compound nouns may take the same suffixes as the root nouns to show plurality. The suffixes are: -a and -i. Examples with -a: achin man, achiha men (final n is often dropped or changed to m); algual child, alguala children; ajaf lord or boss, ajava lords or bosses (final f becomes v before a suffix); ajig' servant, ajig'a servants (compound noun): Examples with -i: ixok woman, ixoki women; meba orphan, mebahi orphans; yava sick person, yavahi sick persons; ajmac sinner, ajmaqui sinners (compound noun).

c. Nouns that are not inflected to show plurality may show it as explained in paragraph 12. Otherwise it is shown by the number of the verb it modifies or by the number of the following modifying words: -ichin, -onojel, -oma, -ig'in, -e (chire, etc.), -vech, -va (ruva, etc.), -cojel, -nig'ajal.

ri vaquix xquitej ri aven the cows (cattle) ate
Cakchiquel Grammar

up the corn field
In this sentence the number of vaquix is revealed by the verbal prefix xqui- (xquitej).

jare ixim re quichin ri quiej this corn is for the horses
In this sentence the number of quiej horses is revealed by the prefix of -ichin which is a third person plural possessive pronoun prefix. (15. a.)

nivajo conojel ri ak I want all the pigs (nivajo instead of quenvajo); xtej ri ixim coma ri quiej the corn was eaten by the horses; xquisoc quig' in quich'ich' they struck with their knives; xquija chique quitata they gave to their fathers, etc.

Specified numbers and collective nouns are considered singular.

d. A noun is never inflected to show person. This is shown by the same verbal, possessive pronoun, and prepositional prefixes as reveal number.

e. Like adjectives and pronouns, nouns are never inflected to show gender although in some few cases the words ixok woman or achin man are used as: ri ixok nima k'atoy-tzij the queen. Certain nouns showing relationship do have a rare form of gender. By the use of different words is shown the gender of the one who is expressing his or her relationship or of the one to whom such relationship is being attributed. Some of these words also reveal the gender of the noun itself. A father speaking of his child would say: ri valg'ual my child while the mother, referring to the same child would say val my child. Neither valg'ual nor val shows whether the child is a
boy or a girl. A third party referring to the same child would say: ri ralg'ual ri juan John's child or ri ral ri maria Mary's child. The mother speaking to the father might say: avalg'ual your child but never aval and vice versa. A man referring to his sister would say vana but he would never use that word in referring to his brother. Thus -ana shows both the gender of the party referred to (sister) and also of the party of the relationship (masculine). We will say then that the gender of nouns like -alg'ual and -al is 'reactive' while that of nouns like -ana is both 'reactive' and 'real'. Both sets should be carefully learned. Nouns reactive in gender are:

**Nouns Reactive in Gender**

<table>
<thead>
<tr>
<th>Masculine (in reaction)</th>
<th>Feminine (in reaction)</th>
</tr>
</thead>
<tbody>
<tr>
<td>g'ajol or -alg'ual</td>
<td>child</td>
</tr>
<tr>
<td>-mam</td>
<td>grandchild</td>
</tr>
</tbody>
</table>

**Chart VIII**

Nouns both reactive and real in gender are:

**Nouns Both Reactive and Real in Gender**

<table>
<thead>
<tr>
<th>Masculine (in reaction)</th>
<th>Feminine (in reaction)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-g'ajol</td>
<td>son</td>
</tr>
<tr>
<td>-mial</td>
<td>daughter</td>
</tr>
<tr>
<td>-ana</td>
<td>sister</td>
</tr>
<tr>
<td>-ixjayil</td>
<td>spouse (wife)</td>
</tr>
<tr>
<td>-jina</td>
<td>father-in-law</td>
</tr>
<tr>
<td>-jite</td>
<td>mother-in-law</td>
</tr>
<tr>
<td>-baluc</td>
<td>brother-in-law</td>
</tr>
<tr>
<td>-vixnam</td>
<td>sister-in-law</td>
</tr>
</tbody>
</table>
Cakchiquel Grammar

-yaj g'ajol son by former yoj al
marriage
chatz cousin (male) yoj ixok al
najti najtixibal
najti nimal

Chart IX

A man calls his elder brother nunimal and younger rincheq. A woman uses the same terms for elder or younger sister.

34. About half of the some 335 root stems (in their different inflections) found in the Gospel of John are verbs. If one can master the verbs, he has mastered Cakchiquel. There are three principal divisions of root verbs. We will classify them and all their derived forms in three conjugations.

a. The first conjugation consists of verbs whose root stems are primarily transitive. We will take five examples: -ben to make, -tej to eat, -tzet to see, -canuj to hunt for, -bij to say. These stems are all transitive and so take the transitive verbal prefixes which we have already learned. With these prefixes without any inflection to the root, it is possible to form the present, past and future tenses of the indicative mood. The same can be said of most transitive roots as regards the volitional mood and the present, past, and future tenses of the "going" and "arriving" forms (paragraph 19), but most one-syllable roots undergo a slight change in these forms. When the root vowel is u the same vowel is added to the root in forming the volitional mood and "going" and "arriving" forms, so that a two-syllable word is formed. If the root vowel is i or o then o is added. When the root vowel is
any other than i, o or u, a is added to form a second syllable.

o is added:

nicol  I save, but tinocolo let me save or that I may save,
nencolo  I am going to save, noncolo I am come and saving;
nibox  I fan, but tinoboxo let me fan,
nenboxo  I am going to fan, nonboxo I am come to fan;
nitzis  I sew, but tintziso let me sew or that I may sew,
nentziso  I am going to sew, nontziso I am come to sew.

u is added:

nig'ul  I receive, but ting'ulu let me receive or that I may receive,
neng'ulu  I am going to receive, nong'ulu I am come to receive;
nibus  I fold, but tinbusu let me fold or that I may fold,
nenbusu  I am going to fold, nonbusu I am come to fold.

a is added:

niben  I make, but tinbana that I may make or let me make,
nembana  I am going to make, nonbana I am come to make;
nijak  I open, but tinjaka let me open or that I may open,
nenjaka  I am going to open, nonjake I am come to open.

The added vowel is retained when other suffixes are added so that it becomes almost part of
Cakchiquel Grammar

the stem. In the case of the added a, it is changed to o for the addition of suffixes.

- ben, - bana, banon, etc.
- jak, - jaka, jakon, etc.

It will be noticed that - ben changes its vowel to a when the stress is removed by the addition of the second syllable. This occurs with all of the verbs of the class under consideration that have e as the root vowel.

- ch' er separate, - ch' ara, - ch' aron.
- ch' ec gain, - ch' aca, - ch' acon.
- k' ej break, - k' aja, - k' ajon.

One-syllable transitive verbs that end in a vowel do not belong to the above class. These roots are not changed for the volitional mood and the "going" and "arriving" forms but before the regular verbal suffixes are added, another vowel is added to form a second syllable. If the root vowel is u another u is added; otherwise o is added.

- su clean, suhu(n)
- tzuhun look, tzuhu(n)
- to (help), tohon
- cha choose, chahon

Sometimes the a of the stem is changed to o as in the case of - ya give, put, yo ho(n). The final j of a transitive root verb is lost before almost all suffixes.

- bij tell, - bi(n), bi(x), bi(tej), 1 bi(la), etc.
- canuj hunt for, canu(n), - canu(x), canu(tej), etc.
Some transitive verb roots change the root vowel and so form the "weak" passive voice without the addition of a suffix.

- niben  I make  guiban  I am made
- nitij  I eat  ditej  It is eaten

Others become passive by merely the use of the intransitive-passive prefixes.

- niya  I give  guiya  I am given
- nich'er  I separate  guich'er  I am separated

Some few become neuter by the change of vowel in the root.

- nitzolij  I return (something)
- guitzolej  I return (intransitive)

b. The second conjugation consists of all intransitive verb roots, except those ending in e, plus the intransitive verbs derived from adjectives. Few of these change their root forms.

- -anumej  flee changes to  -anumaj before suffixes.
- -k'axon  hurt changes to  -k'axomir before suffixes.
- -pe  come changes to  -pet before suffixes.
- -quen  die changes to  -cam before suffixes
- -k'axon and -quen, final n changes to m, before a suffix.

Others add ir before certain suffixes, as, for instance:

- -g'achoj  arrange,  -g'achojir(isaj)
- -jik'  choke,  -jik'ir(inek)
- -noj  become full,  -nojir(isaj)
- -ok'  cry,  -ok'ir(isaj)
Those ending in a vowel add *v* to the stem before the suffixes. Final *a* changes to *o*.

- cha be said, -chov(inek)
- ig' o pass through, -ig'ov(inek)
- oka arrive, -okav(inek)
- tujtu have compassion, -tujtuv(inek)

Sometimes final *n* changes to *v*:

- uxl an to rest, -uxlav(inek)
- atin to bathe, -ativ(inek)

c. The third conjugation consists of all intransitive verbs whose roots end in *e*. Practically all are two-syllable roots. The first syllable never changes. Various modifications may take place in the second syllable when suffixes are added.

(1) When the first syllable vowel is *a* and separated from the final *e* by *h*, the *e* is lost before the activating suffixes.

- pahe to stand, -pa(ba) to cause to stand
- nahe to get ready, -na(ba) to make something ready

(2) When the first syllable vowel is *a* and is followed by a strong consonant the final *e* is changed to *a* before the activating suffixes.

- rak' e to recline, -rak'a(ba) to cause to lie down
- tane to cease, -tana(ba) to cause to cease
- ch'an e to unclothe oneself, -ch'ana(ba) to cause to undress
Mayan Studies I

(3) When the first syllable vowel is e the final e is retained before suffixes.

-tzeke to follow, -tzeke(ba) to cause to follow
-meke to warm oneself, -meke(ba) to cause to warm

(4) Generally when the first syllable vowel is u, and sometimes when it is o the final e is changed to u before most suffixes.

-tzobe to pile up, -tzubu(ba) to cause to pile up
-tzuhe to mold, mildew, -tzuhu(ba) to cause to mold
-tzuye to sit down, -tzuyu(ba) to cause to be seated

(5) When the first syllable vowel is o the final e sometimes changes to o.

-jote to ascend, -joto(ba) to cause to ascend

(6) In certain irregular verbs of this conjugation that form the participle in n instead of l, the final e of the root changes to a.

-xule to go down, -xula(n) going down
-tzale to recline, -tzala(n) reclining

(7) Two verbs (there may be others like them) of this conjugation are rather irregular. In the first place they take an l before the final e and this is either preserved or changed to i when suffixes are added. The greatest irregularity, however, is that their present participles are abbreviated forms of the root stem, and are used very extensively. In the following forms of these verbs: -g'ase to live and -g'oje to abide in g'asle(en) life and gojli(bel) place where some-
thing is or abides, we see illustrations of the first irregularity; an l placed before the final e of the root. The present participles are: g'as living, alive or awake, and g'o abiding. Sometimes g'aslic is used. This last g'o has a wide and varied usage.

(a) In the first place it is used after the five forms of the verb 'to be' as other present participles, but in this usage, it can only rarely be translated 'abiding'.

¿la ix g'o pa tinamit vacamin? are you living in town now?

It is more exactly translated by the Spanish verb estar to be (somewhere).

yin g'o vaye I am here
¿at g'o pa jay? are you in the house?
juan g'o pa tinamit John is in town, etc.

(b) Used without the verb to be it is like the Spanish verb hay there is.

¿la g'o tihij vacamin? is there meat today?

An affirmative answer would be: g'o there is. In this usage, the negative of g'o is manek there is none.

(c) g'o also takes the place of the verb to have.

g'o jun nuvaquix I have a cow (bull or steer)
      jun achin e g'o cahi rugajol a man had (or has) two sons

g'o chi before a verb shows necessity like must or hay que.

g'o chi nichabalij I must preach
Mayan Studies I

(d) g'o has no past or future forms. In the four usages just explained, the tense is determined from the context.

35. Seven verb roots of the first and second conjugations are used as auxiliaries to verbs in an adverbial sense. They follow the verb they assist and are united to it by hyphens.

a. -na to feel, form an opinion when used as an auxiliary shows that, in the opinion of the speaker or as an obvious necessity, the action of the verb must come to pass. It is often used after verbs preceded by g'o chi must.

\begin{align*}
g'o\ &\text{chi diquen-na he must (should) die} \\
\text{chin chi ditaker-na ri rubin jesus that the} \\
\text{\underline{saying of Jesus might be fulfilled}}
\end{align*}

It is sometimes used with other words than verbs.

ja-na-ri yes, of course

b. -can is an abbreviation of -canej to stay, to lag behind. When used after a verb or participle it shows that the action of the verb remains complete at a certain time.

\begin{align*}
\underline{ri} \ &\text{quibin-can that they have spoken} \\
\underline{ri} \ &\text{tzbatej-can that which was left written} \\
\text{man xquitzet-ta-can they did not see him}
\end{align*}

(The action of the verb is limited to a certain time: They later saw him:)

\begin{align*}
-g'oje-can to remain \\
\underline{man} \ &\text{xquig'oje-can vave I will not remain here} \\
-ya-can to leave (ya put, -ya-can to leave put) \\
\underline{taya-can ri quiej pa juyu leave the horse in} \\
\text{the field}
\end{align*}
can-richin-vi his custom (richin is third person singular; -ichin must show by its prefix the person and number of the possessor of the noun).

can-ja-vi yes, exactly, refers to a consummated fact while jan-na-ri refers to one yet to be consummated.

can-kitzij-na-vi of a certainty
chuxe-can before

c. -apo is an abbreviation of -apon to reach, to arrive. It is used after a verb or adverb to visualize the distance traversed in carrying out the action or in pointing out something.

xuben-apo retal he made signs
xquichop-apo ri jesus they took Jesus
tatzeta-apo look yonder
chiri-apo over yonder (used in pointing)

d. -el to go out is used after a verb to show that the action is away from the speaker. It corresponds to our adverbs 'away' and 'out'.

catel-el vave get out from here
xbe-el he went away
xquig'ua'el ri they look away
rucan-el k'ij following day

e. -pe to come when used after a verb shows that the action is toward the speaker or toward the scene being described.

xka-pe he travelled or came down (toward us)
catoc-pe come in (the speaker is inside already)
xehel-pe chug'ulic they went to meet him

(movement was toward the scene of action)
Mayan Studies I

f. -oc to enter when used after a verb shows that the action is into something.
   catoc-oc go in (the speaker is on the outside)
   xutzet-oc he looked into

g. -ka to descend when used after a verb shows that the action is downwards; it corresponds to our adverb down.
   catzuye-ka sit down
   xbe-ka he went down

There is also an adverbial or auxiliary particle vi which is used a great deal after verbs and is united to them with a hyphen. It may be of verbal origin. It shows that the action of the verb extends continuously over a certain length of time or may occur at any time.
   xtijote-vi may climb up (at any time)
   dujek-vi opens (at any time)
   chupan ri imac xquixquen-vi ye will die in your sins (at any time)
   mukun-vi was buried
   xquitej-vi they ate (an extended act)

-vi is often used after the verb in answering questions regarding place or temporary conditions.
   ¿la g'0 ri juan? g'0 -vi Is John here? He is.

This particle should not be confounded with the first person singular reflexive pronoun. When -vi is used after other words than verbs, it still shows that the truth expressed extends through time or is general. chi is an abbreviation of the adverb chic. When with other particles or aux-
Cakchiquel Grammar

iliaries it follows the verb, it gives the idea of 
already or again.

xa quipachk'omin-chi-ta-qui they would have 
already repented
xel-chi-pe-jujbey he went out again

Used before the third person plural reflexive pro-
noun it retains the final c of chic.

quixucun-chic-qui had bowed down (already)

The adverb g'a is used in the same sense
as Spanish pues or English well and is often min-
gled with the adverbial auxiliaries and particles.

xel-chi-g'a-el he went forth, then, again
tok xig'ojele vi g'a ivig'in when I was with you

In English we have no way of expressing the
thought contained in g'a in the above sentence.
It shows that the trend of speech is argumentative.
g'a is used a great deal in this or a consecutive
sense.

The adverb lehek shows that the action of
the verb is of uncertain fulfillment.

dipe lehk he may be coming

Summary of Auxiliary

Particles:

Showing direction:

-pe, action toward speaker
-el, action out, away from speaker
-apo, visualizes action, points
-oc, action inward
-ka, action downward
Mayan Studies I

Showing manner or time of action:
-\textit{can}, \underline{remains complete at certain time}
-\textit{vi}, \underline{extended or generalized act and location}
-\textit{chi}, (chic), \underline{already completed}
-\textit{na}, \underline{must come to pass}
-\textit{lehek}, \underline{uncertainty, perhaps}
-\textit{g'a}, \underline{argumentative or consequential thought}

Chart X
Cakchiquel Grammar

III
SUFFIXES

Most root words may be inflected by suffixes. An adjective may become a noun or a verb; a noun may become an adjective or a verb; and a verb may become an adjective, or noun, or take on a different nature by the addition of suffixes. Sometimes a new word is formed which seems to have little connection with the root word but which by Cakchiquel logic can be shown to be developed from the root thought.

36. An adjective may become a noun occurring after the definite article: sak white, ri sak light; ri utz that which is good; ri g'ag'a the new one.

The suffixes -il, -el and -al also convert the adjective into a noun. Some adjectives take one of these and some the other and then again some few may take more than one with variant meanings resulting, as for instance: nig'ajil the half part, nig'ajal the midst, utzil favor, kindness, mebahil poverty, beyon rich, beyomeil wealth, g'iylal abundance, the many, rug'iylal vinek the common people, nimal elder brother.

Most adjectives become verbs by the addition of -ir or -er. Some few take -ubir, -ober, -bir and -mir. The resultant verbs are intransitive and belong to the second conjugation. They are subject then to the further terminal inflections which belong to the second conjugation.

65
Mayan Studies I

Examples with -ir:
- g'ayevir to become difficult (the final f becomes v before a suffix vowel)
- ch'amir to sour
- g'ag'ahir to become new
- itzelir to become bad

Examples with -er:
- chutiner to become small
- latzer to become narrow
- nimer to become large or great
- lihaner to become level

Examples with -ubir, -ober, -bir:
- alubir to become heavy
- tzilober to become dirty
- nejbir to get further away

rij old, forms its verb by adding -ix: -rijix to grow old, sak white, takes either -ir or -er:
saker to dawn, -sakir to clear up.
cof hard, strong, takes -in: -covin to be able.

Active verbs may be formed from some adjectives by adding -aj or -ej: -junamaj to make equal (the final n of junan equal becomes m), -nimaj to believe or obey (that which is due to a great (nim) person). -itzelaj to hate (that which is due an evil person). -nabeyej to go ahead of or precede some one.

37. Abstract and collective nouns may be formed from root nouns by adding the suffixes -il, -el or -al: bak bone, bakil the skeleton (all the bones of the body); g'ix spine, thorn, g'uxal thorniness (of all thorns of a thing); ch'abek mud, ch'abekil muddiness (all the mud of the road); caj heaven, cajil the heavens;
quig'el blood, -quig'el one's blood in toto, or in general); che wood, tree, chehel forest, woodiness; g'atz a use, g'atzel usefulness; ch'acul body, ch'acutal bodies in general; g'acol young man, g'ajolal one's youth.

Some nouns are made impersonal by the addition of -aj or -ej: -vi the head, viaj a head (not stating whose); -tata father, tatahaj a father (not stating whose); -ey teeth, eyaj teeth (not stating whose); -te mother, tehej a mother (not stating whose);

The foregoing nouns in the root forms are personal and cannot be used unless the possessor is mentioned or understood. Otherwise the impersonal forms are used. The suffixes -ixel are used after -tata and g'ajol in referring to the Trinity.

ri tatahixel God, the Father
ri g'ajolaxel God, the Son

-axel is also used after -nimal which comes from the adjective nim and means elder brother or sister, see paragraph 33. e.

nimalaxel head person in a group

The suffixes -on and -onel are used in an impersonal sense after the personal nouns -ixjayil and -achijil.

-ixjayil someone's wife, ixjaylon or ixjaylonel a wife
-achijil someone's husband, achijilon or achijilonel a husband

The suffix -aren is used after ajaf to mean the territory over which one is lord.

-ajaf lord, master, owner, ajavaren kingdom
Transitive verbs are formed from nouns by addition of the suffixes -aj, -oj, -ij: ak'on medicine, drug, -ak'omaj to treat with medicine; tzij word, -tzijoj to talk; bis sadness, -bisoj to make sad; nohoj wisdom, -nojij to consider; ch'abel word, speech, -ch'abelij to speak, preach, g'ux breast and pixa commandment, charge are rather irregular: g'uxlahaj long for, have regret for, -pixabej to exhort.

The derived verbs above follow the rules of the first conjugation. Intransitive verbs are formed from nouns by the addition of the suffixes -in or -un: g'atz use, -g'atzin to be useful; vech fruit, -vachin to bear fruit; quer fish, -carun to fish; mac sin, -macun to sin.

38. Most Cakchiquel verbs have their precise, frequentative and instrumental forms. Within these forms we find further variation according to neuter or transitive usage and within the transitive forms we have variation according to voice. All these variations are shown by the following suffixes.

FIRST CONJUGATION

Precise Forms

a. Neuter (showing temporary or regular occupation). The participle is used with the intransitive prefixes:

juan ditijon John is teaching or teaches.
roj gojticon We are planting or we plant (int.).

When re achieve the one who is the subject of the verb, the participle is used with the intransitive prefixes but in a transitive sense.

68
Cakchiquel Grammar

ri achique xtinaman rija he that believeth in Him.
ri achique xijachon he that delivered me
b. Transitive.
(1) The root is used for the active voice. The past participle ends in -in; tzeton seen, tijon taught.
(2) Most verbs of this conjugation may have two passive forms. If the root ends in j, the j is changed to x to form the first passive form. If not, the root itself is used with the inflections we have already studied.

nicanju I seek guicanux I am sought
duben he makes diban it is made

The second passive is formed by the suffix -tej and its participle by -tejnek.

guibanatej I am made banatejnek made
xiyatej I was given yajtejnek given
subutejnek deceived

Frequentive Forms
a. Transitive
(1) -la shows that the action of the verb is repeated various times. When the stem ends in j, the j is dropped.

xinben I made xinbanala I made (fre-quently)
ducanuj he is seek-ing ducanula he is seeking (tr.) (repeatedly)

The past participle is formed by -lon.

nubanalon I have done (something various times)
ayacalon you have put up (saved) (over a course of time)
Mayan Studies I

In nubanalox the stem has been modified from -ben to -ban and suffix a added to make -bana. See paragraph 34.

(2) The passive of this form is made by adding -lox to the stem.

dibanalo x it is done (various times)  
guecanulox they are being sought (various times)

Instrumental Forms
If the instrument with which a certain act is done is in view then a special suffix must be used.

(1) The active voice takes -bej:

rij'in ruquig'el xojrucolbej He saved us by his  
blood

The instrument must be mentioned first or else the instrument form of the verb is not used. Past partici-

(2) The passive voice is formed by -bex:

rig'in quig'el xojcolbex by blood were we saved.

SECOND CONJUGATION

Precise Forms

a. Neuter. The root verb is used. guiw er  
 I sleep, guinutzir I am improving. The partici-
ple is formed by -inek: warinek asleep,  
 utzirinek well.

b. Transitive.

(1) The active voice is formed by adding  
-isaj to the stem: niwarisaj I put to sleep, 
nivutzirisaj I bless (make good).

(2) The passive voice is formed by adding  
-isex to the stem: niwarisex I was put to sleep, 
nutzirisex He was blessed.

(3) The participle is formed by adding  
-isan to the stem: ruwarisan he has been put to 
sleep.

70
Frequentive Forms

a. Neuter. To show that the action occurs various times -taj or -yaj is added to the stem: guiwartaj I sleep (referring to various occasions), guiopeteyaj I come (including previous comings).

b. Transitive

(1) The active voice is formed by adding -isale to the stem: niwarisala I put to sleep (various times), drutzirisala He blesses (various times).

(2) The passive voice is formed by adding -isalox to the stem: diwarisalox roma rute He is put to sleep (frequently) by his mother, gojutzirisalox roma ri dios we are blessed (frequently) by God.

(3) The participle is formed by adding -isalon to the stem: ruwarisalon he has put to sleep, rutzirisalon he has blessed.

Instrumental Forms

(1) The active voice is formed by adding -isabej to the stem: niwarisabej I put to sleep (the instrument must be mentioned before the verb), rig'in lok'olej ya xerutzirisabej ri cura the priest blessed them with holy water.

(2) The passive voice is formed by adding -isabex to the stem: rig'in jun bix xwarisabex he (or she) was put to sleep with a song, rig'in lok'olej ya xinutzirisabex I was blessed with holy water.

(3) The participle is formed by adding -isaben to the stem: rig'in jun bix ruwarisaben with a song he was put to sleep, rig'in lok'olej ya rutzirisaben with holy water he was blessed.

(4) Some verbs of this conjugation have a benefactive form using the suffix -ej, -aj or
Mayan Studies I

-ij: niwaraj I watch (over someone) (suffer loss of sleep); guixok' you cry, guinivok'ej you are crying on my account; nisamajij (from guisamaj) I work for someone.

The passive voice and participle are formed like verbs of the first conjugation: -oken has cried, guinok'ejex I am being bemoaned; guiwaramex I am being watched.

THIRD CONJUGATION

Precise Forms

a. Neuter. The root verb is used.

\[
\begin{align*}
guiztuyue & \text{ I sit down} \\
guimeke & \text{ I warm myself}
\end{align*}
\]

The participle is formed by adding -1 to the stem or to the stem as modified according to paragraph 34. c: tzuyul seated, mekel warming oneself.

b. Transitive

(1) The active voice is formed by adding -ba to the stem, as shown in paragraph 34. c: xirutzayuba he caused me to be seated, nimekeba I cause him to warm himself.

(2) The passive voice is formed by adding -bex to the stem: xitzuyubex I was causing to be seated, xemekebex they were caused to warm themselves.

(3) The participle is formed by adding -ban to the stem: tzuyuban caused to be seated, mekeban caused to be warmed.

-g'ase is again irregular. The active voice is formed by adding -oj to the neuter participle and the passive by adding -tej. xug'asoj he awoke, he made live, xg'astej he was awakened, he was made alive, arose.
Frequentive Forms

a. Neuter. To show that the action occurred various times, -taj is added to the stem: guitzuyutaj I sit down (various times), guimeketaj I warm myself (various times).

b. Transitive

(1) The active voice is formed by adding -bala to the stem: xirutzuyubala he caused me to be seated (various times), nimekebala I cause him to be warmed (various times).

(2) The passive voice is formed by adding -balox to the stem: guitzuyubalox I am caused to be seated (various times), guimekebalox I am caused to be warmed (various times).

(3) The participle is formed by adding -balon to the stem: tzuyubalon caused to be seated (various times), mekebalon caused to be warmed (various times).

Instrumental Forms

(1) The active voice is formed by adding -babej to the stem: nitzuyubabej I cause to be seated (by something), nimekebabej I cause to be warmed (by something).

(2) The passive voice is formed by adding -babex to the stem: guitzuyubabex I am caused to be seated (by something), guimekebabex I am caused to be warmed (by something).

(3) The participle is formed by adding -baben to the stem: tzuyubaben caused to be seated (by something), mekebaben caused to be warmed (by something).

The neuter and passive participles formed by -nek or tejnek are only used after the verb "to be".
Mayan Studies I

ri e cosnek  the tired ones
ri warinek  the sleeping one
ob banatejnek  we are made

It often takes -chic, juan coloxejnek chic
John is already saved.

The active participle which always terminates
in n may be used with the possessive pronoun
prefixes to form something like the past perfect
tense.

nuzetnon  I have seen
e ruculon  he has saved them

39. Many substantives are formed from verbs
by adding suffixes.

a. An active gerund is formed by adding -ic
to the active participle in the first conjugation and
to the precise active participle in the other conju-
gations. The second conjugation verbs take the
suffixes -an, -en, -in or -ic. The third con-
jugation takes -en after the neuter participle.

First Conjugation:
tijonic act of teaching, rutijonic ri juan
  John's act of teaching;
chaponic act of seizing, ruchaponic ri achin
  man's act of seizing;
warisanic act of putting to sleep;
tzuyubanic act of seating.

Second Conjugation:
waran act of sleeping or sleepiness (waric
  neuter gender);
washin act of eating or a meal;
utziren act of improving;
elen act of going out, discharge;
camic act of dying, death.
Cakchiquel Grammar

Third Conjugation:
tzuyulen  act of sitting;
xulanen  act of descending a grade;
cukulen  act of being satisfied.

Some irregularities like the following may be expected:

g'aslen  act of living, life, g'aslemal  life;
palen  act of standing, stature;
g'ulenem  act of being married;
meke'en  warmed, meke'enal  act of warming, warmth.

The active gerund has in view the subject performing the act.

b. There is also a passive gerund which has in view the object of the act. All passive verbs of the precise forms of the three conjugations except the second passive\(^3\) of the first conjugation form this gerund. The same suffix -ic serves for all and is attached to the passive form of the verb.

banic  the making (of something)
canuxic  the seeking (of something)
warisaxic  the putting to sleep (of someone)
tzuyubaxic  the seating (of someone)

Most of these passive gerunds form a substantive which speaks more of the manner in which the act is executed. The suffix -il is attached to the gerund.

baniquil  the manner of doing or making
chapiquil (from chapic)  the manner of seizing
canuziquil (from canuxic)  the manner of seeking

\(^3\)This second passive may sometimes form a passive gerund.
conjugation verbs and also to the active forms of the second and third conjugations.

- colonel (from colon)  he who saves, saviour
- tisonel (from tison)  he who sews, tailor,
- seamstress
- warisanel (from warisaj)  he who puts to sleep
- tzuyubanel (from tzuyuban)  he who seats, usher

In some verbs the final -n of the participle may be lost, in which case the -e of the suffix is lost. Often the final n of the participle simply changes to y: banol - banoy the doer, moloy gather, chapol the one who seizes, kasey he who caused to descend, kasey-ya baptizer, ticoy planter.

Second conjugation verbs add -el or -il to the stem.

- waril  one who sleeps, sleepyhead
- camel (from quen)  one who is to die
- k'axel (from k'ax)  one who passes through, a traveller

The difference between the -el, -l and -y forms of this substantive, if there is a difference, is not quite clear. The only case in mind of an actual difference in meaning is k'atoy-tzij a ruler, k'atol-tzij the sphere of his government.

Third conjugation verbs add -nel to the stem.

- tzuyunel  he who is seated
- tzekenel  he who follows
- mek'enenel  he who warms

d. A passive substantive which refers to the recipient of the action of the verb is formed by adding -el to the passive form of the verb.
(The second passive form of the first conjugation is not used in this manner.)

banel  that which is to be done
tijoxel  he who is taught, disciple, student

The passive forms of the second and third conjugations rarely take this construction.

e. An instrumental substantive may be formed from the active voice of the instrumental forms of the verbs of all three conjugations by changing the final j to l.

banbel  that which serves to make something, a factory
colbel  that which serves to save or to escape
utzirisabel  that which serves to bless
tzuyubabel  chair (something to sit on)
g'ulubabel  word with which to answer, an answer

The second conjugation forms another instrumental substantive by adding -ibel or -abel directly to the root. The first might be called active in that it presupposes an agent. This instrumental substantive may be called neuter in that it is formed from the neuter stem and does not include an outside agent.

warabel  something to sleep on, mattress, bed
wahibel  something to eat with or out of, manger
atinabel  a bathtub, place to bathe

To the first class of instrumental substantives, the suffix rijil is often added to make an abstract generalization.

colbel-rijil  salvation
subabel-rijil  deceit
Mayan Studies I

f. Something like a past perfect substantive is formed by changing the final \textit{n} of the active participle of the first conjugation to \textit{-yon}. The same holds true of the active forms of the second and third conjugations:

\begin{itemize}
\item ayamayon \underline{he who had known}
\item ag'axayon \underline{he who had heard}
\item nimayon \underline{he who had believed}
\end{itemize}

Second conjugation verbs add \textit{-yon} or \textit{-ayon} to the stem.

\begin{itemize}
\item okayon \underline{he who had arrived}
\item peyon \underline{he who had come}
\end{itemize}

g. Some third conjugation verbs form a substantive by dropping the final \textit{-e} and adding \textit{-aj}.

\begin{itemize}
\item -u'uel \underline{to get married},
\item g'ulaj \underline{couple, pair};
\item -tzobe \underline{to pile up},
\item tzobaj \underline{group, herd};
\item -tane \underline{to cease},
\item tanaj \underline{that within bounds},
\item \underline{chapter}
\end{itemize}

40. The uses of the English infinitive are expressed in different ways in Cakchiquel.

a. Under the study of prefixes, paragraph 11 and 19, we learned what to do when the infinitive follows the verb \textit{to go}:

\begin{itemize}
\item dibewer \underline{he is going to sleep},
\item derucamij \underline{he is going to seek it}
\end{itemize}

b. The passive gerund is used after \textit{chi} when the object (recipient of the action) is in view.

\begin{itemize}
\item xpe chucanuxic ri juan \underline{he came to hunt John}
\item xpe chi nucanuxic yin \underline{he came to hunt me}.
\end{itemize}
Cakchiquel Grammar

The neuter gerund is used after pa when the subject himself is the recipient of the action.

juan xpe pa tijonic  John went to be taught  (to study)
pedro xpe pa waric  Peter went to be gone  all night

c. When the purpose expressed in the infinitive has actually been accomplished the infinitive is expressed by a regularly conjugated verb.

dios xrajo xojrucol  God wanted to save us  (and did)
dios xrajo cacolic  God wanted to save us  (it is not said whether he did or not)

d. The passive forms of transitive verbs are often used to express the infinitive in clauses expressing purpose.

dicol ri g'aslen 1 delesex  to save life or take it
TZOTZIL VERB PHRASE STRUCTURE

by colin c. dolgaty
Tzotzil Grammar

0. In Tzotzil\(^1\) the morpheme sequences that manifest principal predicates within sentences consist of a verb with or without associated particles. Within such verb phrases there are various degrees of phonological cohesion of the morphemes involved; furthermore, the grammatical relationships among constituents of the verb phrase are such that it is difficult to separate particles external to the verb from affixes. For this reason it seems best to consider the verb phrase as the basic unit that participates in sentence level constructions, and the verb word merely as a constituent of the verb phrase or in many instances as a verb phrase in its minimal form. The order of constituents within the verb phrase in relatively fixed in comparison with the order of sentence level constituents.

The constituents of Tzotzil predicate verb phrases are particles, prefixes, stems and suffixes. Verbs in phrases are divided according to their

\(^1\)Tzotzil is a member of the Mayan family of languages and is spoken by approximately 65,000 Indians living in the State of Chiapas, Mexico. This paper is based on the San Andrés dialect of Tzotzil and the material was gathered during a series of field trips to the villages of Naranjo and San Vicente in the municipality of Bochil, Chiapas, and to the village of Cristobal Colón in the municipality of Larrainzar, Chiapas.

In our study of the language and handling of linguistic matters we have profited by close association with Kenneth and Nadine Weathers and Marion Cowan, who have been working with the same language and have prepared grammatical analyses from different theoretical points of view. For other publications in the language see Nadine Weathers, "Tzotzil Phonemes with Special Reference to Allophones of B," \textit{IJAL} 13, 108-111 (1947) and "Morphological Analysis of a Tzotzil Text," \textit{IJAL} 16, 91-98 (1950).

The writer wishes to express thanks to Dr. Kenneth Pike for his suggestions aiding in the analysis and presentation of this material.
internal structure, that is, the choice of stem and affix sequences. The stems fall into five classes: transitive, intransitive, positional, substantive, and descriptive.

1. Predicate verbs with transitive stems manifest action toward a goal either spoken or understood. They are described in sections 1.1.-1.7. Predicate verb phrases are divided into types according to the obligatory and optional occurrences of their particles and affixes.

1.1. Verbs with a hortatory suffix have the smallest number of affixial combinations. We have charted\(^2\) them first with each stem class in which they occur, and then gradually build up to the more complicated verb phrase types in each stem class.

---

\(^2\)In order to find the number of affixes used and their relative orders in relation to the stem, a large composite chart was drafted. From this chart the items were numbered and these numbers are retained throughout the paper as each particular verb phrase type is discussed with its particular set of obligatory and optional items. The millenium numbers refer to the orders of morphemes which precede the stem counting from the stem forward to the beginning of the predicate verb phrase, and the century numbers refer to the orders of morphemes which follow the stem counting from the stem to the end of the predicate verb phrase. The decade numbers within the millenium and century numbers refer to distinct affix classes within the particular order in which they are found. In the numbering of items we profited by Doris Cox's article, "Candoshi Verb Inflection," *IJAL* 23, 129-140(1957) and have followed to a certain extent her usage of the millenium and century numbers. Only the norm of each item is put in the charts. For allomorphic variants see Section 6.
### Tzotzil Grammar

**TRANSITIVE STEM WITH HORTATORY SUFFIX**

<table>
<thead>
<tr>
<th>+2010</th>
<th>+Stem</th>
<th>+310</th>
<th>+710</th>
<th>+820</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011 k-</td>
<td>St³</td>
<td>311 -ku-</td>
<td>711 -tik</td>
<td>821 -kik</td>
</tr>
<tr>
<td>1st person</td>
<td>hortatory</td>
<td>plural</td>
<td>exclamatory</td>
<td>person</td>
</tr>
</tbody>
</table>

(For allomorphs of morphemes on this and other charts, see Section 6.)

**Chart I**

**Formula 1**: $+ 2010 + S_t + (310 + 710) / (710 + 820)$. Examples: (a) with stem -man to buy it: h-man-ku-tik let's buy it ($+ 2011 + S_t + 311 + 711$);

---

³ In the charts and formulas + indicates obligatory items, ± indicates optional items and / indicates either/or. St indicates transitive stem, Sᵢ intransitive, Sᵢ positional, Sₛ substantive and Sᵈ descriptive.

⁴ The reader should be prepared to sense the structural difference between the charts and the formulas following the charts. The charts, in general, are an attempt to give the structural differences without minor substructural restrictions and variations. That is, the charts try to show the tagmemes with their respective slots and classes, whereas the formulas give specific allotagmatic detail. In this paper we were not able to achieve consistency in this regard. Some of our charts under a more rigorous treatment would have a few of the orders of affixes combined into one tagmeme. (For example, some of the person classes might be combined into a single emic class and a single tagmeme.) When, however, there are no prominent allotagmas within any one tagmeme, both chart and formula give the same detail. (This can be compared to a list of phonemes and a list of allophones. When there are no prominent allophones, the two lists coincide.)


85
Mayan Studies I

(b) with stem -k'el to look at: h-k'el-tik-kik⁵
let's look at it (+ 2011 + Sᵗ + 711 + 821).

1.2. The Imperative Transitive verb differs from the Hortatory just described (1.1.) in
that obligatory Prefix Series 2010 is dropped and
optional Suffix Series 210, 410, 510 and 610 are
added.

See Chart II

Formula 2 shows the restrictions and ex-
expansions in the Imperative Transitive verb:
+ Sᵗ + (± 210 + 310 ± 410) / (± 210 + 310 + 510 ±
[± 610 + 710]) ± 820. Examples: (a) with stem
-boh to cut it: boh-o cut it (+ Sᵗ + 312); (b) with
stem -ʔal to tell it: ʔal-b-o tell it to him (+ Sᵗ
± 211 + 312); (c) with stem -čon to sell it:
čon-be-ʃ-ik (you, plural) sell it to him, them or
(you, singular) sell it to them (+ Sᵗ ± 211 + 312 ±
411); (d) with stem -ʔak' to give it:
ʔak'-b-ʃ-un-kik give it to me (+ Sᵗ + 211 + 312 +
511 ± 821); (e) with stem -čanubtas to teach
someone: čanubtas-b-ʃ-un-ku-tik teach it to us
(+ Sᵗ + 211 + 312 + 511 ± [± 611 + 711]).

1.3 The Perfect Passive verb phrase differs
from the Imperative in that obligatory Suffix Series
310 is replaced by Series 120. Optional Particle
Series 9010, 8010 and 7010 are added and Suffix 821
is dropped.

See Chart III

⁵The exact meaning of Suffix 821 is uncertain, but it seems
to display some sort of emotion or excitement.
<table>
<thead>
<tr>
<th>Stem</th>
<th>+Stem</th>
<th>+210</th>
<th>+310</th>
<th>+410</th>
<th>+(510)</th>
<th>+(610)</th>
<th>+(710)</th>
<th>+820</th>
</tr>
</thead>
<tbody>
<tr>
<td>St</td>
<td>211 -be</td>
<td>312 -o</td>
<td>411 -ik</td>
<td>511 -un</td>
<td>611 -ku-</td>
<td>711 -tik</td>
<td>821 -kik</td>
<td></td>
</tr>
<tr>
<td>relative</td>
<td>imperative</td>
<td>plural</td>
<td>1st person</td>
<td>exclusive</td>
<td>plural</td>
<td>exclamatory</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>with 2nd</td>
<td>and 3rd</td>
<td>person</td>
<td>object</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chart II
# Transitive Stem with Perfect Passive Suffix

<table>
<thead>
<tr>
<th>9011 mi</th>
<th>8011 ha?</th>
<th>7011 muk</th>
<th>St</th>
<th>121 -bil</th>
<th>411 -ik</th>
<th>511 -un</th>
<th>611 -ku-</th>
<th>711 -tik</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interrogative</td>
<td>emphatic</td>
<td>negative</td>
<td>perfect passive</td>
<td>plural with 3rd person</td>
<td>1st person</td>
<td>exclusive plural with 1st person</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 9012 buy | 512 -ot | 712 -uk
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>where</td>
<td>2nd person</td>
<td>plural with 2nd person</td>
</tr>
<tr>
<td>Interrogative</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>513 #-</th>
<th>3rd person</th>
</tr>
</thead>
</table>

**Chart III**

6Suffix 712 is used as plural for 2nd person when immediately preceded by Suffix 512. Suffix 411 is used elsewhere.
Tzotzil Grammar

The following two formulas show the combinations possible when the perfect passive is used. Examples are given with each formula to show the use of the optional, as well as the obligatory parts.

Formula 3: $\pm 9010 \pm 8010 \pm 7010^7 + S_t + 120 + 511 \pm (\pm 610 + 711)$. Examples: (a) with stem -mah to hit it: ha? mah-bil-un yes, I have been hit $(\pm 8011 + S_t + 121 + 511)$; (b) with stem -k'opon to speak to: k'opon-bil-u-tik we (inclusive) have been spoken to $(\pm S_t + 121 + 511 \pm 711)$; (c) with stem -k'el to look at: k'el-bil-un-ku-tik we (exclusive) have been looked at $(\pm S_t + 121 + 511 \pm (\pm 611 + 711))$.

Formula 4: $\pm 9010 \pm 8010 \pm 7010 + S_t + 120 + (\pm 410 + 513)/(512 \pm 712)$. Examples: (d) with stem -mil to kill it: muk mil-bil-ik-# they have not been killed $(\pm 7011 + S_t + 121 \pm 411 + 513)$; (e) with stem -?a?i to hear, understand: ?a?i-bil-os-uk you (plural) have been heard, understood $(\pm S_t + 121 + 512 \pm 712)$; (f) with stem -con to sell it: mi con-bil-# has it been sold $(\pm 9011 + S_t + 121 + 513)$.

1.4. The Perfect Indicative verb phrase differs from the Perfect Passive (1.3.) in that it takes obligatory Prefix Series 2010 and Suffix 122 instead of Suffix 121, and in that Suffix Series 210 and Particle Series 6010 are optional additions.

---

7The particles listed in Series 9010, 8010, 7010 and 6010 constitute only a portion of all the particles in the Tzotzil language and would be dealt with more fully in considering the sentence or clause structure of the language. These, however, have been included in this paper because they are obligatory in a few predicate verb phrase types, (see Secs. 4 and 5). The particles in Series 9010 occur only at the beginning of predicate verb phrases. The particles of Series 6010, except 6013, may occur at the end of verb phrases as well as in the positions in which they are charted.
Mayan Studies I

See Chart IV

Formula 5 with 1st person subject and 3rd person object: \( \pm 9010 \pm 8010 \pm 7010 \pm 6010 + 2011 + S_t + 120 \pm 210 \pm 410 \pm (+ 511 \pm [\pm 610 + 711]) \). Examples: (a) with stem -?ič' to receive it: k-ič'-oh I have received it (+ 2011 + S_t + 122); (b) with stem -man to buy it: h-man-oh-be-ik-u-tik we have bought it for, from them (+ 2011 + S_t + 122 \pm 211 \pm 411 \pm [+ 511 \pm 711]).

Formula 6 with 1st person subject and 2nd person object: \( \pm 9010 \pm 8010 \pm 7010 \pm 6010 + 2011 + S_t + 120 \pm (+ 210 + 512 \pm 712) \). Example (c) with stem -?ak' to give it: ha? k-ak'-oh-b-ot I have given it to you (singular) (+ 8011 + 2011 + S_t + 122 \pm [+ 211 + 512]).

Formula 7 with 2nd person subject and 3rd person object: \( \pm 9010 \pm 8010 \pm 7010 \pm 6010 + 2012 + S_t + 120 \pm 210 \pm 410 \). Example (d) with stem -čon to sell it: mi te a-čon-oh-be-ik have you (singular) sold it to them or have you (plural) sold it to him, them there (+ 9011 \pm 6012 + 2012 + S_t + 122 \pm 211 \pm 411).

---

8When stems beginning with a glottal stop are preceded by a prefix of Series 2010 the initial glottal stop is lost.

9Particle 8011 is the 3rd person of the emphatic personal pronouns: hoʔon I, hoʔot you, haʔ he, she, it. It may also indicate emphasis on the action as well as the actor and may take a plural suffix -ik (see example (e) under formula 33 Section 5).

10Final y is dropped in particles ending in y excepting when spoken in isolation or at the end of an utterance.
## Transitive Stem with Perfect Indicative Suffix

<table>
<thead>
<tr>
<th>Stem</th>
<th>+2010</th>
<th>+Stem</th>
<th>+120</th>
<th>+210</th>
<th>+410</th>
<th>+(+510)</th>
<th>+610</th>
<th>+710</th>
</tr>
</thead>
<tbody>
<tr>
<td>+9010</td>
<td>+8010</td>
<td>+7010</td>
<td>+6010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9011</td>
<td>8011 ha?</td>
<td>7011 muk</td>
<td>6011 l°pe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interroga-</td>
<td>emphatic</td>
<td>negative</td>
<td>here</td>
<td>1st person subject</td>
<td>perfect tense</td>
<td>relative plural with 2nd or 3rd person</td>
<td>1st person object exclusive</td>
<td>plural with 1st person</td>
</tr>
</tbody>
</table>

**Chart IV**
Mayan Studies I

Formula 8 with 2nd person subject and 1st person object: \[ \pm 9010 \pm 8010 \pm 7010 \pm 6010 + 2012 + S_t + 120 \pm 210 \pm 410 + 511 \pm (\pm 610 + 711) \]. Examples: (e) with stem -\(^{\prime}\)al to tell it: av-al-o-h-b-un you (singular) have told it to me, told me about it \((\pm 2012 + S_t + 122 \pm [\pm 211 + 511])\); (f) with stem -sa? to look for: a-sa?-oh-b-un-ku-tik you (singular) have looked for us (exclusive) \(\{\pm 2012 + S_t + 122 \pm (\pm 211 + 511 \pm [\pm 611 + 711])\}\).

The following examples are given in order to show how Particles 9012 and 6013 may be used: (h) with stem -man to buy it: bu a-man-o-h where did you buy it \((\pm 9012 + 2012 + S_t + 122)\); (i) with stem -\(^{\prime}\)i\(^{\prime}\) to receive it: muk bu\(^{11}\) k-i\(^{\prime}\)-oh I haven't received it \((\pm [\pm 7011 + 6013] + 2011 + S_t + 122)\).

Formula 9 with 3rd person subject and 2nd and 3rd person object: \[ \pm 9010 \pm 8010 \pm 7010 \pm 6010 + 2013 + S_t + 120 \pm (\pm 210 + 512 + 712)/(\pm 210 \pm 410) \]. Examples: (g) with stem -\(^{\prime}\)il to see it: y-il-o-h-ik they have seen it \((\pm 2013 + S_t + 122 \pm 411)\); (h) with stem -k'an to ask for it: s-k'an-o-h-b-o\(^{\prime}\)-uk he has asked for it from, for you (plural) \((\pm 2013 + S_t + 122 \pm [\pm 211 + 512 \pm 712])\).

Formula 10 with 3rd person subject and 1st person object: \[ \pm 9010 \pm 8010 \pm 7010 \pm 6010 + 2013 + S_t + 120 \pm 210 \pm 410 \pm (\pm 511 \pm [\pm 610 + 711]) \]. Examples: (i) with stem -\(^{\prime}\)on to sell it: s-\(^{\prime}\)on-o-h-b-u-tik he has sold it to us (inclusive) \((\pm 2013 + S_t + 122 \pm [\pm 211 + 511 \pm 711])\); (j) with stem -\(^{\prime}\)i\(^{\prime}\) to receive it: y-i\(^{\prime}\)-oh-be-ik-un-ku-tik they have received it, he has received them from us (exclusive) \((\pm 2013 + S_t + 122 \pm (\pm 211 + 411 + 511 \pm [\pm 611 + 711])\))

\(^{11}\)Like particles such as interrogative 9012 and relative 6013 are never found in the same verb phrase. In some verb phrase types particle 6013 seems to be obligatory after negative 7011.
Tzotzil Grammar

1.5. The Transitive Subjunctive verb phrase differs from the Perfect Indicative in that obligatory Particle Series 9020 and 3020 have been added, that is, the obligatory Prefix Series 2010 must be preceded by either a particle\textsuperscript{12} or by an auxiliary verb.\textsuperscript{13} Obligatory Suffix Series 810 has also been added to formula 12.

See Chart V

Formula 11 with desiderative and probable:
\[ + 9022 / 3020 + 2010 + S_t + 210 + 410 \pm (+ 510 \pm [\pm 610 + 711])/712. \]  This formula gives a more general distribution of the object prefixes that are treated more thoroughly in the preceding formulas and examples. Examples: (a) using desiderative particle 3021 with stem -toh to pay for: čak h-toh-b-ot I want to pay you for it \((+ 3021 + 2011 + S_t + [+ 211 + 512])\); (b) using probable particle 9022 with stem -mil to kill it: naka s-mil-un-ku-tik he might kill us \((+ 9022 + 2013 + S_t + (+ 511 \pm [\pm 611 + 711]))\); (c) using an auxiliary verb 3022 with stem -lahes to finish it: č-ba\textsuperscript{14} a-lahes-ik you (plural) will go

\textsuperscript{12}Particles of Series 9020 are always found initially in the verb phrase. Only the Conditional Particle 9011 takes the Subjunctive Suffix 811 in verb phrases with transitive stems but the Subjunctive suffixes 331, 332 or 811 are obligatory with all the particles of Series 9020 and 3020. See footnote 24 for meaning of particle 9023.

\textsuperscript{13}Auxiliary verbs which indicate direction consist of a few intransitive stems: ba to go, -tal to come, -ʔeč to enter, -lok' to go out, -ʔeč' to go by, -muy to go up, -yal to go down, etc. These stems may be preceded by a particle from Series 9010, 8010, 7010 and, or 6010 and in incomplete aspect must be preceded by a prefix from Series 5010 plus incomplete aspect Prefix 4011. Desiderative particle 3021 differs from the auxiliary verb in that it may only be preceded by a particle from Series 9010 or 8010.

\textsuperscript{14}When stem -bat to go is used as an auxiliary verb the final t is dropped.
<table>
<thead>
<tr>
<th>Stem</th>
<th>4020</th>
<th>4010</th>
<th>410</th>
<th>410</th>
<th>4200</th>
<th>4200</th>
<th>4300</th>
<th>4300</th>
<th>4400</th>
<th>4400</th>
<th>4500</th>
<th>4500</th>
<th>4600</th>
<th>4600</th>
<th>4700</th>
<th>4700</th>
<th>4800</th>
<th>4800</th>
</tr>
</thead>
<tbody>
<tr>
<td>3021</td>
<td>čak</td>
<td>desiderative</td>
<td>1st person subject</td>
<td>perfect</td>
<td>relative</td>
<td>plural with 2nd person object</td>
<td>1st person exclusive</td>
<td>plural with 1st person subjunctive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stem</th>
<th>4020</th>
<th>4010</th>
<th>410</th>
<th>410</th>
<th>4200</th>
<th>4200</th>
<th>4300</th>
<th>4300</th>
<th>4400</th>
<th>4400</th>
<th>4500</th>
<th>4500</th>
<th>4600</th>
<th>4600</th>
<th>4700</th>
<th>4700</th>
<th>4800</th>
<th>4800</th>
</tr>
</thead>
<tbody>
<tr>
<td>9022</td>
<td>naka</td>
<td>3022</td>
<td>2012 av-</td>
<td>auxiliary</td>
<td>2nd person subject</td>
<td>412 -ot</td>
<td>512 -ot</td>
<td>712 -uk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>probable</td>
<td>verb indicating</td>
<td>direction</td>
<td>2nd person subject</td>
<td>2nd person object</td>
<td>plural with 2nd person object</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stem</th>
<th>4020</th>
<th>4010</th>
<th>410</th>
<th>410</th>
<th>4200</th>
<th>4200</th>
<th>4300</th>
<th>4300</th>
<th>4400</th>
<th>4400</th>
<th>4500</th>
<th>4500</th>
<th>4600</th>
<th>4600</th>
<th>4700</th>
<th>4700</th>
<th>4800</th>
<th>4800</th>
</tr>
</thead>
<tbody>
<tr>
<td>9023</td>
<td>?ak'o</td>
<td>2013 y-</td>
<td>3rd person subject</td>
<td>513 -š</td>
<td>3rd person object</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>permissive</td>
<td>verb indicating</td>
<td>direction</td>
<td>3rd person subject</td>
<td>3rd person object</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Chart V**
and finish it \( (+ 3022 + 2012 + S_t + 411) \); (d) using permissive particle 9023 with stem -mekan to fix it: \( ?ak'o \ j\text{-}mekan\text{-}ku\text{-}tiklet's \) fix it \( (+ 9023 + 2011 \frac{1}{2} + 611 + 711) \).

Formula 12 with conditional: \( + 9021 \pm 7010 + 3022 + 2010 + S_t \pm 122 \pm 210 \pm 411 \pm (+ 510 \pm [\pm 610 + 711]/712) + 811 \). Examples: (a) with stem -ikta to abandon it: \( ?ati \text{-}ikta\text{-}be\text{-}tik\text{-}uk e^{15} \) if we (inclusive) abandon it, him \( (+ 9021 + 2011 + S_t + 711 + 811) \); (b) with stem -?ak' to give it: \( ?ati \text{-}av\text{-}ak'\text{-}oh\text{-}be\text{-}ik\text{-}uk e \) if you (singular) had given it to them, or if you (plural) had given it to him, them \( (+ 9021 + 2012 + S_t + 122 + 211 + 411 + 811) \); (c) with stem -mah to hit it: \( ?ati \text{-}s\text{-}mah\text{-}uk e \) if he hits it, him \( (+ 9021 + 2013 + S_t + 811) \).

1.6. The Passive verb phrase differs from the Conditional in that the obligatory passive suffix 321 and the aspect and person prefixes (Series 5010, 4010 and 3010\(^{16} \)) and optional 9010, 8010 and 7010 have been added. Suffix series 120, 510 and 810 have been dropped.

See Chart VI

Formula 13 showing some of the combinations with Prefix 3011: \( \pm 9010 \pm 8010 \pm 7010 + (5010 + 4011)/4012 + 3011 + S_t \pm 210 + 320 \pm (+ 610 + 710) \).

\(^{15}\)When -e is the final phoneme of a particle it occurs as an enclitic at the end of the verb phrase in which the rest of the particle occurs at the beginning.

\(^{16}\)Series 3010 is distinct from series 2010 in that they occur simultaneously on transitive indicative verbs with object prefixes. (See Sec. 1.7.2.).

95
## Transitive Stem with Passive Suffix

<table>
<thead>
<tr>
<th>49010</th>
<th>48010</th>
<th>47010</th>
<th>45010</th>
<th>44010</th>
<th>43010</th>
<th>+Stem</th>
<th>+210</th>
<th>+320</th>
<th>+410</th>
<th>(610)</th>
<th>(710)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9011</td>
<td>8011</td>
<td>7011</td>
<td>5011</td>
<td>4011</td>
<td>-3-</td>
<td>3011</td>
<td>-i</td>
<td>St</td>
<td>211</td>
<td>-be</td>
<td>321</td>
</tr>
<tr>
<td>mi</td>
<td>ha?</td>
<td>muk</td>
<td>ta</td>
<td>la</td>
<td>present</td>
<td>1st</td>
<td>person</td>
<td>1st person passive plural with 2nd and 3rd persons</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Chart VI

#### Nouns
- 9012 bu
  - where
  - interrogative

#### Verbs
- 4012 1-
  - past participle with 3rd person
- 3012 -a-
  - past participle with son 1st and 2nd person
- 4013 hi-
  - past participle with 3rd person
- 3013 -#-
  - past participle with son 3rd person

### Markers
- 612 -u-
  - inclusive
Examples: (a) with stem -k'el to look at: mi ta\textsuperscript{17} š-i-k'el-e-u-tik are we (inclusive) being looked at
\((\pm 9011 + 5011 + 4011 + 3011 + S_t + 321 \pm [+ 612 + 711])\); (b) with stem -ʔak' to give it: muk l-i-ʔak'-b-at it wasn't given to me \((\pm 7011 + 4012 + 3011 + S_t \pm 211 + 321)\).

Formula 14 showing some of the combinations with Prefix 3012: \(\pm 9010 \pm 8010 \pm 7010 + (5010 + 4011)/4012 + 3012 + S_t \pm 210 + 320 \pm 410\). Examples: (c) with stem -ʔil to see it: mu š-a-ʔil-b-at-ik you (plural) will not be seen \((\pm 7011 + 4011 + 3012 + S_t \pm 211 + 321 \pm 411)\); (d) with stem -ʔak' to give it: mi l-a-ʔak'-b-at-ik was it given to you (plural) \((\pm 9011 + 4012 + 3012 + S_t \pm 211 + 321 + 411)\).

Formula 15 showing some of the combinations with Prefix 3013: \(\pm 9010 \pm 8010 \pm 7010 + (5011 + 4010)/4013 + 3013 + S_t \pm 210 + 320 \pm 410\). Examples: (e) with stem -kolta to help someone: hi-#-kolta-at he was helped \((\pm 4013 + 3013 + S_t + 321)\); (f) with stem -ʔal\textsuperscript{18} to tell it: muk i-#-ʔal-b-at-ik it was not told to them \((\pm 7011 + 4013 + 3013 + S_t + 211 + 321 \pm 411)\); (g) with stem -poh to take away: mi ta š-#-poh-b-at will it be taken away from him \((\pm 9011 + 5011 + 4011 + 3013 + S_t \pm 211 \pm 321)\); (h) with stem

\textsuperscript{17}In fast speech ta + š becomes č. Examples: ta š-i-k'el-e becomes č-i-k'el-e I am being looked at, ta š-a-man becomes č-a-man you buy it, etc.

\textsuperscript{18}Suffix 211 is obligatory with passive Suffix 321 on stem -ʔal to say it.
Mayan Studies I

-ʔut\textsuperscript{19} to tell, scold someone; s-♯-ʔut-at it was
told him \((+ 4011 + 3013 + S_t + 321)\).

1.7. Verbs with transitive stems and indicative affixes are divided between those in
which the object is manifested by suffixes and those in which the object is manifested by prefixes.

1.7.1. Verbs whose transitive indicative mode manifests the object with suffixes may
have a numerative Prefix Series 1010, and a time
or manner Suffix Series 110. Prefix Series 2010
and Suffix Series 510 which were omitted in the
Passive are again used here. Prefix 5012\textsuperscript{20} is
added to the aspect prefixes and Prefix 4012 and
4013 are omitted.

See Chart VII

Formula 16 showing some of the combinations
with 1st person subject: \(+ 9010 \pm 8010 \pm 7010 \pm 6010
+ (5010 + 4010)/5012 + 2011 \pm 1011 + S_t \pm 110 \pm 210/
(+ 210 \pm 410 \pm [\pm 610 + 711])/(+ 210 + 512 \pm 712) \pm
820. Examples: (a) with stem -lap to dress, put

\textsuperscript{19}Stem -ʔut to tell it is irregular when passive Suffix
321 is used in that it always takes allomorph -at and never
suffix 211. Also Prefix Series 5010 which is obligatory on
other stems has never been observed with a passive suffix on
this stem.

\textsuperscript{20}Prefix 5012 is used for completive aspect in this one
verb type only, i.e. Indicative mode with transitive stem and
object suffix. In another dialect (Zinacantan) this prefix is
never used, but completive aspect is depicted by 4012 and 4013
in all verb phrase types. On some occasions and with some
speakers 4013 is used preceding allomorph y- of 2013, as in
hi-y-ak\textsuperscript{1} he gave it.
### Chart VII

<table>
<thead>
<tr>
<th>Stem</th>
<th>1s Singular</th>
<th>2s Singular</th>
<th>3s Singular</th>
<th>1p Plural</th>
<th>2p Plural</th>
<th>3p Plural</th>
<th>1 Acc</th>
<th>2 Acc</th>
<th>3 Acc</th>
<th>1 Ins</th>
<th>2 Ins</th>
<th>3 Ins</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>-be</td>
<td>-be</td>
<td>-be</td>
<td>-be</td>
<td>-be</td>
<td>-be</td>
<td>-be</td>
<td>-be</td>
<td>-be</td>
<td>-be</td>
<td>-be</td>
<td>-be</td>
</tr>
<tr>
<td>4010</td>
<td>to do a second</td>
<td>to do something else</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4011</td>
<td>-av-</td>
<td>-av-</td>
<td>-av-</td>
<td>-av-</td>
<td>-av-</td>
<td>-av-</td>
<td>-av-</td>
<td>-av-</td>
<td>-av-</td>
<td>-av-</td>
<td>-av-</td>
<td>-av-</td>
</tr>
<tr>
<td>5011</td>
<td>to do</td>
<td>to do</td>
<td>to do</td>
<td>to do</td>
<td>to do</td>
<td>to do</td>
<td>to do</td>
<td>to do</td>
<td>to do</td>
<td>to do</td>
<td>to do</td>
<td>to do</td>
</tr>
<tr>
<td>6011</td>
<td>-1s-</td>
<td>-1p-</td>
<td>-1p-</td>
<td>-1p-</td>
<td>-1p-</td>
<td>-1p-</td>
<td>-1p-</td>
<td>-1p-</td>
<td>-1p-</td>
<td>-1p-</td>
<td>-1p-</td>
<td>-1p-</td>
</tr>
<tr>
<td>7011</td>
<td>-2s-</td>
<td>-2p-</td>
<td>-2p-</td>
<td>-2p-</td>
<td>-2p-</td>
<td>-2p-</td>
<td>-2p-</td>
<td>-2p-</td>
<td>-2p-</td>
<td>-2p-</td>
<td>-2p-</td>
<td>-2p-</td>
</tr>
<tr>
<td>9011</td>
<td>-3s-</td>
<td>-3p-</td>
<td>-3p-</td>
<td>-3p-</td>
<td>-3p-</td>
<td>-3p-</td>
<td>-3p-</td>
<td>-3p-</td>
<td>-3p-</td>
<td>-3p-</td>
<td>-3p-</td>
<td>-3p-</td>
</tr>
</tbody>
</table>

#### Indicative Mode with Transitive Stem and Object Suffixes

- **Interrogative**: 5011, 6011, 7011, 9011
- **Emphatic**: 7011, 8011
- **Negative**: 6011, 7011, 9011

#### Suffixes

- **3s Acc**: -av-
- **1p Plural**: -1s-
- **2p Plural**: -2s-
- **3p Plural**: -3s-
- **1 Acc**: -1p-
- **2 Acc**: -2p-
- **3 Acc**: -3p-
- **1 Ins**: -1s-
- **2 Ins**: -2s-
- **3 Ins**: -3s-
- **Plural with 2nd Person Subject and Object**: -2p-
- **Plural with 1st Person**: -1s-
- **Exclamatory**: -1s-
on clothing: li²¹ ta ≠-h-lap-kik e I will put it on here (to see if it fits) (± 6011 + 5011 + 4011 + 2011 + Sₜ ± 821); (b) with stem ≠-ak' to give it: ta ≠-k-ak'-be-ku-tik we (exclusive) will give it to him (+ 5011 + 4011 + 2011 + Sₜ ± 211 ± [± 611 + 711]); (c) with stem ≠-k'an to want it, or to ask for it: muk lah-h-k'an-b-ot I didn't want it from you or I didn't ask you for it (± 7011 + 5012 + 2011 + Sₜ ± (+ 211 + 512)); (d) using suffix 111 with stem ≠-çon to sell it: mi ta ≠-h-çon-ban will I sell it first (before doing something else) (± 9011 + 5011 + 4011 + 2011 + Sₜ ± 111).

Formula 17 showing some of the combinations with 2nd person subject: ± 9010 ± 8010 ± 7010 ± 6010 + (5010 + 4011)/5012 + 2012 ± 1010 + Sₜ ± 110 ± (± 210 ± 410)/(± 210 ± 410 + 511 ± [± 610 + 711]) ± 820.
Examples: (e) with stem ≠-melcan to repair it: mi mu ≠-a-melcan-b-un won't you repair it for me (± 9011 + 7011 + 4011 + 2012 + Sₜ ± (+ 211 + 511)); (f) with stem ≠-ik' to call for: muk la-av-ik'-be-ik-un-ku-tik you (plural) didn't call for us (exclusive) {± 7011 + 5012 + 2012 + Sₜ ± (+ 211 ± 411 ± 511 ± [± 611 + 711])}; (g) using Prefix 1010 with stem ≠-mes to sweep it: ta ≠-a-ça'mes you are sweeping it again (a second time) (+ 5011 + 4011 + 2012 ± 1011 + Sₜ).

Formula 18 showing some of the combinations with 3rd person subject: ± 9010 ± 8010 ± 7010 ± 6010 + (5010 + 4011)/5012 + 2013 ± 1010 + Sₜ ± 110 ± (± 210 ± 410)/(± 210 ± 410 + 511 ± [± 610 + 711])/(+ 210 + 512 ± 712) ± 820.
Examples: (h) using stem ≠-av to plant: ha? ta ≠ ≠-av-ik yes, they are

²¹Glottal stop of particle 6011 is lost and ≠-e occurs as an enclitic at the end of the verb phrase when this particle is used anywhere except in isolation or at the end of an utterance.
planting \( (\pm 8011 + 5011 + 4011 + 2013 + S_t \pm 411) \); (i) using 2nd person object with stem -\text{mil } to kill it: \text{ta } #-s-mil-b-oš-uk \text{ he, it will kill you (plural) } (\pm 5011 + 4011 + 2013 + S_t \pm [\pm 211 + 512 \pm 712]); (j) using 1st person object with stem -?ak' to give it: \text{muk laj-y-ak'b}\text{22-un he didn't give it to me } (\pm 7011 + 5012 + 2013 + S_t \pm [\pm 211 + 511]); (k) showing use of Suffix 112 with stem -mah to hit it: \text{ta } #-s-mah-ulan-ik \text{ they hit it repeatedly } (\pm 5011 + 4011 + 2013 + S_t \pm 112 \pm 411).

1.7.2. There are three obligatory orders of prefixes and an incompletive particle in the Transitive predicate verb phrase manifesting the object by a prefix. This verb type has only four suffixes, all of which are optional.

See Chart VIII

Formula 19 manifesting the restrictions and expansions with 1st person subject: \( \pm 9010 \pm 8010 \pm 7010 \pm 6010 + (5010 + 4011)/5012 + 3012 + 2011 + S_t \pm 210 \pm (\pm 610 \pm 710) \). Examples: (a) with stem -?ak' to give it: \text{bu ta š-a-k-ak'-be-ku-tik } where \text{will we (exclusive) give it to you (singular or plural) } (\pm 9012 + 5011 + 4011 + 3012 + 2011 + S_t \pm 210 \pm [\pm 611 + 711]); (b) with stem -k'an to want it, ask for it: \text{muk lah- } -k'an-be \text{ I didn't want it from you or I didn't ask you for it } (\pm 7011 + 5012 + 3013 + 2011 + S_t \pm 210).

Formula 20 manifesting the restrictions and expansions with 3rd person subject: \( \pm 9010 \pm 8010 \pm 7010 \pm 6010 + (5010 + 4011)/5012 + 3010 + 2013 +

---

22Suffix 211 is obligatory preceding 511 or 512 on this stem.
### Indicative Mode with Transitive Stem and Object Prefixes

<table>
<thead>
<tr>
<th>+9010</th>
<th>+8010</th>
<th>+7010</th>
<th>+6010</th>
<th>+5010</th>
<th>+4010</th>
<th>+3010</th>
<th>+2010</th>
<th>+Stem</th>
<th>+210</th>
<th>+410</th>
<th>/(+610</th>
<th>+710)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9011 mi</td>
<td>8011 ha°</td>
<td>7011 muk</td>
<td>6011 11°</td>
<td>5011 ta</td>
<td>4011 -š-</td>
<td>present</td>
<td>3011 -š-</td>
<td>2011 -k-</td>
<td>511 -be</td>
<td>411 -ik</td>
<td>611 -ku</td>
<td>711 -lik</td>
</tr>
<tr>
<td>interrogative</td>
<td>emphatic negative</td>
<td>here</td>
<td>inceptive aspect</td>
<td>1st person object</td>
<td>1st person subject</td>
<td>relative</td>
<td>plural with 2nd and 3rd person</td>
<td>plural exclusive with 1st person</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9012 buy</th>
<th>6012 tey</th>
<th>5012 lah</th>
<th>3012 -š-</th>
<th>2013 -y-</th>
</tr>
</thead>
<tbody>
<tr>
<td>where interrogative</td>
<td>there</td>
<td>comparative aspect</td>
<td>2nd person object</td>
<td>3rd person subject</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6013 bu</th>
<th>3013 -š-</th>
</tr>
</thead>
<tbody>
<tr>
<td>where</td>
<td>3rd person object</td>
</tr>
<tr>
<td>relative</td>
<td></td>
</tr>
</tbody>
</table>

**Chart VIII**
2. Intransitive Verbs take a class of stems distinct from those utilized by Transitive Verbs. Some of the affixes used are also different, some have a different function, and others, including Prefix Series 2010 and Suffix Series 210 and 320, are absent in the Intransitive. Prefix Series 3010 and Suffix Series 510 and 710 function as subject only in the intransitive, while in the transitive they can function as either subject or object, depending on the phrase type in which they occur. The intransitive stem never manifests action toward a goal.

2.1. The Hortatory Intransitive verb differs from the Hortatory Transitive (l. 1.) in the stem class it takes. Furthermore, Prefix Series 2010 is omitted, and optional Suffix Series 110 is added.

<table>
<thead>
<tr>
<th>INTRANSITIVE STEM WITH HORTATORY SUFFIX</th>
</tr>
</thead>
<tbody>
<tr>
<td>+Stem</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>S₁</td>
</tr>
<tr>
<td>111  -ban  311 -ku  711 -tik  821 -kik</td>
</tr>
<tr>
<td>to do before doing something else</td>
</tr>
<tr>
<td>hortatory  1st person plural exclama-tory</td>
</tr>
</tbody>
</table>

Chart IX

Formula 21: + S₁ + 110 + (310 + 710) / (710 + 820). Examples: (a) using Suffix 311 with stem
-muy to go up: muy-ban-ku-tik let's go up first
(+ S_i + 110 + 311 + 711); (b) using Suffix 821 with
stem -?o? to enter: ?o?-tik-kik let's go in (+ S_i
+ 711 + 821); (c) with stem -bat to go: bat-tik
let's go (+ S_i + 711). 23

2.2. The Imperative Intransitive verb
differs from the Imperative Transitive (1.2.) in
that, (1) it takes a different stem class, (2) it has
a different imperative suffix, (3) it has an optional
time Suffix 111, and (4) the optional Suffix Series
510, 610 and 710 which occur with the transitive
imperative do not occur with the intransitive im-
perative.

INTRANSITIVE STEM WITH IMPERATIVE SUFFIX

<table>
<thead>
<tr>
<th>+Stem</th>
<th>110</th>
<th>310</th>
<th>410</th>
<th>/820</th>
</tr>
</thead>
<tbody>
<tr>
<td>S_i</td>
<td>111 -ban</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
|       | to do be-
|       | fore doing |
|       | something |
|       | else       |
|       |             |
|       | 411 -ik    |   |   |     |
|       | plural     |   |   |     |
|       | exclama-
|       | tory       |
|       |             |
|       | 313 -an    |   |   |     |
|       | impera-
|       | tive      |

Chart X

Formula 22: + S_i + 110 + 310 + 410 / 820.
Examples: (a) using Suffix 111 with stem -ve? to
eat: ve?-ban-an eat first (+ S_i + 111 + 313); (b)
using Suffix 411 with stem -lok' to go out: lok'-an-ik
(you plural) get out (+ S_i +313 +411); (c) using
Suffix 721 with stem -bat to go: bat-an-kik (you

23 Stem -bat to go is irregular in the hortatory phrase in
that it does not take suffix 311.
singular or plural) go \((+ S_i + 313 \pm 821)\).

2.3. The Perfect Indicative Intransitive verb differs from the Perfect Passive Transitive (1.3.) in its stem class, and in that it takes Suffix 123 (or 124) instead of 121. It differs from the Perfect Indicative Transitive (1.4.) in that it does not take the obligatory Prefix Series 2010, nor the optional Suffix Series 210, and in that it takes Suffix 123 (or 124) instead of 122.

See Chart XI

Formula 23: \(+ 9020/(\pm 9010 + 3021)/(+ 9010 \pm 8010 \pm 6010 \pm [(+ 5010 + 4010) + 3022] + S_i + 120 + (\pm 410 + 513)/(511 \pm [\pm 610 + 711])/(512 \pm 712)\). Examples: (a) using 1st person exclusive with stem -?oč to enter: ?oč-em-un-ku-tik we (exclusive) have entered \((+ S_i + 123 + 511 \pm [\pm 611 + 711])\); (b) using 1st person inclusive with stem -ve? to eat: muk ve?-em-u-tik we (inclusive) have not eaten \((+ 7011 + S_i + 123 + 511 \pm 711)\); (c) using 2nd person with stem -hup' to get fat: toh hup'-em-ot you have gotten very fat \((\pm S_i + 123 + 512)\); (d) using 3rd person and stative suffix 124 with stem -vay to sleep: mi vay-al-ik-# are they asleep \((+ 9011 + S_i + 124 \pm 411 + 513)\), compare vay-em-ik-# they have been sleeping or they slept \((+ S_i + 123 + 513)\); (e) with stem -?ay was there: tey ?ay-em-un or ?ay-em-un tey I have been there \((+ 6012 + S_i + 123 + 511)\) or \((+ S_i + 123 + 511 \pm 6012)\).

2.4. The Intransitive Subjunctive verb phrase has an obligatory Particle Series 9020 or 3020, and one of two obligatory Suffix Series 330 or 810, which were not in the previous intransitive verb.
## INTRANSITIVE STEM WITH PERFECT OF STATIVE SUFFIX

<table>
<thead>
<tr>
<th>±9010</th>
<th>±8010</th>
<th>±7010</th>
<th>±6010</th>
<th>Stem</th>
<th>+120</th>
<th>±410</th>
<th>/(+510)</th>
<th>±610</th>
<th>±710</th>
</tr>
</thead>
<tbody>
<tr>
<td>9011</td>
<td>8011</td>
<td>7011</td>
<td>6011&quot;li?e</td>
<td>S&lt;sub&gt;i&lt;/sub&gt;</td>
<td>411 -ik</td>
<td>511 -un</td>
<td>611 -ku-</td>
<td>711 -tik</td>
<td></td>
</tr>
<tr>
<td>mi</td>
<td>ha'</td>
<td>muk</td>
<td>here</td>
<td>plural with 3rd person subject</td>
<td>exclusive with 1st person subject</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interrogative</td>
<td>emphatic</td>
<td>negative</td>
<td>9012 buy</td>
<td>512 -ot</td>
<td>712 -uk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>where</td>
<td>there</td>
<td>6012 tey</td>
<td>2nd person subject</td>
<td>plural with 2nd person</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interrogative</td>
<td>6013 bu</td>
<td>123 -em</td>
<td>perfect</td>
<td>3rd person subject</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>where</td>
<td>relative</td>
<td>513 -#-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>124 -al</td>
<td>static</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chart XI
The Intransitive Subjunctive differs from the Transitive Subjunctive (l. 5.) in that it takes Suffix Series 330. It also takes a different suffix of the 120 series, and omits Prefix Series 2010 and Suffix Series 210.

See Chart XII

Formula 24: \( + (9021 + S_i \pm 120)/9022/9023/3020 + S_i \) + \( (331 + 511 \pm [\pm 610 + 710])/(332 \pm 410)/(\pm 410 + 810) \). Examples: (a) using Suffix 331 with stem -vay to sleep; čak vay-k-un-ku-tik we (exclusive) are sleepy, desire to sleep (+ 3021 + S_i + 331 \pm 511 \pm [\pm 610 + 711]); (b) using Suffix 332 with stem -hulav to awaken. naka hulav-an-ik you (plural) might wake up (+ 9022 + S_i + 332 \pm 411); (c) using Suffix 811 with stem -poč to enter: ?ati ?oč-em-ik-uk e if they had entered (+ 9021 + S_i \pm 123 \pm 411 + 811); (d) using auxiliary verb (ta ŝ)-tal to come with stem -ve' to eat: ta ŝ-tal ve'?-uk he will come and eat (+ 5011 + 4011 + 3022 + S_i + 811); (e) using 9023 (permissive) with stem -âbteh to work: ?ak'-o²⁴ ?abteh-uk let him work (+ 9023 + S_i + 811).

2.5. The Indicative verb with intransitive stem is the only verb in the intransitive group that takes prefixes. For the prefixes which verbs with an intransitive stem share with verbs with transitive stems, compare the following chart with that of 1.7.1. Note espe-

²⁴?ak'-o is the imperative form of the stem -?ak' to give, so a literal translation would be give he works. ta ŝ-k-ak' ta ŝ-?abteh I will allow, permit him to work could be literally translated as I give it, he works.
<table>
<thead>
<tr>
<th>+9020</th>
<th>/3020</th>
<th>+Stem</th>
<th>+120</th>
<th>+330</th>
<th>+410</th>
<th>(+510)</th>
<th>(610)</th>
<th>(710)</th>
<th>+810</th>
</tr>
</thead>
<tbody>
<tr>
<td>9021</td>
<td>3021</td>
<td>Čak S_i</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>conditional desiderative</td>
<td>331 -ik- subjunctive with 1st person</td>
<td>411 -ik plural with 2nd and 3rd persons</td>
<td>511 -un 1st person exclusive</td>
<td>611 -ku- plural with 1st person</td>
<td>711 -tik 3rd person subjunctive</td>
<td>811 -uk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9022</td>
<td>naka</td>
<td>3022</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>probable auxiliary verb</td>
<td>332 -an 2nd person</td>
<td>123 -em perfect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9023</td>
<td>3ak'o</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>permissive</td>
<td>124 -al static</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chart XII
Tzotzil Grammar

cially that Suffix 612\textsuperscript{25} is not used with the transitive.

See Chart XIII

Formula 25: \( \pm 9010 \pm 8010 \pm 7010 \pm 6010 + (5010 + 4011)/4012/4013 + 3010 \pm 1010 + S_i \pm 110 \pm 410/ (+ 610 + 710) \pm 820 \). Examples: (a) with stem -hul to return: ha? li? ta y-i-hul-ku-tik e yes, here we will return \( (+ 8011 + 6011 + 5011 + 4011 + 3011 + S_i + [+ 611 + 711]) \); (b) with stem -?oč to enter: ta y-s-a-?oč-ban-kik you will go in first \( (+ 5011 + 4011 + 3012 + S_i \pm 111 \pm 821) \); (c) with stem -k'ot to arrive: mi tey ta y-s-#-k'ot-ilan-ik do they go (lit. arrive) there repeatedly \( (+ 9011 + 6012 + 5011 + 4011 + 3013 + S_i \pm 112 \pm 411) \); (d) with stem -?ay\textsuperscript{26} was there: muk l-i-?ay-u-tik we (inclusive) were not there \( (+ 7011 + 4012 + 3011 + S_i \pm [+ 612 + 711]) \); (e), (f), and (g) with stem -bat to go: mu y-s-#-bat he is not going \( (+ 7011 + 4011 + 3013 + S_i) \); muk y-s-#-bat he wouldn't go \( (+ 7011 + 4011 + 3013 + S_i) \); muk i-#-bat he didn't go \( (+ 7011 + 4013 + 3013 + S_i) \) (h) with stem -?abteh to work: bu ta y-s-#-?abteh where does he work \( (+ 9012 + 5011 + 4011 + 3013 + S_i) \).

\textsuperscript{25}Suffix 612 is not included in the charts in which the zero allomorph occurs. (See Sec. 6.)

\textsuperscript{26}Stem -?ay was there is only used in completive aspect although we have heard it with Prefix 4011 following Particle 7011. (See footnote 27.)

\textsuperscript{27}Negative particle 7011 is the only item that may replace Series 5010 as an obligatory item immediately preceding Prefix 4011 and seems to convey the idea of never.
# INTRANSITIVE STEMS WITH INDICATIVE AFFIXES

<table>
<thead>
<tr>
<th>Affix</th>
<th>Stem</th>
<th>Affix</th>
<th>Stem</th>
<th>Affix</th>
<th>Stem</th>
<th>Affix</th>
<th>Stem</th>
<th>Affix</th>
<th>Stem</th>
<th>Affix</th>
<th>Stem</th>
<th>Affix</th>
<th>Stem</th>
<th>Affix</th>
<th>Stem</th>
<th>Affix</th>
<th>Stem</th>
<th>Affix</th>
<th>Stem</th>
<th>Affix</th>
<th>Stem</th>
<th>Affix</th>
<th>Stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>9010</td>
<td>58010</td>
<td>7010</td>
<td>6010</td>
<td>5010</td>
<td>4010</td>
<td>+3010</td>
<td>1010</td>
<td>+ Stem</td>
<td>210</td>
<td>+410</td>
<td>740</td>
<td>+610</td>
<td>4710</td>
<td>+2820</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mi</td>
<td>ha?</td>
<td>muk</td>
<td>li?e</td>
<td>ta</td>
<td>ū-</td>
<td>-i-</td>
<td>-ča?- $\tilde{S}$</td>
<td>111</td>
<td>-ban</td>
<td>411</td>
<td>-lk</td>
<td>611</td>
<td>-ku-</td>
<td>711</td>
<td>-cik</td>
<td>821</td>
<td>-kik</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interrogative</td>
<td>Emphatic</td>
<td>Negative</td>
<td>Here</td>
<td>Inceptive</td>
<td>Aspect</td>
<td>Present</td>
<td>Punctiliar</td>
<td>1st person</td>
<td>to do</td>
<td>a</td>
<td>second</td>
<td>time</td>
<td>to do before doing something else</td>
<td>plural with 2nd and 3rd person</td>
<td>exclusive</td>
<td>plural</td>
<td>exclamatory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9012</td>
<td>buy</td>
<td>6012</td>
<td>tey</td>
<td>there</td>
<td>4012</td>
<td>3012</td>
<td>-a-</td>
<td>2nd person</td>
<td>to do a third time</td>
<td>etc.</td>
<td>112</td>
<td>-ulan</td>
<td>612</td>
<td>-u-</td>
<td>repetitive</td>
<td>inclusive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>where</td>
<td>Interrogative</td>
<td>6013</td>
<td>bu</td>
<td>there</td>
<td>4013</td>
<td>3013</td>
<td>-ā-</td>
<td>past punctiliar with 3rd person</td>
<td>3rd person</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chart XIII
Tzotzil Grammar

3. Verbs with Positional stems differ from intransitive stems in that all positional stems which do not have the hortatory suffix 311, take the stative suffix 124. They also differ from those with transitive or intransitive stems in that the positional stems usually indicate the position of the subject (lying, standing, etc.). (Internally the stems differ in that transitive and intransitive stems may be either simple or derived, whereas the positional stems are always simple. When a derivational suffix is added they fall into one of the other two classes.)

3.1. Hortatory verbs with positional stems do not take the optional Suffixes 111 and 821 as do Hortatory verbs with intransitive stems.

<table>
<thead>
<tr>
<th>+Stem</th>
<th>+310</th>
<th>+710</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sp</td>
<td>311 -ku</td>
<td>711 -tik</td>
</tr>
<tr>
<td>hortatory</td>
<td>1st person</td>
<td>plural</td>
</tr>
</tbody>
</table>

Chart XIV

Formula 26: + Sp + 310 + 710. Example using stem -čot to be seated: čot-ku-tik let's be seated (+ Sp + 311 + 711).

3.2. Imperative verbs with positional stems differ from Hortatory phrases in that they have obligatory Suffix 124.
Mayan Studies I

POSITIONAL STEMS WITH IMPERATIVE SUFFIX

<table>
<thead>
<tr>
<th>+Stem</th>
<th>+120</th>
<th>+310</th>
<th>±410</th>
</tr>
</thead>
<tbody>
<tr>
<td>S_p</td>
<td></td>
<td></td>
<td>411 -ik</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2nd person plural</td>
</tr>
<tr>
<td></td>
<td></td>
<td>313 -an</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>imperative</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>124 -1-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>stative</td>
<td></td>
</tr>
</tbody>
</table>

Chart XV

Formula 27: + S_p + 120 + 310 + 410. Example with stem -va? to stand: va?-l-an-ik (you plural) stand up (+ S_p + 124 + 313 + 411).

3.3. Indicative mode verbs with positional stems differ from the Imperative verbs in that instead of obligatory Suffix Series 310, they have obligatory Suffix Series 510, and optional Suffix Series 410, 610 and 710.

See Chart XVI

Formula 28: ± 9010 ± 8010 ± 7010 ± 6010 + S_p + 120 + (± 410 + 513)/(511 ± [± 610 + 711])/(512 ± 712). Examples: (a) using 1st person with stem -nak- to be at home, dwell: ha? nak-al-un-ku-tik yes, we (exclusive) are at home (± 8011 + S_p + 124 + 511 ± [± 611 + 711]); (b) using 2nd person with stem -puč'- to be lying down: tey puč'-ul-oš-uk you
### POSITIONAL STEM WITH STATIVE SUFFIX

<table>
<thead>
<tr>
<th>±9010</th>
<th>±8010</th>
<th>±7010</th>
<th>±6010</th>
<th>+Stem</th>
<th>+120</th>
<th>±410</th>
<th>/(+510)</th>
<th>±610</th>
<th>±710</th>
</tr>
</thead>
<tbody>
<tr>
<td>9011 mi</td>
<td>8011 ha?</td>
<td>7011 muk</td>
<td>6011 liwe</td>
<td>Sp</td>
<td>411 -ik</td>
<td>511 -un</td>
<td>611 -ku-</td>
<td>plural with 3rd person</td>
<td>711 -tik</td>
</tr>
<tr>
<td>interrogative</td>
<td>emphatic</td>
<td>negative</td>
<td>here</td>
<td></td>
<td>plural with 3rd person</td>
<td>1st person exclusive</td>
<td>plural with 1st person</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9012 buy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>where</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interrogative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6012 tey</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>there</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6013 bu</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>where</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>relative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>124 -al</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>static</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chart XVI
(plural) are lying down there ($\pm 6012 + S_p + 124 + 512 \pm 712$); (c) using 3rd person with stem -kot- to stand on all fours: bu kot-ol-ik where are they standing ($\pm 9012 + S_p + 124 \pm 411$).

3.4. Verb phrases with the subjunctive particles on positional stems differ from the corresponding verb phrases with intransitive stems in that Suffix 124 is obligatory with every particle of Series 9020 and 3020 used in verb phrases with positional stems.

See Chart XVII

Formula 29: $+ 9020 \,(/ \pm 9010 + 3021)\,(/ \pm 9010 \pm 8010 \pm 7010 \pm 6010 \pm [\pm 5011 + 4011] + 3022) + S_p + 120 + (331 + 510 \pm [\pm 610 + 710])\,(/ \pm 332 \pm 410)\,(/ \pm 410 + 810)$. Examples: (a) using 1st person and desiderative particle with stem -keh- to kneel: čak keh-l-ik-un I desire to kneel ($+ 3021 + S_p + 124 + 331 + 511$); (b) using 2nd person and probable particle with stem -nuh to be lying face down: naka nuh-l-an-ik you (plural) might be lying face down ($+ 9022 + S_p + 124 + 332 \pm 411$); (c) using 3rd person and conditional particle with stem -kuš- to be alive: ?ati kuš-l-ik-uk e if they were alive ($+ 9021 + S_p + 124 \pm 411 + 811$); (d) with stem -nak to live, dwell: ?oč nak-l-uk he came in to dwell ($+ 3022 + S_p + 124 + 811$); (e) with stem -puč'- to be lying down: ?ak'o puč'-l-ik-un let me lie down ($+ 9023 + S_p + 124 + 331 + 511$).

4. The Substantive verb ?oy constitutes a distinct class of predicate verb stem in that (1) it does not take Prefix Series 1010, 2010, 3010, 4010 or 5010, and (2) Particle Series 6010 is obligatory in the imperative verb phrase type
### POSITIONAL STEMS WITH SUBJUNCTIVE PARTICLES

<table>
<thead>
<tr>
<th>Positional Stem</th>
<th>Subjunctive Particles</th>
</tr>
</thead>
<tbody>
<tr>
<td>+9020 /3020</td>
<td>+Stem +120 +330 +410 /+510 t(+610 +710) /+810</td>
</tr>
<tr>
<td>9021 /dat/ 3021 čak</td>
<td>Sp 331 -ık 411 -ık 511 -un 611 -ku- 711 -tik 811 -uk</td>
</tr>
<tr>
<td>conditional desiderative</td>
<td>1st person subjunctive plural with 2nd person and 3rd person exclusive plural with 1st person subjunctive 3rd person subjunctive</td>
</tr>
<tr>
<td>9022 naka 3022</td>
<td>332 -an 2nd person subjunctive</td>
</tr>
<tr>
<td>probable auxiliary verb</td>
<td></td>
</tr>
<tr>
<td>9023 ʔak'o</td>
<td>permissive 124 -1- stative</td>
</tr>
</tbody>
</table>

Chart XVII
Mayan Studies 1

and in the indicative and subjunctive verb phrase types unless immediately followed by a noun expression either spoken or culturally understood.

4.1. The Imperative Substantive verb phrase differs from the other imperative verb phrases in that it takes an obligatory locative particle.

SUBSTANTIVE STEM WITH IMPERATIVE SUFFIX

<table>
<thead>
<tr>
<th>+6010</th>
<th>+Stem</th>
<th>+310</th>
<th>+410</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ss</td>
<td>?oy</td>
<td>411</td>
<td>-ik</td>
</tr>
<tr>
<td>to be</td>
<td></td>
<td>2nd</td>
<td>plural</td>
</tr>
</tbody>
</table>

6012 tey
there

313 -an
imperative

Chart XVIII

Formula 30: +6010 + Ss + 310 + 410. Example: tey ?oy-an-ik (you plural) be there (+ 6012 + Ss + 313 + 411).

4.2. The indicative Substantive verbs are usually immediately preceded by a Particle from Series 6010 or an attributive particle and also take optional Particle Series 9010, 8010 and 7010.

See Chart XIX
# Substantive Stem in Indicative Mode

<table>
<thead>
<tr>
<th>+9010</th>
<th>+8010</th>
<th>+7010</th>
<th>+6010</th>
<th>+Stem</th>
<th>+410</th>
<th>/+510</th>
<th>÷(÷610)</th>
<th>÷710</th>
</tr>
</thead>
<tbody>
<tr>
<td>9011</td>
<td>8011</td>
<td>7011</td>
<td>6011</td>
<td>5S</td>
<td>411</td>
<td>-ik</td>
<td>511 -un</td>
<td>611 -ku-</td>
</tr>
<tr>
<td>mi</td>
<td>ha?</td>
<td>muk</td>
<td>li?e</td>
<td>s</td>
<td>oy</td>
<td></td>
<td>1st person</td>
<td>exclusive</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>with 1st person</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9012</td>
<td>buy</td>
<td></td>
<td></td>
<td></td>
<td>6012</td>
<td>tey</td>
<td>512 -ot</td>
<td>712 -uk</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2nd person</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9013</td>
<td>bu</td>
<td></td>
<td></td>
<td></td>
<td>6013</td>
<td>bu</td>
<td>513 -#-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3rd person</td>
<td></td>
</tr>
</tbody>
</table>

|       |       |       |       |       |       |        |           |        |        |
| Chart XIX |
Mayan Studies I

Formula 31: \( \pm 9010 \pm 8010 \pm 7010 + 6010 + S_s + (\pm 410 + 513)/(511 \pm [\pm 610 + 711])/(512 \pm 712) \). Examples: (a) ha? li ?oy-un-ku-tik e yes, we (exclusive) are here \( (\pm 8011 + 6011 + S_s + 511 \pm [\pm 611 + 711]) \); (b) mi tey ?oy-oš-uk are you (plural) there \( (\pm 9011 + 6012 + S_s + 512 \pm 712) \); (c) muk bu ?oy-ik- # they are not anywhere (around) \( (\pm 7011 + 6013 + S_s \pm 411 \pm 513) \); (d) toh lek ?oy-# it is very good (superlative particle + attributive particle + Ss + 513).

4.3. The substantive stem with subjunctive suffix differs from the other subjunctive verb phrases in that the subjunctive particle 3021 comes before the attributive and locative particle Series 6010. It takes the same subjunctive suffixes Series 330 and, or 810 as the subjunctive intransitive word-phrases.

See Chart XX

Formula 32: \( \pm 9020/3020 + 6010 + S_s + (331 + 511 \pm [\pm 610 + 710])/(332 \pm 410)/(\pm 410 + 810) \). Examples: (a) ?ati lek ?oy-ik-u-tik e if we (inclusive) are well \( (\pm 9021 + \text{attributive} + S_s + 331 + 511 \pm 711) \); (b) ?ati tey ?oy-an-ik e if you (plural) are there \( (\pm 9021 + 6012 + S_s + 332 \pm 411) \); (c) čak li ?oy-ik-uk e they would like to be here \( (\pm 3021 + 6011 + S_s \pm 411 + 811) \).

5. The Descriptive predicate verb phrases which have nouns or adjectives as their stems are of two types, namely, stative and conditional. They are distinct from the verb phrase types with transitive, intransitive and positional stems in that Particle Series 9010, 8010 or 7010 is obligatory in the indicative mode, Series 9020 and 3020 (obliga-
# Substantive Stem with Subjunctive Suffixes

<table>
<thead>
<tr>
<th>9020</th>
<th>3020</th>
<th>6010</th>
<th>Stem</th>
<th>(330)</th>
<th>(410)</th>
<th>(410)</th>
<th>(510)</th>
<th>([+610] +[+710])</th>
<th>/810</th>
</tr>
</thead>
<tbody>
<tr>
<td>9021 รายการ 3021 คำ</td>
<td>6011 ไล่</td>
<td>Sg อย</td>
<td>331 -ik</td>
<td>411 -ik</td>
<td>511 -un</td>
<td>611 -ku</td>
<td>711 -tik</td>
<td>811 -uk</td>
<td></td>
</tr>
<tr>
<td>conditional desiderative</td>
<td>here</td>
<td>to be</td>
<td>1st person subjunctive</td>
<td>plural with 2nd and 3rd person</td>
<td>1st person exclusive</td>
<td>plural with 1st person</td>
<td>3rd person subjunctive</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 6012 ที่ย์ | 332 -an |
| there | 2nd person subjunctive |

**Chart XX**
Mayan Studies I

tory in subjunctive mode) have only two items, and suffix 811 comes before the person suffixes. They are similar to the substantive verb phrases in that they do not take any prefixes, but are distinct from them in that they do not take Particle Series 6010, and in that they only take one subjunctive suffix (811).

See Chart XXI

Formula 33 for indicative: + 9010/8010/superlative/7010 + $d + (± 410 + 513)/(511 ± [± 610 + 711]/(512 ± 712)). Examples: (a) using emphatic particle with noun stem vinik man: ha? vinik-un-ku-tik yes, we (exclusive) are men (+ 8011 + $d + 511 ± [± 611 + 711]); (b) using negative particle with adjective stem tot strong: muk ñot # it is not hard, he is not strong (+ 7011 + $d + 513); (c) using superlative particle with adjective stem bik'it small: toh bik'it-it ot you are very small (+ superlative + $d + 512); (d) with noun stems ?uk'um river and nab lake: mi ?uk'um, mi nab is it a river or a lake (+ 9011 + $d + 513); (e) with adjective stem ñoh red: ha?-ik ñoh they are red (+ 8011 + $d + 513).

Formula 34 with Subjunctive: + 9021/3021 + $d + (± 410 + 810 + 513)/(810 + 511 ± [± 610 + 711]/(810 + 512 ± 712)). Examples: (a) with noun stem hk'uleh a rich (person): ?ati hk'uleh-uk-u-tik e if we (inclusive) were rich (+ 9021 + $d + 811 + 511 ± 711); (b) with noun stem ñi? dog: ?ati ñi?-uk-ot e if you were a dog (+ 9021 + $d + 811 + 512); (c) with adjective stem muk' big: ñak muk'-ik-uk-# they would like to be big (+ 3021 + $d ± 411 + 811 + 513).
### DESCRIPTIVE STEMS WITH STATIVE AND CONDITIONAL PARTICLES AND SUFFIXES

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Stem</th>
<th>Suffix</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>+9010</td>
<td>8010</td>
<td>7010</td>
<td>3020</td>
</tr>
<tr>
<td>9011 mi</td>
<td>8011 ha?</td>
<td>7011 muk</td>
<td>3021 čak</td>
</tr>
<tr>
<td>interrogative</td>
<td>emphatic</td>
<td>negative</td>
<td>desiderative</td>
</tr>
<tr>
<td>+9020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9021 ḏatie</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>conditional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>+410</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>411 -ik</td>
<td>811 -uk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>plural with 3rd person</td>
<td>subjunctive</td>
<td>1st person</td>
<td>exclusive plural with 1st person</td>
</tr>
<tr>
<td>+810</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>511 -un</td>
<td>611 -ku-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st person exclusive</td>
<td>plural with 1st person</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+510</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>512 -ot</td>
<td>712 -uk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd person</td>
<td>plural with 2nd person</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+610</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>513 -#</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd person</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Chart XXI**
Mayan Studies I

6. Some of the morphemes have two or more allomorphs\(^{28}\) varying according to the morphemes or phonemes with which they occur.

Particle 7011 muk\(\infty\)mu: mu is used in present punctiliar, muk elsewhere.

Prefix 4011 -\(\tilde{s}\)-\(\sim\)-\#-: allomorph -\#- is used preceding allomorph h- of 2011 and allomorph s- of 2013. Allomorph -\(\tilde{s}\)- occurs elsewhere.

Prefix 4012 1-/n- are free variants of the same morpheme.

Prefix 4013 i- \(\sim\) hi-: allomorph hi- occurs in utterance initial position, allomorph i- occurs elsewhere.

Prefix 4014 (la- \(\sim\) lah-)/ (\(\tilde{?}a\)- \(\sim\) \(\tilde{?}ah\)-): allomorphs la-/\(\tilde{?}a\)- occur immediately preceding Prefix 2012, allomorph h- of Prefix 2011 and allomorph s- of Prefix 2013; allomorphs lah-/\(\tilde{?}ah\)- occur elsewhere.

Prefixes 2011 k- \(\sim\) h-, 2012 av- \(\sim\) a-, and 2013 y- \(\sim\) s- \(\sim\)#-: allomorphs k-, av, and y- precede stems beginning with a glottal stop, (see footnote 8); allomorphs h-, a- and s- precede stems beginning with the other consonants. Allomorph #- is used in place of allomorph y- when immediately preceded by Prefix 4011.

Suffix 112 -ilan \(\sim\)-ulan: allomorph -ilan occurs when the final vowel of the stem is u or o; allomorph -ulan occurs when the final vowel of the stem is a, e, or i.

\(^{28}\)~ indicates that the morpheme alternates are phonologically conditioned, \(\infty\) that they are morphologically conditioned and / that they are free variants. Examples for the allomorphs described in this section may be found following the charts and formulas where the particular morphemes are described.
Suffix 124 -l -∞ -al ~ -el ~ -il ~ -ol
~ -ul: allomorph -l- occurs with positional stems when immediately followed by Suffix 313, 331, 332 or 811: allomorphs -al ~ -el ~ -il ~ -ol
~ -ul occur elsewhere. The vowel of this suffix agrees with the vowel nucleus of the stem.

Suffix 211 -be -∞ -b-: allomorph -b- occurs preceding suffixes 312, 321, 511 or 512; allomorph -be occurs elsewhere.

Suffix 312 -o -∞ -#-: allomorph -o occurs in verb phrase final position; allomorph -#- occurs when immediately followed by 411 or 511.

Suffix 321 -at -∞ -e: allomorph -e occurs immediately after the stem; allomorph -at may be preceded by 211. With some stems either allomorph may be used, with others there seems to be a preference.

Suffix 331 -ik -∞ -k-: allomorph -ik is used following 124, allomorph -k- occurs elsewhere.

Suffix 511 -un -∞ -u-: allomorph -u- is used when immediately followed by suffix 711; allomorph -un is used elsewhere.

Suffix 512 -ot -∞ -oš-: allomorph -ot occurs in word-phrase final position; allomorph -oš- is used when followed by suffix 712.

Suffix 612 -u- -∞ -#-: allomorph -#- is used with transitive stems and when immediately preceded by Suffix 511; allomorph -u- is used with intransitive stems.
SHOWING THE RELATIVE ORDERS OF

<table>
<thead>
<tr>
<th>10010</th>
<th>9010</th>
<th>8010</th>
<th>7010</th>
<th>6010</th>
<th>5010</th>
<th>4010</th>
<th>3010</th>
</tr>
</thead>
<tbody>
<tr>
<td>9011 mi</td>
<td>9021 'atlie</td>
<td>8011</td>
<td>ha³</td>
<td>7011 muk</td>
<td>6011 li⁴</td>
<td>5011 ta</td>
<td>4011 $-</td>
</tr>
<tr>
<td>interroga-</td>
<td>condi-</td>
<td>emphatic</td>
<td>negative</td>
<td>here</td>
<td>inceptive</td>
<td>present</td>
<td>punctil-</td>
</tr>
<tr>
<td>tive</td>
<td>tional</td>
<td></td>
<td></td>
<td></td>
<td>aspect</td>
<td>1st person</td>
<td>subject or object</td>
</tr>
</tbody>
</table>

9012 buy 9022 naka
where probable
interroga-
tive

6012 tey 5012 lah
there complete-
tive aspect

4012 l- 3012 -a-
past punc-
til with son sub-ject or
2nd person

9023 'at'ko
permissive

6013 bu
where relative

4013 hi- 3013 -i-
past punc-
til with subject or
3rd person object

9013 bu
<table>
<thead>
<tr>
<th>3020</th>
<th>2010</th>
<th>1010</th>
<th>Stem</th>
<th>110</th>
<th>120</th>
<th>210</th>
<th>310</th>
<th>320</th>
<th>330</th>
<th>410</th>
<th>510</th>
<th>610</th>
<th>710</th>
<th>810</th>
<th>820</th>
</tr>
</thead>
<tbody>
<tr>
<td>3021</td>
<td>Çak</td>
<td>2011 k-</td>
<td>1011 -ç-</td>
<td>$S_p$</td>
<td>111 -ban</td>
<td>121 -bil</td>
<td>211 -be</td>
<td>311 -ku-</td>
<td>321 -at</td>
<td>331 -ik-</td>
<td>411 -ik</td>
<td>511 -an</td>
<td>611 -ku-</td>
<td>711 -tik</td>
<td>811 -uk</td>
</tr>
<tr>
<td>desiderative</td>
<td>1st person transitive</td>
<td>subject</td>
<td>to do</td>
<td>first</td>
<td>or before</td>
<td>perfect</td>
<td>passive</td>
<td>relative</td>
<td>subjunctive</td>
<td>with transitive stems</td>
<td>plural</td>
<td>1st person object or subject</td>
<td>1st person plural</td>
<td>3rd person</td>
<td>exclamationary</td>
</tr>
<tr>
<td>3022</td>
<td>aux-</td>
<td>2012</td>
<td>1012 -ç~-</td>
<td>$S_q$</td>
<td>112 -ulan</td>
<td>122 -oh</td>
<td></td>
<td></td>
<td></td>
<td>312 -o</td>
<td>332 -an</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>auxiliary</td>
<td>2nd person</td>
<td>verb</td>
<td>to do</td>
<td>a</td>
<td>intransitive</td>
<td>to do</td>
<td>repeatedly</td>
<td>perfect</td>
<td>imperative</td>
<td>with transitive stems</td>
<td>subjunctive</td>
<td>with 2nd person</td>
<td>object</td>
<td>plural</td>
<td>suffix 512</td>
</tr>
<tr>
<td>indicating</td>
<td>3rd time</td>
<td>direction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013 y-</td>
<td>1013 -çan-</td>
<td>$S_p$</td>
<td></td>
<td>123 -em</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>313 -an</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd person</td>
<td>subject</td>
<td>positional</td>
<td>to do</td>
<td>a</td>
<td>4th time</td>
<td>perfect</td>
<td>on transitive stems</td>
<td>imperative</td>
<td>with intransitive stems</td>
<td></td>
<td></td>
<td>513 -$g$-</td>
<td></td>
<td>3rd person</td>
<td></td>
</tr>
<tr>
<td>etc.</td>
<td>$S_q$</td>
<td>substantive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>etc.</td>
<td>$S_d$</td>
<td>descriptive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
IXII. Clause Structure

by Ray Elliott
0. This paper is a preliminary description of Ixil\(^1\) clause types and their component parts. A lower level comprised of word and phrase structure is described here only in so far as such description serves to define and distinguish clause types and their component parts. The full description of this level is reserved for separate treatment later. Higher layers such as sentence and paragraph structures which appear to be considerably more complex than clause structure will also be left for subsequent treatment. Commands, negations, questions and non-clause sentence types will be included in the projected discussion of sentence types, and hence are not treated in this paper.\(^2\)

\(^1\)Ixil is a language of the Mayan family spoken in the northern part of the department of Quiché in Guatemala's northwest highlands by an estimated 25,000 people comprising three somewhat divergent but mutually intelligible dialects corresponding roughly to the municipalities of Nebaj, Chajul and Cotzal. Data in this paper are from the Nebaj dialect and were obtained on the field in 1953-1957 under the sponsorship of the Summer Institute of Linguistics. Principal informants were Pedro Cedillo and Jacinto Pérez. I am indebted to Robert Longacre for suggestive and helpful criticism in developing this presentation.

\(^2\)The assumptions and procedures underlying this paper are given by Longacre in "String Constituent Analysis," *Language*, 36, 63-88. The following definitions for clause and sentence are from footnotes 7 (p. 66) and 21 (p. 79) of that article.

A tentative definition of clause might be as a class of hypertagmemes of a hierarchical order ranking above such hypertagmemes as the word and/or phrase on the one hand and below such hypertagmemes as the sentence and paragraph on the
Mayan Studies I

The data are presented with terminology adapted from the tagmemic approach\(^3\) to grammatical analysis.

other hand. It typically nucleates around a non-coordinate nonsubordinate construction and expresses some such relationship as predication or equation.

A tentative definition of sentence might be as a class of hypertagmemes of a hierarchical order ranking above such hypertagmemes as the clause on the one hand and below such hypertagmemes as the paragraph on the other. It may consist of a single clause, of a patterned combination of clauses, or of a clause fragment (usually of phrasal structure and often dependent in sense on other sentences in the linguistic or situational context). It tends to be characterized by more closure and grammatical independence than the clause, as evidenced by introducing and closing particles such as affirmation, question, and conditional structures. For a discussion of problems raised by the occurrence of 'dependent sentences' see a forthcoming paper of Viola Waterhouse, Independent and Dependent Sentences.

It is assumed here that for many languages dependent and independent clauses may be joined in the same clause types provided that this distinction does not set up differing internal relationships in dependent versus independent clauses. According to section 4. of the Longacre article the presence of a particular introductory particle in dependent clauses versus absence of this particle in independent clauses is an insufficient criterion for setting up structurally contrastive clause types--unless presence of the subordinating particle correlates with some other structural difference internal to the dependent versus the independent clause.

\(^3\)Cf. Kenneth L. Pike, Language in Relation to a Unified Theory of the Structure of Human Behavior. (Glendale, California: Summer Institute of Linguistics; part one, 1954, part two 1955), part one, chapter 7. The term tagmeme in this paper (and in Pike's revised terminology) is equivalent to the term grameme in these two volumes of Pike's.

130
A tagmeme is the correlation of a grammatical-function slot with the classes of items that may occur in or 'fill' that slot. In the interest of simplicity of presentation, the clause formulas in the subsections of 1. represent the tagmemes by unit symbols which do not indicate the classes of items which manifest the tagmemes. The discussion in 1. describes the manifesting classes and other features within the clause-level tagmemes that are pertinent to the definition and distinction of the clause types. In the subsections of 2. the clause-level tagmemes are discussed in a more specific way as to the included tagmemes which comprise them.

The plus symbol + in the formulas indicates obligatory occurrence, that is, a plus tagmeme must occur in the clause; the plus-or-minus symbol ± indicates non-obligatory occurrence, that is, a plus-or-minus tagmeme may occur in the clause or it may not.

1. Ixil clauses are divided in terms of internal structure into four types: intransitive, transitive, semi-transitive and equative.

1.1. The formula for intransitive clause in its minimum expression is + P-1 + S, where P-1 represents the intransitive predicate tagmeme manifested by an intransitive verb expression (see 2.1.1.) and S represents the subject tagmeme manifested by a substantive expression (see 2.2.1.).
Mayan Studies I

Examples:⁴ la achin aṅ you will bathe (la achin will bathe manifests P-1, aṅ you manifests S), cat u l u naj the man came (cat u l came manifests P-1, u naj the man manifests S).

In its maximum expression the intransitive clause may be formulized as + P-1 + S + B + M + L + T + C, where B represents the benefactive tagmeme, M the manner tagmeme, L the location tagmeme, T the time tagmeme and C the cause tagmeme (see 2.5.1. through 2.5.5. for the types of items which manifest B, M, L, T and C tagmemes). M or T may optionally occur immediately preceding the P-1 tagmeme. Such occurrence is statistically less frequent, is in mutually exclusive distribution in any given clause with the occurrence of the same tagmeme in its usual lineal order, and superimposes a meaning of emphasis with reference to the P-1 tagmeme.

There are no observed instances of more than two other tagmemes in addition to P-1 and S in the

---

⁴Ixil phonemes (expressed in symbols of the international phonetic alphabet): aspirated explosive stops p t k q at bilabial, interdental, velar, back-velar and glottal positions; implosive bilabial stop b; glottalized explosive stops t? k? q?; affricates ts tj ts at alveolar, alveopalatal and retroflexed alveopalatal positions; glottalized affricates ts tj tj ts?; fricatives s ŋ s j s x at bilabial, alveolar, alveopalatal, retroflexed alveopalatal and velar positions; nasals m n; lateral l; flap r; unrounded vowels i ə a ɪ ʊ in front high close, front mid open, central low open, back mid open and back high close positions; and semi-vowel y. These phonemes are represented in the government-approved orthography employed in this paper by the symbols: p t c/qu k '; b; t' c'/q'u k'; tz ch tx; tz' ch' tx'; v s š x j; m n; l; r; i e a o u; y.
same clause. Deviations from the lineal order B M L T C are relatively rare. A few commonly observed patterns are:

\[ P-1 \, S \, B: \text{cat xo'v in te naj I was afraid of the man (cat xo'v was afraid manifests P-1, in I manifests S, te naj his-direction the man manifests B);} \]

\[ P-1 \, S \, M: \text{cat ul i stoj he came afoot (cat ul came manifests P-1, i he manifests S, stoj afoot manifests M);} \]

\[ P-1 \, S \, L \, T: \text{la ben in tu tostitx cabi I will go to church day after tomorrow (la ben will go manifests P-1, in I manifests S, tu tostitx at church manifests L, cabi day after tomorrow manifests T);} \]

\[ P-1 \, S \, T \, C: \text{mat in chel chitu' tan nun molole' I go immediately because I am called (mat go manifests P-1, in I manifests S, chel chitu' immediately manifests T, tan nun molole' because I am called manifests C);} \]

Examples in which a tagmeme precedes the P-1 tagmeme:

\[ M \, P-1 \, S: \text{yaquix cat ul ivi' ixoj strongly came the woman's head (or, more freely, the woman became very angry) (yaquix strongly manifests M, cat ul came manifests P-1, i-ivi' ixoj her-head woman manifests S);} \]

---

5One clause has been observed in which only the tagmemes P-1 and L are manifested; the subject, however, is implicitly present in the linguistic and non-linguistic environment of the clause.

6'tu' indicates location in or location at and is not directional (see 2.5.3.). Directional indications for 'tu' in the glosses are derived from a correlation of 'tu' with the action of the verb or with the linguistic or non-linguistic context.
TP-1 SL: calen la ben in tu uncabal tomorrow I will go home (calen tomorrow manifests T, la ben will go manifests P-1, iin I manifests S, tu uncabal to my house manifests L).

1.2. The formula for the transitive clause in its minimum expression is + P-2, where P-2 represents the transitive predicate tagmeme manifested by a transitive verb expression (see 2.1.2.). Examples: la vechbu I will eat, ni kabi we hear, cat tala he said.

In its maximum expression the transitive clause may be formularized as + P-2 + A + O\(^7\) + B + M + L + T + C, where A represents the actor tagmeme manifested by a substantive expression (see 2.2.2.), and O represents the object tagmeme manifested by a substantive expression (see 2.3.). For B, M, L, T, and C see 1.1. and 2.5.1. through 2.5.5. Tagmemes O or M or L or T may occur optionally immediately preceding the P-2 tagmeme. Such occurrence is statistically less frequent, is in mutually exclusive distribution in any given clause with the occurrence of the same tagmeme in its usual lineal order, and superimposes a meaning of emphasis with reference to the P-2 tagmeme.

There are no observed instances of more than four other tagmemes in addition to P-2 in the same clause. A few commonly observed patterns are:

P-2 A O B: cat tal u naj u suchil sve the man told me the truth (cat tal he told manifests P-2, u naj the man manifests A, u suchil the truth manifests O, sve to me manifests B);

\(^7\)For special features of the lineal order of occurrence of the allotagmas of the object tagmeme, see 2.3. Allotagma stands in the same relationship to tagmeme as does allomorph to morpheme and allophone to phoneme.
Ixil Grammar

P-2 A M: tak'onv ac sjunal he works alone (tak'onv he works manifests P-2, ac he manifests A, sjunal alone manifests M);

P-2 O B L: la val uma'l u yol se tu co'm I'll tell you something in the cornfield (la val I will tell manifests P-2, uma'l u yol one the word manifests O, se to you manifests B, tu co'm in the cornfield manifests L);

P-2 L T: tul tu vitz chel he comes from the mountain today (tul he comes manifests P-2, tu vits at the mountain manifests L, chel today manifests T);

P-2 A O C: cat ik'os naj ixoj ta'n uma'l u ju'si' the man hit the woman with a stick of firewood (cat ik'os he hit manifests P-2, naj man manifests A, ixoj woman manifests O, ta'n uma'l u ju'si' with a stick of firewood manifests C).

Examples in which a tagmeme precedes the P-2 tagmeme:

O P-2 B T: ye'xcam cat val se e'te I didn't say a thing to you yesterday (ye'xcam nothing manifests O, cat val I said manifests P-2, se to you manifests B, e'te yesterday manifests T);

M P-2 A O L: yaquix cat tulsa ixoj ivi' ti' u mes strongly the woman caused her head to come against the cat (or, more freely, the woman raged furiously at the cat) (yaquix strongly manifests M, cat tulsa she caused-to-come manifests P-2, ixoj woman manifests A, i-ivi' her-head manifests O, ti' u mes with (against) the cat manifests L);

---

8The inverted word order in the gloss represents an attempt to convey into English the more or less subtle change of emphasis involved in the Ixil word order.
Mayan Studies I

L P-2 O: tzi' xamal cat vabicat u yol by the fire I heard it (tzi' xamal edge fire manifests L, cat vabicat I heard-there manifests P-2, u yol the word manifests O);

T P-2 O L: cu'k'i cat tabi ve't iyan u Tiix tu pe' in the afternoon he heard God walking in the garden (cu'k'i afternoon manifests T, cat tabi he heard manifests P-2, i-xan u Tiix his-walk the God manifests O, tu pe' in the garden manifests L).

The transitive clause is distinguished from the intransitive clause by the following features:

(1) Within the predicate (nuclear) tagmeme, P-2 differs from P-1 in that the P-2 verb stem obligatorily contains a pronominal actor prefix, while the P-1 verb stem does not. While it is true that an intransitive clause may contain a pronominal subject indicator, there is a clear difference in function between the pronominal elements indicating subject of intransitive clauses and the pronominal elements indicating actor of transitive clauses. An intransitive clause must contain either a pronominal element or a noun expression manifesting the subject tagmeme, but the pronominal element as such is not obligatory. A transitive clause, on the contrary, must contain a pronominal verb prefix indicating actor, and, in addition, may not contain a clause-level actor tagmeme.

(2) As to the other (peripheral) tagmemes, the transitive clause frequently (but not obligatorily) contains an object tagmeme, while the intransitive clause does not.

This correlation of the obligatory occurrence of an actor prefix within the nuclear tagmeme with the potential occurrence of an object tagmeme among the peripheral tagmemes constitutes a fea-
ture which clearly distinguishes the transitive clause from the intransitive clause.

(3) The subject tagmeme of the intransitive clause and the object tagmeme of the transitive clause may be manifested by the same class of pronominal post-clitics. In both the transitive clause and the intransitive clause, this class of post-clitics occurs in the same position with relation to the verb stem and phonologically is closely tied to it. In the transitive clause this class of post-clitics is in mutually exclusive distribution (in any given clause) with a noun-expression filler of the object slot. In the intransitive clause this class of post-clitics is in mutually exclusive distribution (in any given clause) with a noun-expression filler of the subject slot. In the transitive clause this class of post-clitics filling the object slot often occurs in the same clause with a noun-expression filler of the actor slot.

The subject of an intransitive clause and the object of a transitive clause are manifested by the same class (pronominal post-clitics and noun-expressions), but the tagmemes are different because the two slots subject vs. object in which the class may occur are sharply different in grammatical function. These two tagmemes are diagnostic of the two clause types.

9There is a distributional basis for terming the intransitive subject pronoun a post-clitic while terming the transitive actor-indicating pronoun a verb prefix. The actor-indicating pronoun is tightly bound to the verb stem and nothing occurs between it and the stem; the intransitive subject pronoun is less closely bound to the verb stem and a class of post-clitics here termed style (see 2.1.1.) may occur between it and the intransitive verb stem.

10In spite of the close phonological tie, however, in each clause type this class of post-clitics patterns grammatically as filler of a distinct clause-level function slot.
1.3. The formula for the semi-transitive clause in its minimum expression is $+ \text{Ag} + \text{P-3}$, where Ag represents the agent tagmeme manifested by a substantive expression (see 2.2.3.), and P-3 represents the semi-transitive predicate tagmeme manifested by a semi-transitive verb expression (see 2.1.3.). Example: ac cat banon it was done by him (ac him manifests Ag, cat banon was done manifests P-3).

In its maximum expression the semi-transitive clause may be formularized as $+ \text{Ag} + \text{P-3} \pm R \pm B \pm L \pm C$, where R represents the recipient tagmeme manifested by a substantive expression (see 2.4.). For B, L and C see 1.1. and 2.5.1., 2.5.3. and 2.5.5. Examples:

Ag P-3 B: naj cat alon sve it was said by the man to me (naj man manifests Ag, cat alon was said manifests P-3, sve to me manifests B);

Ag P-3 R: in banon u xíla the chair was made by me (in me manifests Ag, banon was made manifests P-3, u xíla the chair manifests R);

Ag P-3 R C: cam cat banon in tan cat xa'v in what was done to me? because I vomited (or, more freely: "what caused me to vomit?!") (cam what? manifests Ag, cat banon was done manifests P-3, in me manifests R, tan cat xa'v in because I vomited manifests C);

Ag P-3 L: in cat banon tuc' naj it was done by me and him (in me manifests Ag, cat banon was done manifests P-3, tuc' naj with man manifests L).

The semi-transitive clause is distinguished from both the intransitive clause and the transitive clause by the following features:

(1) The obligatory occurrence of the suffix
-on **passive** on the verb stem manifesting the P-3 tagmeme correlates with the obligatory occurrence of the actor-like agent tagmeme **preceding** the predicate tagmeme; this correlation constitutes a feature found in no other clause type.

(2) The verb stem manifesting the P-3 tagmeme does not contain the pronominal actor prefix which is obligatory to the verb stem manifesting the P-2 tagmeme of the transitive clause.

(3) When the Ag tagmeme is manifested by a pronoun, the pronoun is a member of a class of independent pronominal particles which closely parallels (though it is not entirely identical to) the class of pronominal post-clitics, but is not similar to the class of pronominal actor prefixes to the transitive verb stem.

(4) When the R tagmeme in the semi-transitive clause is manifested by a member of the class of pronominal post-clitics, the post-clitic has a meaning of receiver of the action of the predicate (as in transitive clauses) rather than that of subject or initiator of the action as in intransitive clauses.

It may be seen that the semi-transitive clause exhibits some of the features of both the intransitive clause (e.g., no pronominal actor prefix to the verb stem) and the transitive clause (e.g., pronominal post-clitic "object" or recipient of action of predicate) while completely filling the requisites of neither of these two types. It could be argued that what is here termed semi-transitive is a subclass of the transitive clause with the actor tagmeme occurring in the position of emphasis preceding predicate; but this would not take into account the fact that the posited occurrence of
this "actor" tagmeme in the position of emphasis then requires a correlating change within the verb (suffixation of -on), while no such change is required in the verb by the occurrence of O or M or L or T in the pre-predicate slot. Similarly, it could be argued that what is here termed the R tagmeme in the semi-transitive clause is identical with the O tagmeme in the transitive clause. However, in clauses unambiguously identified as transitive the potential occurrence of the clause-level O tagmeme correlates with the obligatory occurrence of the phrase-level actor tagmeme manifested by a pronominal prefix within the transitive verb stem itself (since that prefix does not occur in the same clause with the -on passive suffix verb or with the actor-like agent tagmeme in the pre-predicate slot).

In such a situation as this, one of the principles developed by Longacre11 within the framework of the spot-class grammatical approach of Pike is useful. In evaluating structural differences among clauses, this principle recognizes the significance of any distinction within the predicate (or nuclear) tagmemes of the clauses under examination provided that such a distinction in the nucleus correlates with a further distinction in the peripheral tagmemes of the clauses. By this principle the separate identity of the semi-transitive clause is established in spite of its similarity to some features both of the intransitive and of the transitive clauses: the nuclear tagmeme is distinguished by the obligatory -on suffix (which occurs on its manifesting verb) from the nuclear tagmemes of

11Cf. fn. 2.
other clause types, and this distinctive nuclear
tagmeme correlates with a further distinction else-
where in the clause, viz., the obligatory occur-
rence of the agent tagmeme (with distinctive pre-
predicate position) rather than subject or actor.

1.4. The formula for the minimum expression
of the equative clause is + Co + E, where Co rep-
resents the comment predicate tagmeme manifested
by a substantive expression or adjective expres-
sion (see 2.1.4.), and E represents the entity tag-
meme manifested by a substantive expression (see
2.2.4.). Equative clauses express an equation in
which existence is posited or some characteristic
is stated with reference to a topic (entity). Ex-
amples: atic uma'll u naj there was a man (atic
previously existent manifests Co, uma'll u naj
one the man manifests E), nim itxequeb naj the
man is tall (nim big manifests Co, itxequeb naj
his-height man manifests E), nimla txo u txo the animal is big (nimla txo big animal manifests
Co, u txo the animal manifests E), cancha cu'h
u mes the cat is just worthless (cancha cu'h
worthless only manifests Co, u mes the cat man-
ifests E).

Expanded equative clauses may contain an L
or T or C tagmeme (see 1.1., 2.5.3., 2.5.4. and
2.5.5.) in addition to the obligatory Co and E tag-
memes, but no instance has been observed in which
more than one of these additional tagmemes occurs
in the same clause. A few clauses with the E tag-
meme preposed to the Co tagmeme have been ob-
served. Examples:

Co E L: at isoc u cu'c vi' tze' the
squirrel's nest is in the tree (at presently exist-
ent manifests Co, isoc u cu'c its-nest the
squirrel manifests E, vi' tze' head tree manifests
L);
Mayan Studies I

Co E T: je' u sutz' e'te the clouds were high yesterday (je' high manifests Co, u sutz' the clouds manifests E, e'te yesterday manifests T);

Co E C: yab ve't txo ta'n u ju'si' the animal was hurt by the stick of firewood (yab ve't hurt^12 manifests Co, txo animal manifests E, ta'n u ju'si' by the stick of firewood manifests C);

E Co L: cajva'l uncarnelo at tu unpe' my four sheep are in my corral (cajva'l uncarnelo four my-sheep manifests E, at presently existent manifests Co, tu unpe' in my-corral manifests L).

The equative clause is distinguished from the other three clause types by the following features:

(1) The predicate tagmeme of the equative clause is manifested by a substantive or adjective expression.

(2) The predicate tagmeme of the equative clause never contains the included As tagmeme (see 2.1.1., 2.1.2., and 2.1.3.) which is potentially present in the predicate tagmemes of the other three clause types.

(3) The tagmemic structure of the remainder of the clause--aside from the obligatory Co and E tagmemes--is rudimentary as compared with that of the other clause types.

2. We turn now to the features which distinguish the individual clause-level tagmemes. Some clause-level tagmemes are comprised of two or more included tagmemes on a lower level, and some of these in turn may be composed of still other included tagmemes. In keeping with the main purpose of this presentation, the discussion that follows is

^12ve't is not readily translatable.
left incomplete as to the description of some of the details of this internal structure which are not pertinent to the definition and distinction of clause-level tagmemes.  \(^{13}\)

2.1. The four types of predicate tagmemes are considered to be nuclear and are obligatory to their respective clause types. As such they constitute a readily identifiable class of tagmemes.

2.1.1. Predicate tagmeme P-1 has a slot meaning of intransitive action, in that the intransitive clause does not contain an object tagmeme to which the action of the predicate may be said to be directed. The P-1 tagmeme is manifested by a class 1 verb expression, the included tagmemes of which may be formularized as \( \pm \text{As} + \text{V-1} \pm \text{St} \), where As represents the tense/aspect tagmeme which is manifested by a class of pre-clitics here termed Aspect, V-1 represents the class 1 verb tagmeme which is manifested by an intransitive verb stem, and St represents the style tagmeme which is manifested by a class of post-clitics here termed Style.

The St tagmeme may be manifested as post-clitic to either the As tagmeme or the V-1 tagmeme, but not to both in the same clause. The potential occurrence of St following the As tagmeme is the sole reason for not giving verb-prefix status to the class of aspect pre-clitics. The potential occurrence of St following the V-1 tagmeme is the sole reason for not giving verb-suffix status to the class of pronominal post-clitics which manifests

\(^{13}\)Some sub-classes of clause-level tagmemes also (e.g., "directional" verb expressions and complex verb expressions) whose structure does not affect the classification of clause types, are left for treatment in the appropriate sections of word and phrase description.
the intransitive subject tagmeme. Examples:

V-1: mat in I go (mat go manifests V-1; in I manifests the clause-level subject tagmeme);

As V-1: cat ben naj the man went (cat past tense or completive aspect manifests As, ben go manifests V-1; naj man manifests the clause-level subject tagmeme);

As St V-1: cat chit col in I really was tired (cat past/completive manifests As, chit really manifests St, coli to be tired manifests V-1; in I manifests the clause-level subject tagmeme);

V-1 St: mat ve't in I go (mat go manifests V-1, ve't (untranslatable) manifests St; in I manifests the clause-level subject tagmeme);

As V-1 St: cat oc ve't ak'bal night entered (cat past/completive manifests As, oc to enter manifests V-1, ve't (untranslatable) manifests St; ak'bal night manifests the clause-level subject tagmeme).

2.1.2. Predicate tagmeme P-2 has a slot meaning of transitive action, in that the transitive clause potentially contains an object tagmeme to which the action of the predicate may be said to be directed. The P-2 tagmeme is manifested by a class 2 verb expression, the included tagmemes of

Phonological boundaries in Ixil are not always synchronous with grammatical boundaries; skewness may be seen in some of the examples. The pronouns which may manifest the subject tagmeme in the intransitive clause are bound forms morphologically, and closely tied phonologically to the verb stem and to the Style class of post-clitics. Note, for example, ma.tin and mat.ve't.in where the period marks syllable division but where mat and mat ve't manifests the P-1 tagmeme, and in manifests the subject tagmeme.
which may be formularized as $\pm \text{As} + \text{V-2} + \text{St}$, where V-2 represents the class 2 verb tagmeme which is manifested by a transitive verb stem. The verb stem in turn is manifested by several included tagmemes, one of which is the obligatory actor tagmeme manifested by a member of the list of pronominal prefixes to the verb stem. The identity and functions of the As and St tagmemes are the same as those described for the class 1 predicate tagmeme in 2.1.1. Examples:

V-2: tul naj the man comes (t-ul he-comes manifests V-2; naj man manifests the clause-level actor tagmeme);

V-2 St: tul ve't naj the man comes, (ve't untranslatable manifests St);

As St V-2: ni cu'x itz'ub vi' ik'ab he just sucks his finger (ni present progressive/habitual manifests As, cu'x just manifests St, i-tz'ub he-sucks manifests V-2, vi' i-k'ab head his-hand manifests the clause-level object tagmeme);

As V-2: la cuban achaj we will do your errand (la future/incompletive manifests As, cu-ban we-do manifests V-2; a-chaj your-errand manifests the clause-level object tagmeme);

As V-2 St: cat tal ve't naj the man said (cat past/completive manifests As, t-al he-says manifests V-2, ve't manifests St; naj man manifests the clause-level actor tagmeme).

2.1.3. Predicate tagmeme P-3 has a slot meaning of semi-transitive action, in that it exhibits some of the characteristics both of the intransitive and of the transitive predicates while being identical to neither of them. The P-3 tagmeme is manifested by a class 3 verb expression, the included tagmemes of which may be formularized as $\pm \text{As} + \text{V-3} + \text{St}$, where V-3 represents the class 3 verb
tagmeme which is manifested by a semi-transitive verb stem. The verb stem in turn is manifested by several included tagmemes, one of which is the obligatory passive tagmeme manifested by the -on passive suffix to the verb stem. The identity and functions of the As and St tagmemes are the same as those described in 2.1.1., with the exception that no instance has been observed in which St follows As. Examples:

V-3: in banon u xila the chair was made by me (in me manifests the clause-level agent tagmeme; ban-on was-made manifests the V-3 tagmeme; u xila the chair manifests the clause-level recipient tagmeme);

As V-3: in cat banon u xila the chair was made by me (cat past/completive manifests As);
V-3 St: in banon ve't u xila the chair was made by me (ve't manifests St);
As V-3 St: in cat banon ve't u xila the chair was made by me.

2.1.4. Predicate tagmeme Co has a slot-meaning of equative in that it identifies an entity as to its existence or as to one of its characteristics. The Co tagmeme is manifested by a substantive expression or by an adjective expression, the included tagmemes of which are not pertinent here. Examples:

With the Co slot filled by an adjective expression: nim itxequeb naj the man is tall (nim big manifests Co; i-txequeb naj his-height man manifests the clause-level entity tagmeme);

With the Co slot filled by a noun expression: nimla txo u txo the animal is big (nimla txo big animal manifests Co; u txo the animal manifests the clause-level entity tagmeme).

146
Ixil Grammar

2.2. Of the remaining clause-level tagmemes found in the various clause types four may be considered to constitute a class of topic tagmemes. Three of these tagmemes (subject, agent and entity) are obligatory peripheral tagmemes in their respective clause types, and the other (actor) is a quasi-obligatory peripheral, in that it patterns in duplicative parataxis with the obligatory phrase-level actor tagmeme within the transitive verb expression.

2.2.1. The topic tagmeme S (subject) has a slot meaning of subject of or participant in the action of the intransitive predicate tagmeme. The subject tagmeme may be manifested by a member of the class of pronominal post-clitics, or by a noun expression. In any given clause a pronominal filler of the subject slot is in mutually exclusive distribution with a noun-expression filler of that slot. Examples:

With pronominal filler of subject slot: mat ve't o' we go (mat ve't to go manifests the clause-level P-I tagmeme; o' we manifests S);

With noun-expression filler of S: cat av ve't u tixc'aj u mes the cat's claws entered (cat av ve't entered manifests the clause-level P-I tagmeme; u t-ixc'aj u mes the its-claws the cat manifests S).

2.2.2. Topic tagmeme A (actor) has a slot meaning of more precise identification of the initiator of transitive action indicated by the verb prefix within the predicate tagmeme. While it is itself non-obligatory to the transitive clause, nevertheless

\(^{15}\text{Cf. Eugene A. Nida and Moisés Romero C., The Pronominal Series in Maya (Yucatec), IJAL 16.4 (October 1950), 193-197, especially sections 1.1. and 2.}\)
Mayan Studies I

when it occurs it is in duplicative parataxis with the obligatory pronominal actor prefix. The actor tagmeme is manifested by a noun expression. Example: cat tocsa u seol u me xa tu cabal the carpenter put the table in the house (cat t-o csas he-caused-to-enter manifests the clause-level P-2 tagmeme; u seol the carpenter manifests A; u me xa the table manifests O, tu cabal in the house manifests L).

2.2.3. Topic tagmeme Ag (agent) has a slot meaning of person by whom the action of the semi-transitive predicate tagmeme is initiated. It may be manifested by a member of a class of independent pronominal particles (which closely parallels but is not identical to the class of pronominal post-clitics), or it may be manifested by a noun expression. Examples:

   in cu x cat tz'ison vacami x your shirt was sewn by me alone (in cu x me alone manifests Ag; cat tz'ison was sewn manifests P-3, va-cami x your-shirt manifests R), u k'esla ibal u xac cat ak'on u ch'ich' the machete was given by the boy's grandfather (u k'esla i-bal u xac the old his-father the boy manifests Ag, cat ak'on was given manifests P-3, u ch'ich' the machete manifests R).

2.2.4. Topic tagmeme E (entity) has a slot meaning of item posited, identified or classified by the comment tagmeme. It is manifested by a member of the class of pronominal post-clitics or by a noun expression. Examples: yab ve't a x you are hurt (yab ve't injured manifests Co, a x you manifests E), atic uma ll isoc u cu'c there was a squirrel's nest (atic previously existent manifests Co, uma ll i-soc u cu'c one its-nest the squirrel manifests E).
2.3. The object tagmeme has a slot meaning of object toward which the action of the transitive predicate tagmeme is directed. It is actualized in a given clause as one of three allotagmas:

(1) Op in which the object is indicated by a member of the class of pronominal post-clitics which occurs immediately following (and in close phonological relationship with) the P-2 tagmeme;

(2) On in which the object is indicated by a noun expression occurring either (rarely) immediately preceding P-2 or (usually) immediately following the A tagmeme; and

(3) Oc in which the object is indicated by a clause occurring as the initial or final clause-level tagmeme in a given clause.

Since the A tagmeme is optional to the class 2 clause, any one of these three allotagmas of the O tagmeme may occur in a given clause immediately following the P-2 tagmeme. However, when A occurs in the same clause with O, then Op always occurs between P-2 and A, while On and Oc occur either clause initially or immediately following A.

Examples:

With Op: cat ik’os in naj the man hit me (cat i-k’os he-hit manifests P-2, in me manifests Op, naj man manifests A);

With On: cat ik’os naj u talne’ the man hit the baby (u talne’ the baby manifests On);

With Oc: cat ik’os in u tx’i’la naj tak’ u ixoj “the bad man hit me” said the woman (cat ik’os in u tx’i’la naj the bad man hit me [u tx’i’la naj the bad man] manifests Oc, t-ak’ she-said manifests P-2, u ixoj the woman manifests A).
2.4. The recipient tagmeme has a slot meaning of receiver of the action of the semi-transitive predicate tagmeme. It may be manifested by the same classes of items which manifest the subject tagmeme of the intransitive clause and the object tagmeme of the transitive clause. For examples see 1.3. and 2.1.3.

2.5. The adverbial tagmemes are non-obligatory peripherals, and have an over-all meaning of describing or delimiting the action or situation of the predicate tagmemes.

2.5.1. The benefactive tagmeme has a slot meaning of indicator of the person or animal to whom or for whom the action of a predicate tagmeme is obliquely directed, or towards which it is oriented--often as a second referent in addition to the direct object. It expresses person spoken to, recipient of a favor or of damage, one toward whom love or fear is felt, or one who is taught, cured, given to or borrowed from. When the "benefactor" is represented by a pronoun, the B tagmeme is manifested by a noun expression of the relator possessed-item type; when the "benefactor" is represented by a noun expression, the B tagmeme is manifested by a noun expression of the possessed-item possessor type. In either case the included Item tagmeme is manifested by the morpheme -e direction, which is diagnostic of this clause level tagmeme. Examples:

- cat yolon naj sve the man spoke to me (cat yolon spoke manifests P-1, naj man manifests S, sve to me manifests B [s- relator, v-e my-direction]);
- cat yolon in ste I spoke to him (in I manifests S, ste to him manifests B [s- relator, t-e his-direction]);
2.5.2. The manner tagmeme has a slot meaning of condition, circumstance or manner attending the action of the predicate tagmeme. This tagmeme is admittedly (to some extent, at least) a catch-all or miscellaneous classification for those "adverbial" function slots which do not pattern with any of the other adverbial tagmemes. It is usually manifested by a particle (e.g., yaquix strongly) or by a relator-item or relator-possessed-item noun expression, e.g., stoj afoot (s- relator, t-oj his-foot), sjunal alone (s- relator, junal aloneness). Manner tagmemes occur infrequently as compared with the other adverbial tagmemes. It is possible that further data may allow the various items now classified as manner tagmemes to be absorbed into the classes which manifest one or more of the other adverbial tagmemes.

2.5.3. The location tagmeme has a slot meaning of location of the action or situation of the predicate tagmeme. The location tagmeme is actualized as three allotagmas with considerable development and extension of the basic locational meaning:

(1) Location at or in, manifested by relator possessed-item noun expressions (with the item slot filled by the morpheme -ul stomach/insides/ insideness) and by possessed-item possessor noun expressions (with the item slot filled by -u inness/atness. In a few instances the reference is to location in time rather than to location in space.

Examples:

\[
\text{cat yolon in te naj I spoke to the man (te naj to the man manifests B t-e his-direction, naj man)}.\]

\[
\text{cat tak'can u me'xa stul he put the table inside (cat t-ak'can he-put manifests P-2, u}.
\]
Mayan Studies I

me'xa the table manifests O, stul inside manifests L[s- relator, t-ul its-insides];
cat tak'can u me'xa tu cabal he put the table in the house (tu cabal in the house manifests L[t-u its-inness, cabal house]).

Location in time is seen in this example: tu cu'k'i cat tabi ve't ton u Ti'x in the afternoon he heard God arrive (t-u cu'k'i in the afternoon manifests L[5-u its-inness, cu'k'i afternoon], cat tabi ve't he heard manifests P-2, t-on u Ti'x his-arrival the God manifest O).

(2) Environment of, manifested by relator possessed-item noun expressions and by possessed-item possessor noun expressions in which the item slot is filled by the morpheme -i' withness. The possessor may be either animate or inanimate. When this tagma accompanies a verb of motion it means "in accompaniment."
Examples:

la ben in sti' I will go with him (la ben will go manifests P-1, in I manifests S, sti' with him manifests L[s- relator, t-i' his-withness]);

la ben in ti' naj I will go with the man (ti' naj with the man manifests L[t-i' his-withness, naj man]).
at xamal ti' u ju'si' there is fire on the stick of firewood (or, more freely, the wood is burning) (at presently existent manifests Co, xamal fire manifests E, ti' u ju'si' on the stick of firewood manifests L[t-i' its-withness, u ju'si' the nose-firewood]).

(3) Location relative to, manifested by relator possessed-item noun expressions or by head-attributive noun expressions in which the head slot is filled by a member of a restricted class of nouns whose primary reference is to some part
of the body and, in these noun expressions, extended to mean location or position with relation to the noun filling the attributive slot. Examples:

With relator possessed-item filler of L: cat vak'can unbobal sunvi' I put my hat on my head (cat v-ak'can I-put manifests P-2, un-bobal my-hat manifests O, sunvi' on my head manifests L [s- relator, un-vi' my-head]);

With (unpossessed) item possessor filler of L: tuc je'oj txo vi' vitz the animal is about to go up on the mountain (tuc je'oj about to go up manifests P-1, txo animal manifests S, vi' vitz on the mountain manifests L [vi' head, vitz mountain]).

2.5.4. The time tagmeme has a slot meaning of time of the action or situation indicated by the predicate tagmeme. It is manifested by a class of particles here termed time particles (e.g., chel today, na'ytzan long ago, oxi three days hence). Examples:

la ben in chel I will go today (la ben will go, in I, chel today); atic uma'l u naj na'ytzan there was a man long ago (atic previously existent, uma'l u naj one the man, na'ytzan long ago).

2.5.5. The cause tagmeme has a slot meaning of indicator of cause, reason, purpose, or person or thing responsible for the action or situation of the predicate tagmeme. It is manifested by relator possessed-item noun expressions and by possessed-item possessor noun expressions in which the item slot is filled by -a'n becauseness, or by subordinate clauses introduced by the connective particle tan because and by the complex connective particle tiuva' because.
The cause tagmeme is functionally and formally distinct from the agent tagmeme of the semi-transitive clause type. The semi-transitive agent tagmeme is obligatory to the semi-transitive clause and occurs in no other type; the cause tagmeme is non-obligatory in all four clause types but may occur in each of them. The semi-transitive agent tagmeme obligatorily occurs clause-initial and immediately preceding the P-3 tagmeme; the cause tagmeme has never been observed to occur in this position. Examples:

```
cat mutxya u ixi'm sva'n the corn was used
up by me (cat mutxya was used up manifests P-1,
u ixi'm the corn manifests S, sva'n by me mani-
ifests C [s- relator, v-a'n my-becauseness]);
cat mutxya u ixi'm ta'n naj the corn was used
up by the man (ta'n naj by man manifests C [t-a'n
his-becauseness, naj man]).
```

Example with tan-clause manifesting the C tagmeme: ye' cat tzujbe in tan cat c'axbi in I
couldn't eat because I was injured (ye' no; cat
tzujbe could eat manifests P-1, in I manifests S;
tan cat c'axbi in because I was injured manifests
C [tan because, cat c'axbi was injured, in I]).

Example with tiuva'-clause manifesting C tagmeme: camchil uva' cat iban ve't chajnaj tiuva'
cat tesa chajnaj tak'itxa' the men died because
they removed their intestines (camchil uva' death
this manifests O, cat iban they-did manifests
P-2, chajnaj men manifests A; tiuva' cat tesa
chajnaj tak'itxa' because they removed their in-
testines manifests C [tiuva' because, cat tesa
they removed, chajnaj men, tak itxa' their-
intestines]).
THE JACALTEC NOUN PHRASE

by clarence and katherine church
Jicaltec Grammar

1. Two noun phrases can be distinguished in Jicaltec\(^1\) on the grounds of internal structure and constituent tagmemes.

1.1. Phrase type one is given the name Qualifier-Head because it consists of a head tagmeme accompanied by a qualifying tagmeme such as a quantifier, specifier or a classifier. The formula for this phrase type is as follows: ± Q ± S ± C ± H ± M or, ± Quantifier ± Specifier ± Classifier + Head + Modifier. The obligatory tagmemes are the head and one other tagmeme indicated in the formula in that by definition more than one item is required if the construction is to be a phrase.

Examples of the minimum structure of this phrase type are: classifier-head te'yumte\(^2\) the club (te' plant classifier, yumte' club); quantifier-head hun laba one snake (hun one, laba snake); specifier-head heb hetbi them (heb plural specifier with people, hetbi them, i.e., mixed men and women); head-modifier te'nimejal plant big (te' plant classifier, nimejal big).

Examples of the observed maximum structure of this phrase type are:\(^3\) quantifier-specifier-head-

---

\(^1\)Jicaltec is a member of the Mayan family of languages and is spoken by about 12,000 people in the municipalities of Jicaltenango and Concepción in the Department of Huehuetenango in Northwestern Guatemala.

\(^2\)The phonemes of Jicaltec are: a, p', c, c', ch, ch', e, h, i, j, k', l, m, n, ñ, o, p, r, s, t, t', tʂ, tʃ, ts, ts', u, w, ŋ, ʌ, y, ʔ.

The practical orthography used in this paper and conforming to the government approved alphabet is: a, b, c/qua, c'/qua, ch, ch', e, h, i, j, k', l, m, n, ñ, o, p, r, s, t, t', tx, tx', tz, tz', u, w, ŋ, x, y, ˈ.

\(^3\)The theoretically possible maximum has not been observed in our present corpus.
Mayan Studies I

modifier hune'4 pila yaxne one single water-tank pure-green (hun one, -e' singular specifier, pila water-tank, yaxne pure-green); quantifier-classifier-head-modifier hun ch'en nian ch'en one metal-class little-thing (of) metal (hun one, ch'en metal classifier, nian little thing, ch'en metal).

Other examples of intermediate complexity follow: quantifier-classifier-head hun naj lujwum one male fisherman (hun one, naj male classifier, lujwum fisherman); quantifier-specifier-head cawañ heb naj two-people plural men (cawañ two people, heb plural specifier with people, naj man); specifier-classifier-head heb naj cañalwom plural male dancer(s) (heb plural specifier with people, naj male classifier, cañalwom dancer); quantifier-head-modifier hun naj c'alom one man rich (hun one, naj man, c'alom rich).

1.2. Phrase type two is given the name Possessor-Item because it consists of an item tagmeme preceded by a possessor tagmeme in all manifestations of this phrase type. The formula for this phrase type is as follows: \( \pm Q \pm S \pm C + P_1 + I \pm P_2 \pm M \) or, \( \pm \) Quantifier \( \pm \) Specifier \( \pm \) Classifier \( \pm \) Possessor\(_1\) \( \pm \) Item \( \pm \) Possessor\(_2\) \( \pm \) Modifier.

---

4 Characteristically, at least some Jacaltec phrase-level tagmemes are manifested by a class of items, some members of which are phonologically bound. For this reason it does not seem theoretically valid to set up the word as a distributional matrix in distinction to the phrase. This paper therefore does not attempt to distinguish word-level tagmemes from phrase-level tagmemes. Specifically, note that in the above paragraph the bound form -e' single specifier is distributionally parallel to other specifiers that are free forms.
 Jacaltec Grammar

Examples of the minimum structure of this phrase type are as follow: possessor₁-item yunin son of (y- third person possessor₁ with vowel initial stems, -unin son); hin bi my name (hin my, bi name).

Examples of the observed maximum structure of this phrase type are as follows: quantifier-specifier-classifier-possessor₁-item-possessor₂ hune' naj sc'amte' ix Lila one male servant-of Lila (hun one, -e' single specifier, naj male classifier, s- third person possessor₁ with consonant initial stems, c'amte' servant, ix female classifier, Lila Lila); quantifier-classifier-possessor₁-item-modifier hun naj jet meba'il one male our-companion (in) poverty (hun one, naj male classifier, j- first person plural possessor₁ with vowel initial stems, -et companion, meba'il poverty).

Other examples of intermediate complexity follow: classifier-possessor₁-item-possessor₂ ix sc'utzin naj rey the daughter (of) the king (ix female classifier, s- third person possessor₁ with consonant initial stems, -c'utzin daughter₅, naj male classifier, rey king) possessor₁-item-modifier ha tienda sunil your store all (ha second person possessor₁ with consonant initial stems, tienda store, sunil all).

1.3. There are features common to both phrase types. In every occurrence of the quantifier tag-meme it is phrase initial. The specifier always occurs preceding the classifier and following the quantifier if the quantifier and/or classifier tag-

₅There are two words for daughter in Jacaltec. c'utzin daughter (of a man) and -unin daughter or son (of a woman).
memes are present in the phrase. In turn, the classifier always occurs following the specifier and the quantifier when either or both of the tagmemes is present in the construction. In both phrase types the modifier may occur as the terminal tagmeme of the phrase.

1.4. The contrastive features which distinguish the two phrase types are: (1) a systematic distinction between the nuclear tagmemes (head and item) of the two types; (2) a correlating distinction in the peripheral tagmemes. While the head spot of the Qualifier-Head phrase is filled by nouns of class B and C which are optionally possessed and never possessed respectively, (see 2.1.) the item spot of the Possessor-Item is filled by nouns of class A and B which are always possessed and optionally possessed respectively. In that Class A has but few members it follows that the head spot of the Qualifier-Head phrase is filled by a larger composite class of nouns than the item spot of the Possessor-Item phrase. Many of the fillers of the head spot may also occur in the classifier and modifier spots in the phrase. The distribution of the modifier tagmeme in both phrase types constitutes a further feature distinguishing between them. Modifiers occur with greater frequency in the Qualifier-Head phrase. Furthermore the modifier may occur immediately postposed to the head in the Qualifier-Head phrase while in the Possessor-Item phrase possessor2 may occur between the item and the modifier. Finally, possessor1 and possessor2 are tagmemes restricted to one phrase type as opposed to the other; the former, with a restricted manifesting class not found elsewhere in the noun phrase, has special diagnostic values and is obligatory to its phrase type.
2. The constituent tagmemes of the noun phrases are described in detail in this section. In the consideration of the tagmemes of the noun phrases the nuclear tagmemes will be considered first since it is around these tagmemes that the phrase is formed.

2.1. The head tagmeme of the Qualifier-Head phrase is manifested by nouns of class B and C. Class B nouns are those which may or may not be possessed. It can be divided into sub-classes: (1) Nouns which suffix -e when not possessed and which therefore bear this suffix when manifesting the head tagmeme. This subclass includes body parts, e.g., k'abe hand; articles of clothing, e.g., waxe pants; and members of the family, e.g., alibe sister-in-law (except derived nouns such as ixal wife and i'chamil husband); (2) Nouns which do not suffix -e when unpossessed such as animals and other items. This subclass includes such nouns as melyu money, wakax cow and yawub sick person. Class C nouns are those which are never possessed. Such items as k'ak'e wind, tz'ayic sun, c'uh lightning and one term for house ha house are in this class.

The head tagmeme of the Qualifier-Head phrase may be preceded by a classifier, a specifier, a quantifier or any allowable combination of these tagmemes in the phrase. The head tagmeme may be followed by the modifier tagmeme. Since the modifier tagmeme is the only one that the head may precede there is a structural contrast between a Qualifier-Head phrase and a construction which may be termed the equative clause and which contains the same classes in reverse order. For example a classifier-head construction no' wakax the cow contrasts with wakax no' it is a cow.
Mayan Studies I

which is an equative clause.

2.2. The item tagmeme of the Possessor-Item phrase is manifested by nouns of class A and B. (See 2.1. above for description of class B.) Class A is made up of nouns that are obligatorily possessed. (See 2.6. for treatment of the possessor tagmeme.) Such nouns as -atut house (cf. jatut our house) and -och tortilla (cf. hawoch your tortilla) make up this class of nouns.

The item tagmeme must be preceded by a possessor1 and may be followed by possessor2. The optional modifier occurs as the terminal tagmeme of the phrase. As in the Qualifier-Head phrase the nuclear tagmeme preceded by possessor1 may be preceded by a classifier, a specifier or a quantifier or any combination of these tagmemes in the phrase. Any other meaningful ordering of the tagmemes results in a change in meaning and construction. In the following example an equative clause results when the order of the tagmemes is reversed. hin wakax my cow cf. wakax hin I am a cow. (hin my, wakax cow.)

2.3. The quantifier tagmeme which is initial in both phrase types is manifested by numerals exhibiting a vigesimal system. The numerals may enter into several sorts of quantifier phrases manifesting this tagmeme. While the internal analysis of these quantifier phrases is not described in detail in this paper a brief summary of the range and constituency of this phrase follows:

There are Jacaltec numbers from one to ninety-nine. The Spanish 'ciento' is used for

---

6There are vestiges of the system having been more extensive in the recent past. Information was volunteered by an informant that his grandfather used waj c'al six (times) twenty for 120.
hundred and 'mil' for thousand. The system exhibits additive, subtractive and multiplicative relationships. Additive relationship is shown by lajuneb ten and cab lañeub two plus ten 'twelve' (cab two, lañeub ten, an allomorph of lajuneb). Subtractive relationship is shown by ox c'al sixty and lajun ox c'al sixty minus ten 'fifty' (lajun 'ten,' ox c'al 'sixty'). Multiplicative relationship is shown by hun c'al twenty (hun 'one,' c'al 'bundle') and ox c'al sixty (ox 'three,' c'al 'bundle').

Numerals may be inflected by postposed elements to indicate people counted oxbwañ three people, to indicate animals counted oxc'ón three animals and to indicate all other items not included above, i.e. oxeñ three. Numerals may also occur in repeat sequence to indicate a distributive quantity, hun hun each one (hun one), hun hun tz'ayic each day (hun one, tz'ayic day); and ox ox horail every three hours (ox three, horail hour).

2.4. The specifier tagmeme which occupies the second position in both phrase types in manifested by a class of five specifiers. (1) -e' singular specifier, as in hune' tx'i' one single dog (hun one, -e' singular specifier, tx'i' dog); (2) heb plural specifier with people as in heb naj plural men (heb plural specifier with people, naj man); (3) -uj partitive specifier as in hunuj te' tzu one of the gourds (hun one, -uj partitive specifier, i.e. one or some from several, te' plant classifier, tzu gourd); (4) xa allative specifier (other) as in hun xa coñob one other village (hun one, xa allative specifier, coñob village); (5) ñe limitative specifier as in cab xa ñ bara manta two only other yards (of) cloth
Mayan Studies I

(cab two, xa allative specifier, ñe limitative specifier (only), bara yard, 7 manta cloth).

2.5. The classifier tagmeme is manifested by a class of fifteen nouns. These are distinguished from other nouns by the following criteria, at least two of which characterize each member of the class: (1) They may occur in repeat sequence as ch'en ch'en the rock. (2) They are never possessed. (3) They fill a pronominal function in the structure of the paragraph. (For example a horse may be introduced in the first part of a paragraph as no' che animal-class horse'; but unless there is a need for clarity or emphasis, the classifier no' alone will be used in referring to the horse in the rest of the paragraph.) Classifiers classify the nouns with which they occur into fifteen classes correlating to some degree with observable distinctions in regard to the characteristics or origin of the referents of the nouns which they classify. Some of the classifications reflect either contemporary or past cultural distinctions. (For example the fact that the moon is classified as female while death, sickness and laziness are classified as being masculine can probably be attributed to Pre-Columbian religion.)

Following is a list of the classifiers and their usage:

ch'en is the classifier for nouns referring to objects of stone, metal and metal-like materials such as glass and ice as well as the objects in which one of these is the dominate component.

7A bara is not a full yard but 33 inches. It is a standard of linear measure in many areas of Latin America.
ch'en vasu the (mineral-class) water class; ch'en xi the (mineral-class) kettle; ch'en avion the (mineral-class) airplane.

ha' is the classifier for nouns referring to water, rivers, lakes, springs, the ocean and rain. The Jacaltec word for pus is also classified with the above. ha'pohow the (water-class) pus; ha'mar the (water-class) ocean; ha'nap the (water-class) rain.

ixim is the classifier for nouns referring to corn or anything made from corn as well as flour and bread. ixim pan the (corn-class) bread; ixim waj the (corn-class) tortilla; ixim bajar the (corn-class) corn-cob; ixim ñal the (corn-class) corn-ear.

no' is the classifier for nouns referring to animals (except the dog), insects, or anything made from them. no'che the (animal-class) horse; no'nam the (animal-class) butterfly; no' xañab the (animal-class) sandal.

te' is the classifier for nouns referring to plants, trees, or anything that grows from the ground as well as things made from them. te'ak'in the (plant-class) board; te'tzu the (plant-class) gourd; te'aceite the (plant-class) cooking oil.

metx is the classifier for the noun referring to dog. metx tx'i' the (dog-class) dog.

k'a' is the classifier for nouns referring to fire and the sun. k'a' k' a' the (fire-class) fire; k'a' tz'ayic the (fire-class) sun.

tx'otx' is the classifier for nouns referring to dirt, land, clay and things made from them. tx'otx' tx'otx' the (earth-class) land; tx'otx' sam the (earth-class) griddle.

naj is the classifier for nouns referring to things masculine. Hills, death, sickness, laziness
and sadness are some of the nouns that occur with this classifier. naj txac the (male-class) small pox; naj camical the (male-class) death; naj Pegro the (male-class) Peter.

ix is the classifier for nouns referring to things feminine. Woman and the moon are the nouns with which this classifier occurs. ix ix the (woman-class) woman; ix x'ajaw the (woman-class) moon.

ya' is the classifier for nouns referring to age and is mildly honorific. ya'icham the (old-one-class) grandfather; ya'Pegro the (old-one-class) Peter.

xo' is the classifier for nouns referring to young woman. xo'c's'utzin naj rey the (young-woman-class) daughter of the king; xo' wunin the (young-woman-class) my daughter.

ho' is the classifier for nouns referring to young man. heb ho' alcal tx'ow plural (young-man-class) mayors (which are) rats.

nian is the classifier for nouns referring to small items or children. hun nian c'oconte' one the (little-class-thing) cage; nian juxtaj the (little-one-class) our brother.

2.6. The possessor tagmemes of the Possessor-Item phrase will be referred to as possessor1 and possessor2. Possessor1 tagmeme is manifested by the person indicators of the first, second and third persons. It occurs in a fixed order immediately preposed to the item. In the following data the first item is the variant occurring with consonant initial stems and the second item is the variant occurring with the vowel initial stems.

hin ~ w- first person singular; co ~ j- first person plural; ha ~ haw- second person singular; he ~ hey- second person plural; s- ~ y- third person.
Possessor tagmeme is manifested by nouns and by noun phrases of both Qualifier-Head and Possessor-Item types. When possessor is third person, possessor may occur postposed to the item to further identify the possessor as to number, age and sex, but is not obligatory to the construction. In the following examples which illustrate both possessor tagmemes in the same constructions those of greater complexity will be presented first: possessor-item-possessor
c'utzin naj rey daughter-of the king (s- third
tialperson possessor, c'utzin daughter, naj the
[male-class], rey king). naj rey fills the
possessor2 spot and is composed of a Qualifier-
Head phrase; slixton wunin ribbon-of my
daughter (s- third person possessor, lixton
ribbon, wunin my daughter), wunin fills posses-
sor2 spot and is itself a possessor-item phrase
composed of w- first person possessor1 and
-wunin daughter.

Examples of less complexity are: possessor1-
item hin mam my father (hin first person pos-
sessor, mam father); ha mi1 your (sg.)
mother (ha second person possessor1, mi1
mother); yatut house-of (y- third person pos-
sessor1, -yatut house).

2.7. The modifier tagmeme is manifested by	nouns, noun phrases, attributives and attributive
expressions. It occurs postposed to the head or
item tagmeme and is not obligatory to the construc-
tion. It may also be preceded by the possessor2
tagmeme and is phrase final in its every occurrence.

The modifier spot may be filled by a single
noun hun vasuhal ha1 one glass (of) water (hun
one, vasuhal glass ha1 water). It may be
filled by a noun phrase of the Qualifier-Head
type hun c'ajan heb naj belwom one group (of) plural men travelers (hun one, c'ajan group, heb plural specifier with people, naj male classifier, belwom traveler). It may be filled by a Possessor-Item phrase as follows: ya'ixnam smi'naj the old grandmother his mother (ya' old-one classifier, ixnam grandmother, s- third person possessor1, mi' mother, naj him). An attributive may fill the modifier spot as in hun naj c'alom one man rich (hun one, naj man, c'alom rich); or it may be filled by an attributive expression hun yabil caw how one sickness very grave (hun one, yabil sickness, caw intensifier very, how grave).