MICROFILM COLLECTION OF MANUSCRIPTS ON MIDDLE AMERICAN CULTURAL ANTHROPOLOGY SERIES 7
A GRAMMAR OF MODERN YUCATEC
BY
MANUEL J. ANDRADE
NO. 41
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ON
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No. 41

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CHICAGO, ILLINOIS
1955
The present volume was substantially completed by Manuel J. Andrade before his untimely death in 1941. During the war years S.L. Bradshaw pulled the materials together and completed the typing of the manuscript before illness forced him, too, to return the material to the Mayan Linguistic Research Project.

It was hoped that it would be possible to prepare a complete index of the contents of the volume before publication. This, too, was frustrated, because of the press of other duties on the undersigned who inherited the responsibility.

At long last, the manuscript is being made available to the general public essentially in the form in which it was received from Bradshaw. We have left a few marginal notes pencilled in during our first reading of the manuscript on the chance that they may be useful. We still hope to be able to prepare the index and to publish the materials in book-form at a future date. We hope that this interim availability in microfilm will serve its purpose.

Norman A. McQuown
A GRAMMAR OF MODERN YUCATECO

by

Manuel J. Andrade
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PREFACE

The program of investigation which the Division of Historical Research of the Carnegie Institution has been carrying out in Mexico and Central America includes a study of the Maya family of languages. It is expected that a comparative study of these languages will provide information utilisable in the main enterprise of which the linguistic project forms a part. An indispensable prerequisite in an inquiry of this sort is obviously that there should be adequate knowledge of each of the languages dealt with. The acquisition of such knowledge is for the present the chief concern in this project.

The descriptive information available on the languages of the Maya family is for the most part inadequate to the demands of a historical study. On some of the languages there is hardly any information of the kind required, and that which is available for the rest is insufficient in one respect or another. Because of the circumstances which preceded the formulation of a plan of research, the work of this linguistic project began where there was the least need of collecting descriptive data; namely, in Yucatan. But even there, despite the abundant literature available, there was a lack of unequivocal information on the sounds of Yucatec, and a need of describing the language as a whole in a manner
that would facilitate comparison with adequate descriptions of the other members of the family. In this publication an attempt is made to meet these requirements insofar as the Yucatec spoken at present is concerned. The Yucatec known to us through the literature of previous centuries will be the subject of a future study.

The work of collecting data on Modern Yucatec was financed in 1930 by the University of Chicago, and in two subsequent years, 1931 and 1933, jointly by the Carnegie Institution of Washington and the University of Chicago. Thanks are due to the persons through whom the aid of these institutions was obtained, particularly to Professor Fay-Cooper Cole, head of the Department of Anthropology of the University of Chicago, and Dr. Alfred V. Kidder, chairman of the Division of Historical Research of the Carnegie Institution of Washington. Much time and expert advice were generously given by Messrs. Salomon N. Treviño and Ivar Kalberg, both of the University of Chicago, while designing and constructing the sound-recording equipment used in this research. The names of other persons to whom credit is due will be mentioned later in connection with that which they contributed. For numerous personal favors the writer is indebted besides to many residents of Yucatan and British Honduras to whom his gratitude has already been expressed orally.

University of Chicago

Manuel J. Andrade

October, 1940
1. The name Yucatec

The language dealt with in these pages is commonly called Maya, and equally common is the use of this name to denote the whole family of which this language is a member. Further ambiguity is involved in the use of the phrase 'a Maya dialect', since by this expression sundry writers have referred to any member of the family, or to any but the Huastec dialects, or exclusively to any of the four dialects which, according to them, constitute the Maya division of the Tzeltal-Maya sub-group. Ordinarily, the scope of the ambiguity is not so wide, but still to assert that this or that is true of Maya is equivocal whenever the context does not suffice to preclude ambiguity.

Maps and various influential agencies have established quite firmly the habit of terming 'Maya' the whole linguistic family. An attempt to restore the old use of the word to designate exclusively the aboriginal language of Yucatan is likely to be futile. It has seemed advisable, therefore, to call this language Yucatec. In so doing we conform to an old precedent, as shown in Note 1, but the fact that this appellation precludes ambiguity may sufficiently justify its adoption.
2. Old Yucatec and Modern Yucatec

Chiefly to facilitate reference, two periods of the history of Yucatec will be distinguished by the designations Old Yucatec and Modern Yucatec. By the former we shall refer to the language known through the literature of the sixteenth and seventeenth centuries (Note 2). Beltran's grammar, written during the first half of the eighteenth century, may conveniently be said to describe the language in the beginning of the transition to Modern Yucatec. The period of Modern Yucatec may be assumed to begin during the first half of the nineteenth century or thereabout. In the dictionary compiled by Pio Perez about this time, one finds usages of the sort which constitutes the main grammatical differences between Old Yucatec and the language spoken at present. It is true that some of the phrases chosen by Pio Perez to illustrate various special uses are now obsolete or obsolescent, but the majority are not.

Modern Yucatec differs from Old Yucatec at least with respect to vocabulary, morphology, and syntax. The syntactic and morphologic differences cannot be specified properly in these introductory remarks. Concerning vocabulary, one observes that approximately one-fifth of the words listed in the Motul dictionary are now obsolete. With respect to the uses of those which constitute the main body of the present vocabulary, one notices that as a rule they retain most of
the senses in which they were formerly employed. The main lexical innovations consist in the adoption and adaptation of Spanish words.

As one would expect, there is more admixture of Spanish in and near the larger towns than in the more isolated districts, although there are some exceptions to this rule. But the extent of this admixture has been much exaggerated by those who deplore its occurrence. In a few samplings of discourse amounting roughly to 8,500 running words, the total number of different Spanish words, excluding proper names, was found to be 9. The samplings were chosen at random from phonographic records of extemporaneous discourse. In some localities much of the Spanish admixture seems to have taken place within one or two generations. By way of experiment, we would occasionally point out to an informant the fact that he had used a Spanish word. The reaction varied roughly with the age of the individual and the locality. In Chemax, state of Yucatan, two of the oldest men would in most instances replace the Spanish word by a native term, and it would be done as readily as when one corrects a mere slip of the tongue. On the other hand, some of the expressions that were so readily recalled in this locality, and which conformed to Old Yucatec usage, were nearly as strange as alien words to our informants in other localities, regardless of the age of the individuals.
Concerning phonetic differences between the old and the modern language, it may be obvious that all that can be done is to infer with various degrees of uncertainty what is more likely than unlikely the case. It is commonly assumed, at least by implication, that Yucatec pronunciation has not changed much during a period of more than three centuries. Making allowance for differences of opinion as to what is much or little in this respect, we venture to say that there are more reasons for entertaining this assumption than for holding the contrary. This question is discussed at length in Note 3.

3. Population and geographic delimitation

Yucatec is spoken at present throughout the peninsula of Yucatan; in some villages of the districts of Corozal and El Cayo, British Honduras; and, according to some reports, in some localities in El Peten, Guatemala. From the census of Mexico of 1930 we extract the following data on the number of individuals 5 years of age or older who speak only Yucatec, or Yucatec and Spanish, in the three political divisions of the peninsula of Yucatan:

<table>
<thead>
<tr>
<th></th>
<th>Yucatec only</th>
<th>Yucatec and Spanish</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yucatan</td>
<td>113,121</td>
<td>129,100</td>
<td>242,221</td>
</tr>
<tr>
<td>Campeche</td>
<td>16,213</td>
<td>15,091</td>
<td>31,304</td>
</tr>
<tr>
<td>Quintana Roo</td>
<td>1,862</td>
<td>1,825</td>
<td>3,687</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>131,196</strong></td>
<td><strong>146,016</strong></td>
<td><strong>277,212</strong></td>
</tr>
</tbody>
</table>
It is officially stated that no census was taken in some of the localities in the interior of Quintana Roo, where, according to all accounts, there are villages in which no one understands Spanish. In 1921 the Yucatec-speaking population of British Honduras was "about 6,000", according to the Handbook of British Honduras, London, 1925. With regard to Guatemala, we find that the census of 1931 classes a portion of the population as "Indians", but it does not indicate what languages they speak. The "Indian" population of the whole province (departamento) of El Peten is there said to be 2,471. This may include peoples whose native tongues are Mopan, Lacandon, and Yucatec. For the reasons stated in Note 4, we leave out of consideration the so-called Peten or Itza dialect which Dr. Berendt is supposed to have discovered in that region. Since El Peten and the portion of Quintana Roo not covered by the census are sparsely populated, it seems that roughly 283,000 individuals speak Modern Yucatec.

4. Speech differences

As one would expect, there are local and regional differences of speech within the area roughly delimited above. It would be idle, of course, to say that the differences are negligible, or that they are noteworthy, without attempting to specify the criterion with respect to which one chooses to evaluate them. If we choose to evaluate them with respect to
mutual intelligibility, it seems justifiable to hold that the local and regional differences in the use of Modern Yucatec are of negligible consequence. The natives of any two distant localities can understand one another adequately to their needs in nearly all instances. There are occasional difficulties in understanding a word or a phrase of some local vernacular, but the interlocutors can generally dispose of such momentary obstacles by resorting to paraphrase or explanation.

It need scarcely be said that what is negligible with respect to the above criterion can be worthy of note with respect to the task of describing a given language or dialect. Consider, for example, what would be the case in dealing with American English. An American from Alabama may understand another from Ohio satisfactorily, although one may pronounce a special kind of r where the other pronounces none. To say the least, it would hardly conform to professional standards to make no mention of this and many other differences in a description of American English as it is actually spoken throughout the United States. Similar conditions prevail in the Yucatec speech-area.

Many of the speech differences we must take into account in describing Modern Yucatec are apparently due to the circumstance that various linguistic devices and
usages which became obsolete in some communities are still prevalent in others, or are preserved only in the speech of their oldest members. But we do not know whether all the differences observed are of that sort. When the differences are lexical, the Motul dictionary provides in nearly all instances the information required to decide which of two or more given variants conforms to Old Yucatec usage. But when differences of some other sort are involved the matter is not so simple. The grammars of the Old Yucatec period, San Buenaventura's and Coronel's, are too concise and otherwise inadequate. Additional grammatical information can be deduced from the legal documents, and other texts of the sixteenth and seventeenth centuries, as well as from the numerous sentences which illustrate lexical uses, particularly in the Motul dictionary. But the work required to deduce such information in a reliable manner remains to be done. The texts themselves cannot be assumed to be equally reliable. On general principles one must obviously discriminate between translations of the Catholic Catechism and texts which are not translations. The former may be reliable, but their reliability will have to be tested. Moreover, translations are not the only texts which require critical examination. We all know that some of the Chilan Balam manuscripts are probably copies made by individuals who can justifiably be suspected of not knowing Yucatec. Thus, a careful scrutiny
of most of the material available must be made before undertaking to deduce grammatical information from it.

Assuming that in the future we shall possess more extensive and reliable knowledge of Old Yucatec usage, it does not follow that we may be able then to decide in every case which of two given usages observed at present is a later development. Suppose neither of two given variants is found in the old literature. We cannot conclude that what is not found there did not occur, and it is possible, besides, that both variants be later developments. Also, in the Motul dictionary one finds references to the "speech of the coast", and to "the speech of Campeche", which indicate unequivocally what one would suspect on general principles, namely, that there were regional differences within the Old Yucatec speech-area. Some of the present variants may well be remnants of those differences, or later developments from them.

The procedures employed here in dealing with variants are expected to yield results which are non-committal with regard to the preservation of old usages or the development of new ones. We have tried, however, to treat variants in as orderly a manner as our information permits. We regard as insufficiently informative a description which states
simply that such and such variants occur in a given speech-area, without indicating which of them concur in the speech of a single individual, and which concur in the speech of one or more specifiable localities or regions. The division into speech-types employed in our description rests on observations of such concurrences.

Throughout the description presented in these pages, variants are distinguished by the terms A-variant, B-variant, and X-variant. As explained less loosely in Note 5, A-variants concur and are common in speech of Type A; B-variants are likewise ascribable to speech of Type B, while X-variants are those which, so far as our information goes, do not distinguish either of those two speech-types from the other. Conforming to the procedures outlined in Note 5, this description of Modern Yucatec is based on Type A. It deals explicitly with Type B, and with X-variants only when their deviations from Type A are discussed. As may be gathered from what is said in Note 5, the labels 'A' and 'B' do not imply any puristic evaluation. The fact that the speech we labeled 'Type A' seems to conform to older Yucatec usage in more instances than that labeled 'Type B' is purely accidental so far as our procedures are concerned; for, as stated in Note 5, the choice of the speech-type which can serve conveniently as the basis of the description is determined solely by the exigencies of the task.
The following statements on the distribution of the two speech-types are based both on the texts recorded and on information procured in the manner specified in Note 6. Guided by the data available on the distribution of the Yucatec-speaking population and by our information on the speech-types, we conjecture that the individuals whose speech is prevalently of Type A constitute perhaps no more than one-fourth of the Yucatec-speaking population. The Yucatec of the Corozal district of British Honduras, that of our Quintana Roo informants, and that of Lunkini, state of Campeche, is prevalently of Type A. In the state of Campeche, Type A seems to be common also in Bolonchen and other villages of that district, but our information on that portion of the peninsula is of unknown reliability. In the state of Yucatan, Type B is decidedly prevalent. In some districts, however, according to various reports the speech of the older folk is Type A, or has some of the characteristics of this speech-type, while the speech-type of the young generation is prevalently Type B. So far as our own observations go, that is the case in the villages of Chemax and Chaczinkin. The same condition was observed in Calkini, state of Campeche, although this town is only a few kilometers from the village of Lunkini where Type A prevails. According to some of the oldest natives of Calkini, the differences between their
speech and that of the people of Lunkini were greater fifty or sixty years ago. Some of the characteristics of Type A, particularly the suffix -il which is equivalent to the B-variant -i, occur under special circumstances in the speech of individuals whose discourse is ordinarily of Type B. When translating Spanish words or expressions, or when demonstrating how a given Yucatec expression is pronounced, some of our informants would use some A-variants which did not occur in the texts they dictated. It should be noted, however, that this does not hold for all the A-variants.

5. Samplings

The samplings of connected discourse on which our description of Modern Yucatec is based consist of folk-tales, autobiography, narratives more or less of a historical sort, descriptions of ceremonies, of agricultural and hunting techniques, and of several other pursuits. Some of these pieces of narrative and description, as well as a few dialogues, were recorded on 112 double-faced ten-inch aluminum discs, and the rest were taken down at dictation. To each narrative, description, or dialogue, recorded in either of these two ways, we shall refer as a text. The total number of texts is 214, and the length of each varies, approximately, from
200 to 12,000 words. There are 13 texts of 5,000 words or more, and 98 containing from 1,000 to 4,000 words. Three-fourths of the folk-tales spoken before the microphone are at least twice as long as the longest tales recorded at dictation. Also, the longest and most complex sentences occur in the texts recorded phonographically.

The texts are samplings of the speech of 32 informants whose ages vary from 20 to 93. All but 2 of the informants were male. Two of the texts were dictated by individuals whose command of Spanish was about equal to that of their native tongue. All but 6 of the 32 informants were illiterate, and 14 spoke only Yucatec.

The localities where these texts were recorded are as follows: Merida, Chichen Itza, Chankom, Chemax, Valladolid, and Peto, State of Yucatan; Calkini and Lunkini in the State of Campeche; Pachacaan, Xaybe, and Paraíso, in the Corozal district of British Honduras. Some natives of other localities were brought to the above places, or happened to come there on a visit, or some errand, or had resided there no longer than five years. These were from Piste, Xocenpich, Sotuta, Chacsinkin, and Xbox, State of Yucatan; and from Chunpon, Bacalar, and Icayche, Quintana Roo. The above total does not include some informants who were utilized for phonetic observations and tests of other sorts. These informants were from the states of Yucatan and Campeche.
PART 1
PHONOLOGY

1.1. Consonants

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<tr>
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<th>Labio-Dental</th>
<th>Alveolar</th>
<th>Palato-Alveolar</th>
<th>Palatal</th>
<th>Velar</th>
<th>Glottal</th>
</tr>
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<tbody>
<tr>
<td>Plosive</td>
<td>p</td>
<td>p'</td>
<td>b</td>
<td></td>
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<td></td>
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<tr>
<td>Nasal</td>
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<td>n</td>
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<td>Lateral</td>
<td>l</td>
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<td></td>
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<td>s</td>
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<tr>
<td>Affricate</td>
<td></td>
<td>t's</td>
<td>t's'</td>
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<tr>
<td>Rolled</td>
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<td>r</td>
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<tr>
<td>Frictionless continuants</td>
<td>w</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>j</td>
</tr>
</tbody>
</table>

Notes:
(1) IPA symbols have been used throughout this work for Modern Yucatec sounds.
(2) The sounds f, d, r, p, and g are found only in words borrowed from Spanish.
(3) ' indicates glottalization, or ejective articulation.
(4) b is weakly articulated in medial position; in final position it is unexplosive, being released nasally with glottal closure.
(5) Final l is weakly articulated (and is frequently omitted in speech of Type B).
(6) ? does not occur initially.
1.2. **Vowels**

\[ i \quad e \quad a \quad o \quad u \]

Notes:

(1) The vowels i, e, a, o, and u in Yucatec are close to cardinal vowels 1, 2, 4, 7, and 8, respectively, but somewhat lower, at approximately positions 2, 6, 14, 24, and 27 in the IPA vowel chart.

(2) The diphthongs ei, ai, oi, and au occur.

(3) All the vowels occur long (i:, e:, etc.) and doubled (ii, ee, etc.). The first element of a double vowel is normally (but not invariably) of greater intensity and higher pitch than the second element.
Sound Change

Study of the phonologic characteristics of Modern Yucatec shows a variety of sound changes, ranging from a few instances of phonetic change, through a number of phonologic changes of varying degrees of consistency, to a rather large number of variations, particularly in connection with vowels, regarding which no definite statements can be made. All the types of changes occurring in the illustrative material used in Part 4 are listed below, together with some indication of the consistency and frequency of their occurrence.

1.3. Consonants

(1) Invariable change of ms to ns and of mt to nt occurs.

ku 'jensik, he brought it down; j-em-s-ik; em-s, bring down; em, go down.

tu 'kinsa,hi, he killed it; kim-s-ah-i; kim-s, kill; kim, die.

'sansa,maí, every day; sam-sam-al; sam-sam, duplicated stem (4.69).

'k̪aata,ko:b, they are beautiful; k̪a-t-ak-o:b; k̪a-tam, beautiful.

u hentah'ma, it was hanging; hem-t-ah-ma; hem-t, place across.

(2) k' as the final consonant of a few monosyllabic verb stems in speech of Type A occurs as ? in the same stems
in speech of Type B. In other stems $\ddagger$ is a variant of \( k' \) but the relationship to speech type is unknown.

\( \text{tan u 'pak'taal, he was awaited; speech of Type A. tan u 'na'taal, speech of Type B.} \)

\( \text{ho:p' u 'hok'saal, they began to be brought out; variant; ho:p' u 'ho'saal.} \)

(3) A very few examples are observed of long consonants which in the instances noted may be attributed to compensatory lengthening; e.g., sun:a'hi, he came back (su(t)-n-ah-i); k \( \text{sentik:ba, (in order that) we feed ourselves (sen-t-ik-(k)-ba).} \)

(4) Loss of consonants

The following losses are invariable in isolated stems, the occurrence of which in the texts is frequent:

\( l \) before \( s \) in ta(l)s, 'bring': ta:'sik, ta'sah, ta'saak, ta:'se.

\( n \) before \( s \) in bi(n)s, 'take': bi'sik, bisa'hetj, bis'bil, bi'se.

\( l \) before \( \ddagger \) in 'o(l)bil, 'poor': 'ki?bil, 'hak',o'bil, o'bil.

These losses occur consistently in individual stems which are found infrequently:

\( \ddagger \) before \( n \) in si(?)n, 'fetch firewood': 'si:na,ko:b.

\( t \) before \( n \) in su(t)n, 'return': su'nak,e$^\ddagger$.

\( t \) before \( s \) in e(t)s, 'show': we:s.

\( b \) before \( s \) in lu(b)s, 'cause to fall': lu'sen.

\( t\ddagger \) before \( s \) in ku(t)s, cause (something) to arrive: k'u:si'ke?.
The following losses are consistent in 95% of the examples of a number of different words:

?- before -a?, -e?, -o?: 'ha, a?; ha?-a?. 4fe' o?; 4fe'? o?.

b before t: 'wa:katu,ba; wa(l)-ka(b)-t-u-ba. 'jak'a:tal;
i-ak'-a(b)-t-al.

These losses are observed frequently but inconsistently:
l before t: wa'tal; wa(l)-t-al. 4f'ital; 4f(i(l))t-al.
l before k: 'kukin,taal; ku(l)-kin-t-aal; 4fikun,taal;
     4f(i(l))kun-t-aal.

Loss of medial h after k is observed in such stems as
nok'ha?S; 'hit with a club', and ok'han, 'baptize':
no'kastaa; bi; o'kanak.

Final h and l are often dropped, particularly in speech of Type B. Examples:
tu nan'ta, he ate it; han-t-a(h).
tan in 4f'ee, I am laughing; 4f'ee(h).
ho:p> u 'pibtaa, it is beginning to cook in pib;
pib-t-aa(l).
tin jo'ko, I am coming in; j-ok-o(l).
1.4. **Vowels.**

Many instances are observed of the occurrence of the vowel of stems (3.1) and of certain suffixes, otherwise in quantity or quality than would be expected on the basis of their occurrences elsewhere. In some cases fairly definite statements may be made governing the conditions under which these "abnormal" forms occur; in others, however, only a general phonologic tendency may be described. Some types of vowel change seem to be morphologically determined.

(1) A common phenomenon is the apparent lengthening of short vowels under certain conditions which can be specified for about one-half of the samples studied; a cross-check was made for each condition in order to determine the frequency with which lengthening occurred for that condition.

Lengthening of vowels occurred in approximately 95% of the following classes of morphemes: (a) monosyllabic nouns ending in any consonant except *a*, when followed by *-a?, -e?, -o?* (3.5); (b) pronouns of Class C, 1st. and 2nd. pers. sing., when followed by *-a?, -e?, -o?*, or *-l(?)* (2.6, 3.5 ff).

- *be:'lo?, way; bel-o?*.
- *ka:'ha?, village; kan-a?*.
- *ji:'le?, eye; j-i-le?*.
- *te:'le?, to you; tel-e?*.
- *te:'na?, to me; ten-a?*.

About 80% of the vowels of the following lengthen: (a) *jan, 'have'* (3.5), when followed by a pronoun of Class B (2.5); (b) *-en, 1st. pers. sing. pron. Class B*, when followed by
-ə?, -eʔ, -oʔ, -i(ʔ); (c) the suffix -ab (3.9), when followed by another suffix. If, however, -ab is either preceded by or followed by a syllable containing a long vowel, the vowel of -ab usually does not lengthen.

tiʔ ja:'no:n, we were there; jan-o:n; -o:n (2.5).
ka k'u'fe:neʔ, when I arrived; k'urt'en-eʔ; -en (2.5).
i'la:bi, it was seen; il-ab-i; -ab (3.9); but 'a:labi, it was said; 'kinsa:bo:b, they were killed.

In many instances, too numerous to list, short and long stem vowels of the same quality seem to be interchangeable, no determinants being apparent for the variations. The scattered and contradictory data at hand do not justify classification of these instances.

wa'ta,neʔ, wa:'ta,noʔ, wife; w-at-an-eʔ.
ju'mil, ju:'mil, owner; jum-il.
nuʃi, nu:'ʃi, old, big; nuʃ-i.
'jalan, 'ja:lan, under.
in wo'hel, in wo:'hel, I know it; w-on-el.
ka ta'sik, ka ta:'sik, you bring it; ta(l)-s-ik.
tan u ha'nah, tan u ha:'nal, he is eating; han-al.
ku ho'k'ol, ku ho:'k'ol, he came out; hok'-ol.
 Gus:k u 't'ani,ken; Gus:k u t'a:'ni,ken, she had called me; t'an-ik-en.
(2) Many examples are observed of variation between double and short vowels, between double and long vowels, and between double, long, and short vowels.

In some instances, an obvious change in significance accompanies the use of short or double vowel.

kuk, elbow; 'kuuk, squirrel.
kan, snake; 'kaan, sky.
bul, lung; 'buul, bean.

In emphatic speech, 'kuuk occurs as 'ku^uk, 'kaan as 'ka^an, etc.

For the doubling of the stem vowel in passive forms see 3.48 and 3.49. For the variants of suffixes -aak and -aan see 3.13 and 3.47, respectively.

The pronouns -e:ʃ and -o:b (2.5) occur as -eef and -oob when they are accented and in medial position.

\begin{align*}
\text{ti ka } & \text{\text{-fun'kee, there is where you must start; } } \\
& \text{\text{-fun-(i)k-e:ʃ-i. } } \\
\text{a } & \text{\text{-funke:'ʃo?, (when) you begin it; } } \\
& \text{\text{-fun-(i)k-e:ʃ-o#ac. } } \\
\text{ku } & \text{\text{k'utʃ'loobe², by the time they arrived; k'utʃ-(u)l-o:b-e². } } \\
& \text{\text{k'utʃ'o:b, they arrived; k'utʃ-o:b. } }
\end{align*}

A phenomenon comparable to that observed for interchangeability of long and short vowels is observed for long, short, and double vowels.

\begin{align*}
\text{\text{'sel, side. } } & \\
\text{'maalob, 'nr:lob, all right, good. } & \\
\text{su'kun, su'kun, brother. } & \\
\text{ku } & \text{\text{'hoon'ol, ku 'ho:p'ol, it begins. } } \\
& \text{\text{ku 'ś'ockol, ku, 'ś'ockol, it ends. } }
\end{align*}
ma u 'G'ab'a:bal, ma u 'G'a:bal, ma u 'G'abal, it was not given.
u 'G'ab'a:bak, u 'G'a:ba:bak, u 'G'ab'a:bak, (in order that) it will be fetched.
'G'eehnah-e:yi, you laughed; 'G'ehnen, Laugh! tan u 'G'e:'ne?', she was laughing (3.53).
'toone?', to:'ne?', to me.
'heela?', he:'la?', 'he:la?', here it is.

No consistent behavior is found relating to the shifting of accent and the occurrence of a long vowel when suffix -a?, -e?, or -o? is added to a stem which contains a double vowel; cf. 'buul, le 'buulo?', 'the beans', and 'heela?', etc., above.

(3) A tendency is observed, particularly in speech of Type B toward elision of the vowel of an unaccented medial suffix. This phenomenon is most nearly invariable when a reflexive pronoun (2.7) follows the unaccented suffix; its occurrence is considerably less predictable when other suffixes follow. Elision of the vowel of an unaccented medial syllable in noun forms is apparently confined to those instances in which the vowels of the stem and of the medial syllable are of the same quality.

tu mulhu'ba, he threw himself; nul-(a)h-u-ba; -u-ba (2.7).
ku 'hel'sku,ba, he rests himself; hel-s-(i)k-u-ba.
jan u 'han'tko:b, they will surely eat it up; han-t-(i)k-o:b; -o:b (2.4).
wa ka k'utj-e:-j, if you come; k'utj-(u)k-e:j; -e:j (2.5).
ma in won'i, I don't know; m-on-el-i; -i (3.4).
ra:'jil, cow-like; wakaj-e:jil.
le 'Sim'no:b, the horses; 'Simin-o:b.
1.5. *Contraction*

Primarily in speech of Type B, frequent and in some cases extreme contraction is observed. Some typical examples are listed:

- min (ma in); ma (ma a); mu (ma u).
- kin (ka in); ka (ka a); ku (ka u).
- tin (ti in, tan in); ta (ti a, tan a); tu (ti u, tan u); t (ti k); te (ti le).
- ha (he a), hu (he u).
- t’in (ts'ok in); ts'u (ts'ok u).
- kan (ka bin); kun (ku bin).
- ta:'ken (tal-ak-en); wa:k'bal (wal-ak-bal); wi:'ke?(\*-il-ik-e?).
- tik'nal (tu ik'nal); tju:l'he (tu 'ja:la,he?); 'tjo'ralal (tu 'jo'ral).
1.6. **Accent**

Relative stress within a word has been indicated in this work by primary and secondary accents (', and ,) preceding the stressed syllable. The relationship between pitch and accent in Modern Yucatec has not been studied sufficiently to permit generalization; it may be said, however, that frequent examples occur in which greater stress accompanies lower pitch and lesser stress accompanies higher pitch (e.g., le 'nuukulo:,boʔ, 'the utensils', with high pitch on -lo:-, lower pitch on -boʔ).

Accent in Modern Yucatec appears to be determined lexically; with few exceptions, a sharp division can be made between those verbs in which the stem is accented, regardless of whether one, two, or more suffixes are added, and those whose stem is invariably unaccented. Regarding nouns, somewhat more complex behavior is noted.

The accent patterns which occur most frequently in the texts are summarized below. For convenience, stems and suffixes containing double vowels are treated as monosyllabic.

1. (1) Words with one double vowel; the accent is always on the first element. Examples:

'hooll, head  'taan, ashes
'huun, paper, letter  'suuf, basket
'luum, ground  'buul, bean
(2) Disyllables

(a) The most frequent pattern for disyllabic noun and
verb forms is that in which the ultima bears the accent.
Listed below are the noun forms, and the verb stems whose
disyllabic forms (i.e., with one monosyllabic suffix) accent
the ultima.

A sampling of the noun forms follows: the last two examples
represent the normal pattern for monosyllabic noun plus suffix:

<table>
<thead>
<tr>
<th>Noun Form</th>
<th>Verb Stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>tja'mal, cigarette</td>
<td>ta'man, cotton</td>
</tr>
<tr>
<td>ta:'k'in, money</td>
<td>wa'kaʃ, cow</td>
</tr>
<tr>
<td>ja'nab, shoe</td>
<td>k'a'no:b, hammocks</td>
</tr>
<tr>
<td>Si'nik, ant</td>
<td>ma:'keʔ, man</td>
</tr>
</tbody>
</table>

Two groups of verb stems follow; the first comprises
stems which occur in the texts with great frequency and
whose adherence to the pattern is therefore relatively
certain; the second group includes stems which occur less
frequently.

Group 1

<table>
<thead>
<tr>
<th>Verb Stem</th>
<th>Group 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>be:t, make (e.g., be:'tah)</td>
<td>maʃ, hold</td>
</tr>
<tr>
<td>bin, go</td>
<td>tal, come</td>
</tr>
<tr>
<td>bis, carry</td>
<td>tas, bring</td>
</tr>
<tr>
<td>bo:t, pay</td>
<td>uk', drink</td>
</tr>
<tr>
<td>hant, eat something</td>
<td>wen, be sleepy</td>
</tr>
<tr>
<td>il, see</td>
<td>ʇs'on, shoot something</td>
</tr>
<tr>
<td>jan, be, have</td>
<td>ʇʃil, lie down</td>
</tr>
<tr>
<td>kaʃt, find</td>
<td>ʇʃ'in, throw</td>
</tr>
<tr>
<td>kul, sit</td>
<td>k'ål, lock</td>
</tr>
<tr>
<td>man, buy</td>
<td>k'utʃ, arrive</td>
</tr>
</tbody>
</table>
Group 2

han, eat (e.g., ha'nal)  
hat's', strike  
luk', leave  
ment, make  
ok', enter  
nak', plant  
pul, throw  
san, fear  

tah, boil, bake  
tih, dry  
fül, end  
ťfakt, out by striking  
k'am, accept  
k'af, tie  
k'ub, deliver  
k'ujt, hide  

(b) The accent falls on the penult in a small number of nouns and verbs; and in all words which contain a double vowel in the penult.

A list of nouns which fall in this pattern follows:

'makan, grove  
'maskab, machete  
'ulum, turkey  
'išam, husband  
'k'ek'en, pig  
'uk'ul, drink  

As in the pattern in which the ultima is accented, two groups of verbs, of greater and less frequency, respectively, are given.

Group 1

al, say (e.g., 'a:lah)  
ho:n', begin  
hok', come out  
kim, die  
lub, fall  
olt, be willing  
paut, be possible  
taut, send  
utf, happen  
tőa, give  
ťfa, turn loose  
ťfa, fetch  
k'at, ask, wish
Group 2

katf, break
lik's, lift
man, pass
nats', approach
pa't, await

Words with double vowel in penult include:

'maalob, bad
'siinil, sin
'naak, climb (e.g., 'naakal, 'naskak)
'saat, get lost ('saatal, etc.)
'k'uum, soften by boiling ('k'uumul, etc.)

(c) Primary and secondary accents are observed on penult and ultima, respectively, of compound nouns and of nouns which are followed by -aʔ, -eʔ, -oʔ, or -ben (3.5, 3.41).

'be,k'ik', vein; be, road; k'ik', blood.
'pol,teʔ, carpenter; pol, head; teʔ, wood.
'k'an,hool, pillow; k'an designates an object used for comfort; 'hool, head.
'ha,oʔ, water; haʔ-oʔ (1.3)
'te,aʔ, wood; teʔ-aʔ
'na,eʔ, house; na-eʔ
'k'o,ben, kitchen; k'o-ben
'utf,ben, ancient; utf-ben
(d) The following verb forms represent accentual irregularities observed in the texts; most of the verb stems involved have already been listed in accordance with the preponderance of evidence pointing to their inclusion in one of the two patterns for disyllables.

- ku ṭsa:'bal; ku ṭsa:bal, they will be given it.
- in 'han,te; in han'te (in order that) I eat it.
- jan u 'kinsik, she has to kill it; tan u kin'sik, she is killing it.
- ki'men, he is dead; irregular V-aan form (3.47)
  (but 'kimi, 'kimil, etc.).
- ho'k'en, Come out! (but 'hok'i, 'hok'ol, etc.).
- 'hanen, Eat! (but ha'nal, etc.).
- lu'baan, it is fallen (but 'lubul, etc.).
- ṭa'ben, I was fetched; ṭa-(a)b-en; (but ṭa'aik, etc.).
- ma ṭuukul, it isn't caught (but ṭu'kik).
Trisyllabic forms fall with some exceptions into one of two accent patterns: (a) with an accent on the ultima (and on no other syllable), and (b) with a primary accent on the antepenult and a secondary accent on the ultima. Almost all verbs which in disyllabic forms are accented on the ultima, but only a few of the nouns so accented (about 15%), adhere to the first pattern. All of the verbs and about one-half of the nouns which in disyllabic form are accented on the penult adhere to the second pattern. Examples of forms representing both patterns follow:

- binla'ho:b, they all went (disyllabic forms include bi'no:b, bi'nen, bi'ni).
- ma be:ti'ko:b, don't make them (disyllabic forms include be:'tik, be:'tan).
- kaji'lo:b, chickens (disyllable, ka'Jil).
- 'kime,ne?, I died (disyllabic form, 'kimil).
- 'sama,le?, at once (disyllabic form, 'samal).
- 'k'eje,mo?, pozol (disyllable, ke'jem).

Examples of trisyllables which fall in neither pattern are:

- k'a'laanen, I am locked up.
- k'as'jentaal, they are tied.
- su'ku,ne?, brother.
- bi'neti', you went.
- 'okk'i:ne?, evening.
- k'o,le'leilil, highly respected lady.
(4) In the relatively few words in the texts which contain more than three syllables, the ultima is invariably accented; in most instances either the first or second syllable is also accented. Some examples follow:

'k'ek'eno:boʔ, pigs.
a wo'beltike:tselʔ, (in order that) it be known to you.
tiikilan'kil, reference to excited activity of ants.
'mahana:boʔ, helpers.
'poltselʔiyiʔ, you are a carpenter.
'bukint'mafoʔ, (you) were putting on (clothes).
'tikbana'ko:n, we may talk.

(5) In general Spanish words follow Yucatec patterns.

li'bro, book.
pe:'ro, but.
mo:do'il, manner.
bam,da'ʔeside.
'kampa'na, bell.
tu 'huntar,tah, they gathered together.
'sabado,ak, last Saturday.
u 'enkantar'tal, they are enchanted.
PART 2

BRIEF GRAMMATICAL DESCRIPTION

This part is intended, as its title indicates, to serve as a brief presentation of the most important Modern Yucatec forms and their uses, and to serve incidentally as an introduction to the detailed treatment of Parts 3 and 4. An attempt is made to relate the relatively familiar and inexact classifications of Part 2 to the classifications based on usage which are employed in Part 4.

Morphologic Elements

2.1. Stems. We shall define a stem (3.1) as the lexical element remaining when in the process of analysis identifiable suffixes are removed from a form. Most Yucatec stems are monosyllabic: 'hane, ne; $, Eat! -e$; 2nd. pers. plur. ending; -en, imperative verb suffix; han, intransitive verb stem 'to eat'; han'1il, cooked food; -il, non-particular noun suffix (4.60); -(a)l, noun suffix (4.52); han, stem.

2.2. Prefixes. When the stem begins with a vowel, prefix w- is required after pronouns in or a, and prefix j- is required after pronoun u (3.2). in wi'le, I see it; u ji'le, he sees it; il, see.

2.3. Suffixes. For convenience, suffixes are classified
Terminal suffixes are preceded by pronominal suffixes, verbal suffixes, stem formatives, and stem suffixes. The are getting large. noh-otf-t-al-o:b-e?; -e?, terminal suffix; -o:b, pronoun 'they'; -al, verbal suffix; -t, stem formative; -otf, stem suffix; noh, 'large', stem.

2.4. Pronouns of Class A. Three sets of personal pronouns are identified; they will be called pronouns of Class A, B, and C. Pronouns of Class A are used as subjects of certain verbal constructions and as possessives:

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st. person</td>
<td>k, k ... -e:ʃ</td>
</tr>
<tr>
<td>2nd. person</td>
<td>a ... -e:ʃ</td>
</tr>
<tr>
<td>3rd. person</td>
<td>u ... -o:b</td>
</tr>
</tbody>
</table>

The notation '...' in the plural pronouns represents the verb or noun stem and the suffixes which intervene between k, a, or u and -e:ʃ or -o:b.

k, 'we', the exclusive form of the 1st. pers. plur. is employed (1) when the listener is excluded: 'he and I (but not you)'; k 'a:lik tetʃ, we (he and I) say to you; (2) when k includes only one listener: 'you (sing.) and I'; tan k tal, we (you and I) were coming. k ... -e:ʃ, 'we', the inclusive form, includes more than one listener; 'you (plur.) and I'; (tu 'jo?lal) k ə'oní'ke:ʃ, (in order
that) we (both you two and I or we) may shoot. The context of the communication must determine the persons included or excluded in 'we'.

The terminal component -oːb of u ... -oːb is omitted in about half the examples of its use as a pronoun of Class A. When -oːb is omitted there is usually some sign of plurality in the context. ħoːk u lah tal in maha'noːb, tat. All my helpers have come, sir. lah, all; in maha'noːb, my helpers; expected verb form, ħoːk u tal-oːb (4.15).

Where a verbal suffix and a direct object pronoun (2.5) are required, the order for the plural pronouns is: k, a, or u : verb stem + verb suffix + direct object pronoun + -eːʃ or -oːb. jan a 'təntikoː; neːʃ, you have to feed us; ənə, to feed; -t, formative; -ik, verbal suffix; -oːn, 'us', object pronoun; -eːʃ, terminal component of pronoun of Class A a ... -eːʃ, 'you'. For jan see 4.18.

Pronouns of Class A are used as possessives: in na, my house; a na, your house; a naːeːʃ, your (plur.) house; etc. When there is both a thing possessed and a possessor, the order is: pronoun of Class A + possessed item + possessor. u p'ok in su'kun, my elder brother's hat; u p'ok le pa:'loʔ, that boy's hat. Similar to these but without a possessor in the strict sense are: u 'habet le tʃeʔ, the chips of the tree; u hol 'k'oːben, the kitchen door; u tʃiʔ k'wɨik, the mouth of the plaza.
2.5 Pronouns of Class B. These are used as subjects of certain verbal constructions and as direct object pronouns:

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st. person</td>
<td>-en</td>
<td>-o:n, -o:ne:ʃ</td>
</tr>
<tr>
<td>2nd. person</td>
<td>-e:ʃ</td>
<td>-e:ʃ</td>
</tr>
<tr>
<td>3rd. person</td>
<td></td>
<td>-o:b</td>
</tr>
</tbody>
</table>

The 1st. pers. plur. pron. Class B has both an exclusive and an inclusive form. -o:n, 'we', 'us', excludes the listener or includes only one listener; 'lubon, 'he and I fell' or 'you and I fell', depending on the context. -o:ne:ʃ, 'we', includes more than one listener; 'lubo:ne:ʃ, you (plur.) and I fell.

The 3rd. pers. sing. pron. Class B is a null sign.

lu'k'ak, he had left; luk', to leave; -ak, a verbal suffix; null sign for 'he'. The 3rd. pers. plur. -o:b is omitted in a third of the examples, many of which have another plural sign in the context; e.g., hel u 'pa:to:b, they stopped (hel) to wait; expected form: hel-o:b.

A pronoun of Class B used as subject or object follows the verb stem and its suffixes. 'alkabna,ho:b, they were running; 'alkab, to run; -n-ah, intransitive suffixes; -o:b, they. As indicated above, pronouns of Class B are followed by the terminal components of plural pronouns.
of Class A and by the terminal suffixes: ŭha't'sen:e, 'he',
they hit me; ha't's, to hit; -en, 'me', pronoun of Class B;
-šo:b, terminal component of ŭ ... -šo:b, 'they', pronoun of
Class A; -e?, terminal suffix.

When pronouns of Class B are used as direct objects, only
the exclusive form -o:n is found for 'us'. There is frequent
omission of the 3rd. pers. plur. pron. -šo:b, 'them'. ŭj'a,e,
'Take him' or 'Take them'; ŭj'a, to take; -e, verbal suffix
for imperative; null sign for 'him' or 'them'.

2.6 Pronouns of Class C. Except for the 3rd. person, pro-
nouns of Class C are the pronouns of Class B with prefix ŭ-:

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st. person</td>
<td>ten</td>
<td>to:n, to:'ne:j</td>
</tr>
<tr>
<td>2nd. person</td>
<td>ŭtę?</td>
<td>te:j</td>
</tr>
<tr>
<td>3rd. person</td>
<td>le:'ti?</td>
<td>le:'tio:b</td>
</tr>
</tbody>
</table>

Pronouns of Class C have two primary functions. They
are used as devices for emphasis, signifying 'you yourself',
'it is he who', 'as for me', etc. ŭtę 'k'askun,tik, It
is you who are spoiling it; le:'ti? in koni'ke?, That's
what I sell! Pronouns of Class C often supplant the pro-
noun ordinarily required by the verbal construction; e.g.,
le:'ti? jo:'hel, 'he himself knew' (expected construction,
le:'ti? u jo:'hel). Although usually preceding the verb
in this use, Pronouns Class C follow the verb in imperative
sentences: ŭtę a te:'ųj'i?, Take it yourself!
The second function of pronouns of Class 0 is as indirect object; in this use they follow the verb: 'p'atak te'f, let it be yours (let it remain to you). The 3rd. pers. pronouns are preceded by ti, 'to', when used as indirect objects; e.g., ma ta:sa'he:te:'ni? ti le:'ti?, You (plur.) did not give it to me but to him; ten-i?, 'to me', pronoun of Class 0 and terminal suffix -i?(4.59); ti, to; le:'ti?, 3rd. pers. sing. pron. Class C. A few examples have been noted of other pronouns of Class C preceded by ti; e.g., ma tin G'ah ti te:4ei?, I did not give it you.

More frequently 'to him' and 'to them' are expressed by ti? and ti'o:b, respectively, rather than by pronouns of Class 0. The former is probably ti (variant ti?), 'to', followed by 3rd. pers. sing. pron. Class B null sign; ti'o:b is ti or ti? followed by pron. Class B -o:b; 'a:lab ti?', it was told to him; 'G'abak ti'o:b, let it be given to them.

2.7 The reflexive pronouns. These consist of the reflexive sign -ba preceded by pronouns of Class A in, a, u, or k:

- in-ba; in sot-in-ba, I cut myself
- a-ba; a sot-a-ba, you cut yourself
- u-ba; u sot-u-ba, he cut himself
- k-ba; k sot-k-ba, we cut ourselves
- a-ba; a sot-a-ba-e:j, you (plur.) cut yourselves
- u-ba; u sot-u-ba-o:b, they cut themselves

Reflexive forms are also used as reciprocals; e.g., tan u 'lu:si:ku, bao:b, they were fighting with each other.
2.8 Impersonal pronouns. mak, 'one', 'man', 'people', 'person', is sometimes used as an impersonal pronoun analogous to French on. mak u naakal tu 'kab, one gets on the branch; u ta:ta mak, one's father; le 'mako:bo? ja:no:bo? the persons that may be present; mi mak tu be:ta'hah, no one made it.

u lak'and u hel, 'another', 'the other', 'its other' are comparable in most of their uses to impersonal pronouns: hant u hel, Eat another. 'naakak u lak?', Let another climb.

Main Constructions

2.9 Past holistic. The most prevalent use of the following constructions is to express completed action occurring in the past:

\[ t-PA \text{ V-ah} (4.9) \], the transitive form, consists of \( t- \), an unidentified auxiliary prefixed to PA, a pronoun of Class A; V, the verb stem; -ah, a verbal suffix (3.10).

Verb stem be:t, 'make', 'do'

\[ \begin{align*}
\text{tin be:ta'hah, I did it (t-in be:t-ah)} \\
\text{ta be:ta'hah, you did it (t-a be:t-ah)} \\
\text{tu be:ta'hah, he did it (t-u be:t-ah)} \\
\text{t be:ta'hah, we did it (excl.) (t-(k) be:t-ah)} \\
\text{t be:ta'he:s, we did it (incl.) (t-(k) be:t-ah-e:s)} \\
\text{ta be:ta'he:s, you did it (t-a be:t-ah-e:s)} \\
\text{tu be:ta'ho:o:b, they did it (t-u be:t-ah-o:b)}
\end{align*} \]

The PA for 1st. pers. plur. is t or t ... -e:s, since k, 'we', is always omitted after t- (2.4).
V-PB, the intransitive form, consists of V, verb stem, and PB, pronoun of Class B.

Verb stem lub, 'fall'

'luben, I fell (lub-en)
'lubetf, you fell (lub-etf)
'lub, he fell (lub-null sign)
'lubon, we fell (excl.) (lub-o:n)
'lubon, we fell (incl.) (lub-o:n-e:s)
'lubes:j, you (plur.) fell (lub-e:s)
'lubos:b, they fell (lub-o:b)

The passive form, V-ab, consists of V, verb stem, and -ab, verbal suffix (3.9).

Verb stem il, 'see'

'ilaben, I am seen (il-ab-en)
'ilabetf, you are seen (il-ab-etf)
'ilab, he is seen (il-ab-null)
'ilabon, we are seen (il-ab-o:n)
'ilabes:j, you (plur.) are seen (il-ab-e:s)
'ilabos:b, they are seen (il-ab-o:b)

For the use of pronouns and for the lack of an inclusive form of the 1st. pers. plur., see 4.10.

2.10 Durative. The following constructions are often used in statements that involve a continuing action which is either past, present, or future:

The transitive form is tan PA V-ik (4.14); tan has no
independent meaning in this use and is not conjugated; PA indicates a pronoun of Class A; V, verb stem; -ik, verbal suffix (3.2Q).

Verb stem be:t, 'make', 'do'

tan in be:'tik, I was (am, will be) doing it

tan a be:'tik, you were (are, will be) doing it

tan u be:'tik, he was (is, will be) doing it

tan k be:'tik, we were (etc.) doing it

tan k be:ti'ke:§, we were (etc.) doing it

tan a be:ti'ke:§, you were (etc.) doing it

tan u be:ti'ko:§, they were (etc.) doing it

The intransitive form commonly used for durative expressions is tan PA V-(a)l, with tan, PA and V as defined above and -(a)l the verbal suffix (3.18). The vowel of the verbal suffix agrees vocally with that of the verb stem.

Verb stem lub, 'fall'

tan in 'lubul, I was (am, will be) falling

tan a 'lubul, you were (are, will be) falling

tan u 'lubul, he was (is, will be) falling

etc.

Although the form usually used as a durative passive has several variants (3.41), it will be denoted by the formula tan PA V-(aa)l:

Verb stem hant, 'eat (something)'

tan in han'taal, I was (am, will be) being eaten

tan a han'taal, you were (are, will be) being eaten

tan u han'taal, he was (is, will be) being eaten

etc.
2.11 *Past inceptive.* The constructions most frequently used to express the beginning of an act which occurred in the past are: ho:p' PA V-ik, transitive; ho:p' PA V-(a)1, intransitive; ho:p' PA V-(aa)1, passive (4.17). ho:p', 'to begin to occur' is an impersonal verb which is also found in the conjugational forms: ho:p'ol and ho:p'ok. In our samplings the constructions corresponding to the above formulas occurred only in the 3rd. person (for constructions used to express the past inceptive in the 1st. and 2nd. persons, see 4.17 and 4.22).

**Transitive**
ho:p' u be:'tik, he began to do it
ho:p' u be:ti'ko:b, they began to do it

**Intransitive**
ho:p' u 'lubul, he began to fall
ho:p' u 'lubul'o:b, they began to fall

**Passive**
ho:p' u han'taal, it began to be eaten
ho:p' u han'taal'o:b, they began to be eaten

2.12 *Perfective.* Forms used when reference is made to the perfective are: so:k PA V-ik, so:k PA V-(a)1, and so:k PA V-(aa)1, for transitive, intransitive, and passive, respectively. So:k, the intransitive verb 'to end', 'to be over' is unconjugated in these forms (4.15).
Transitive

*k'o:k* in *be:'tik*, I had (have, shall have) done it

*k'o:k* a *be:'tik*, you had (have, will have) done it

*k'o:k* u *be:'tik*, he had (has, will have) done it

etc.

Intransitive

*k'o:k* in *'lubul*, I had (have, shall have) fallen

*k'o:k* a *'lubul*, you had (have, will have) fallen

*k'o:k* u *'lubul*, he had (has, will have) fallen

etc.

Passive

*k'o:k* in *han'taal*, I had (have, shall have) been eaten

*k'o:k* a *han'taal*, you had (have, will have) been eaten

*k'o:k* u *han'taal*, he had (has, will have) been eaten

etc.

2.13 **Habitual.** The following symbolize the constructions used to express actions repeated often but not in immediate succession (4.27); i.e., descriptions of habits, customs, rituals, or common practices of any kind: *k*-PA V-*ik*, transitive; *k*-PA V-(a)1, intransitive; *k*-PA V-(aa)1, passive. They may refer to past, present or future occurrences. The first component, *k*-, combines with the pronouns to form kin, ka, ku; the 1st. pers. plur. has *k* instead of *k-* *k*. *k* be:*ti'ke:ʃ, we (you plur. and I) do it time after time; *k-(k)* be:*t-ik-e:ʃ.
2.14 **Predictions with certainty.** He PA V-(a)l-e^n, he PA V-(a)l-e^n, and he PA V-(aa)l-e^n are the forms which are commonly used when the speaker is sure of his prediction, or is determined to carry it out. He is otherwise used as a demonstrative (4.16); -e^n is a terminal suffix (3.6). He in tasi'ke^n, I will bring it (I certainly will and don't worry about it); he u 'kimi,le^n; He certainly will die.

2.15 **Immediate predictions.** Certain forms are frequently used to express a prediction which involves some certainty that an event will occur in the immediate future. The transitive and intransitive forms are bin PA kah PA V-(e) and bin PA kah V-(a)l; for passive forms see 4.56. Bin, the irregular verb 'to go' is un conjugated in these forms; kah is a remnant of an Old Yucateo durative construction. -(e) is the symbol used to indicate use of either -e or a null sign. Bin in kah in be:'te, I am going to do it; bin PA kah V-e^n. Bin in kah in k'ub tetf, I am going to deliver it to you; bin PA kah V-null; k'ub, to deliver; tetf, to you. Bin in kah 'lubul, I am going to fall; bin PA kah V-(a)l.

2.16 **Remote predictions.** Bin PA V-(e), transitive, bin V-(a)k-PB, intransitive, and bin V-(aa)k-PB, passive, (4.42) are commonly used to predict remote events which have low certainty or relation to fact; e.g., bin 'kimi,ketf, you will die (a curse). For -(a)k and -(aa)k see 3.11 and 3.49.
2.17. **Formulas regrouped.** To conform to the terminology used in Part 4, holistic formulas t-PA V-ah, V-PB, and V-ab will be called AHAB constructions, from the transitive and passive suffixes -ah and -ab. One prediction formula (above) and the durative, inceptive, and perfective formulas have in common PA V-ik, PA V-(a)l, PA V-(aa)l, which will be called IKAL constructions, from the transitive and intransitive suffixes -ik and -al. The habitual forms k-PA V-ik, k-PA V-(a)l, k-PA V-(aa)l will be called k-IKAL constructions. Forms PA V-(e), V-(a)k-PB, V-(aa)k-PB, with certain variants, are used for remote predictions and for many other functions (4.37); these will be called NULLAK constructions, from the transitive and intransitive suffixes 'null' and -ak.

2.18. **Imperatives.** The transitive forms V-(null) and V-e are used as imperative references which occur, respectively, as the initial component and as the sole component of a clause or sentence (4.38): ḍxa tiʔ, Give it to him; ḍan' te, Eat it. V-en is the only form found for intransitive imperative references addressed to the 2nd. pers. sing. (4.57): ḍen, Come down. Forms used when the imperative reference is addressed to the 2nd. pers. plur. are V-eːʃ, transitive, and V-en-eːʃ, intransitive: ḍaːeːʃ, You (plur.) turn it loose! 'eːme,neːʃ, You (plur.) come down! For constructions addressed to 1st. pers. plur. and other persons see 4.21, 4.38.
NULLAK constructions preceded by ka (4.38), and k-IKAL forms (4.36) are usual for transitive and intransitive imperative references which are preceded by some other component of the sentence. The former constructions are more common for orders, the latter for petitions: mas ka k'ub, You had better deliver it; mas, Spanish 'better'; ka (a) k'ub, NULLAK transitive (4.37). le kan t'a;na'ke?, ka 'nukik ti?, When she speaks, answer her; le kan t'an-ak-e?, when she speaks; k-a nuk-ik, k-IKAL transitive (4.27).

The usual construction* for a negative imperative reference is the negative term ma (2.24) plus an IKAL construction (4.24): ma han'tik, Don't eat it; ma (a) han-t-ik, IKAL transitive; for elision of pronoun a see 1.5. The use of 'negative bik, and B variant mik, is common for negative imperative references which recommend caution, give warning, or ridicule (4.43): bik 'lubke;j, Don't you (plur.) fall! lub-(u)k-e;j, NULLAX intransitive.

2.19. Interrogatives. Two devices which serve to express the kind of interrogation answered by 'Yes' or 'No' are:
(1) The use of wa, 'if', after the first assertive word of the sentence; haʃ wa hah a t'an ? Are you really telling the truth? haʃ, really; hah, truth; t'an, to tell. hah wa a t'an ? Are you telling the truth?
(2) A change of sentence intonation; ta haʃ's'ah ? You struck him? t-a haʃ's'-ah, transitive AHAB.
The following devices are used as initial or sole components of questions to be answered by information (4.31): 'baaf', what; maaf, who; bais, how; 'tuaaf, where; ba'huaaf, how much; 'bijaaf, when; and expressions beginning with these terms, such as 'baaf' ten, 'why'; 'baaf' tu men, 'for what reason'. 'baaf' is derived from 'baal' (Old Yuc. baal and balx), a universal word of reference signifying 'thing', 'things'; maaf, 'who', is derived from mak, 'one' (Old Yuc. mao and maax). These devices, used also as relative pronouns, end in $, etymologically identical with the $ (Old Yuc. ix) in $ma, 'without' (2.24). The constructions which may follow these interrogative devices are those found otherwise in declarative sentences; the AHAB and k-IXAL forms are found most frequently; e.g., 'baaf' ka wur'jik? What do you hear? k-a w-uj-ik, k-IXAL transitive. 'tuaaf' jan le $jan pa:'lo? Where was the child? jan, to be, AHAB intransitive; le $jan pa:'lo', the child.

2.20. Conditional clauses. wa, 'if', wa tu men, 'if perchance', 'esak tu men, 'in case that', 'ha:li, 'provided that' (4.44) commonly occur as the initial component of a unit comparable in use to a conditional clause. The differentiation between wa and wa tu men is not consistent; but the latter sometimes indicates that the
protasis is a mere assumption, or a contingent condition ('if it happens that ...').

The k-IKAL constructions are those usually used after one of the above terms (4.35); e.g., wa tu men ku 'pahtal, if it is possible; k-u paht-al, k-IKAL intransitive. A NULLAK construction, however, is preferred when the conditional clause expresses a provisory promise, a supposition about the future, or a statement contrary to fact (4.44): 'ha:li ka ְtָsָa ten, p vided you give it to me; ka ְtָsָa, NULLAK transitive. wa ka tak, if he had come (and he had not); ka ta(l)-(a)k, NULLAK intransitive (Cf. 1.5'). For the circumstances in which AHAB constructions are used in conditional clauses see 4.11.

2.21. Purpose clauses. Constructions with uses corresponding to purpose clauses consist of an IKAL or NULLAK form introduced by u 'ti?al, 'in order to', 'so that', or tu 'jo?lal, 'on account of', 'on his account' (4.23, 4.41): u 'ti?al a bi'sike?ne? ..., so that you may take me ...; a biisike?ne? , IKAL transitive with terminal suffix -e?. Where a NULLAK construction is required and the purpose clause and the main clause have the same subject, u 'ti?al and tu 'jo?lal are seldom used: (ka 'hok?ok) u ju?k?o:b, (They come out) in order to drink; u j-uk?-o:b, NULLAK transitive.
2.22. Relative and other delimiting clauses. Most of the common verbal constructions have uses which correspond to those of English relative clauses: ... 'ba$: ab ti'e? (the clothes) which were given to him; ts'a-(a)b, AHAB passive; ti(?)-e?, to him, pron. of Class C and terminal suffix -e?(4.58); no formal device for 'which'. Often the devices 'ba$: 'what', ma$: 'who', etc. (2.19) serve as relative pronouns and as initial components of relative clauses: ... 'ba$: han'tik, (He could not catch) what he eats; (u) han-t-ik, IKAL transitive; for omission of pronoun see 4.34.

Constructions introduced by he 'ba$: 'whatever', he ma$: 'whoever', wa 'ba$: 'whatever' are used as relative clauses with non-specific antecedents (4.45). ... he 'ba$: ka wa:l ti'e?, (See to it that he obeys) whatever you tell him; ka (a) w-al, NULLAK transitive; ti(?)-e?, 'to him', pronoun of Class C and terminal suffix -e?(4.58). Units introduced by 'tuu$: 'where'; he 'tuu$: 'wherever'; he bi$, 'as', 'like'; and similar terms, are equivalent to various delimiting clauses. ... 'tuu$: kin bi'saal, (He couldn't see) where I was being taken; k-in bi-saal, k-IKAL passive. ... he bi$ tin 'wa:lah ti'o: be?, (They did) as he told them; t-in w-al-ah, AHAB transitive; ti-o:b-e?, pronoun of Class C and terminal suffix -e?.
2.23. **Temporal clauses**: A device whose function is comparable to that of a temporal clause in English is usually the initial component of a sentence. When a k-IKAL construction is used as a temporal clause (4.33), it denotes an event which occurred, is occurring, or will occur before something else happens: *ku taha'le?* ..., After it was cooked, (he ate); *k-ù tah-al-e?*, k-IKAL intransitive; *tah*, to cook; *-e?* (4.58). **NULLAK** constructions are preceded by *kaen*, *kan*, *le kaen*, *le kan*, in references to an unspecified future time (4.46); e.g., *kaen 'ta:ke,ne?*, when I come; *ta(1)-(a)k-en-e?*, NULLAK intransitive.

Various verbal constructions, most frequently IKAL or k-IKAL, are used in temporal clauses when preceded by one of a large group of time expressions (Cf. 2.25 and 4.20). Examples: *îqil u we:'ne,le?*, while he was asleep; *îqil*, while; *u wen-el*, IKAL intransitive; *-e?* (4.58). *tjen p'e'lak u bi'saal*, as soon as he was sent; *tjen p'e'lak*, as soon as; *u bi'saal*, IKAL passive. When a verbal construction is preceded by *le*, the unit may denote 'as soon as (x occurred)'. When the verbal construction is an AHAB form, a very short time interval is indicated (4.62): *le ka tu be:ta'he?*, the very moment he did it. *-e?* is the final morpheme of nearly all temporal clauses.
Other Parts of Speech

2.24. **Negatives.** ma or ma:, variant ma? before a vowel, is used as the sign of simple negation and immediately precedes the verbal construction: ma? i'la:bi, he was not seen; il-ab-i, AHAB passive with terminal suffix -i (4.59). 'baas' ten ma: ta be:'tik? Why don't you do it? ma: tan a be:'tik, IXAL transitive (4.14); for contraction of tan a see 1.5. ma is apparently not found before constructions k-IXAL (4.34), ka NULLAK (4.62), bin+NULLAK (4.42), and bin PA kah (4.56); the negative statement corresponding to the affirmative assertion using one of these forms consists of a ma (+-tan)+IXAL construction.

ma tet? is used for emphatic negation before an IXAL construction (4.59); ma tet? u 'kimil, He is *not* dead. mis mak, 'no one', 'nobody', and mis 'baal, 'nothing' are used before k-IXAL constructions (4.33): mis mak kin bi'sik, I did not take anyone away; k-in bis-ik, k-IXAL transitive. mis bi'k'in, 'never', and bik (B-variant mik) are found before certain NULLAK constructions (4.42, 4.43): mis bi'k'in bin k sul-e:, never are we to cease; bin k sul-e:, bin+NULLAK transitive. mi'naan signifies 'not to have', 'not to exist' (4.61): mi'naan u ka:'ho:b, there are no towns; kah-o:b, towns.

2.25. **Adverbs.** With uses comparable to those of adverbs of time and place in English are many forms such as ti?, la?, tun, 'then', 'there'; 'ka:si, 'previously'; lei'li,
1"hil, 'while'; napulak, 'right away'; sam, 'a while after';
tak, 'until'; nat, 'far'; natS, 'near'. Except for 'kaqj, 'previously', these forms usually precede the verbal construc-
tion: seb 'take\_me\_?, I will come soon; seb, soon;
tal-(a)-k-en\_?, NULLAK intransitive; for contraction of
tal-ak see 1.5; -e\_? (4.58).

As in various European languages, particularly in col-
loquial speech, many words in Yucatec are used without
morphologic differentiation for both adjectival and adverbial
functions; e.g., a -\_\_?an 'ante\_\_me\_?, you help me a little;
\_\_?an, little; a ant-en\_?-?, NULLAK transitive. le \_\_?an
pa:'lo\_?, the little boy; le pa:'lo\_?, the boy.

The construction designated as 'adjunct verbal stem'
(4.50) has the adverbial use of intensifying or varying
the significance of the verb stem which it immediately pre-
cedes. Common adjunct verbal stems are: han, right away,
in a hurry; sen, extremely, much. a han -\_\_?ak a 'sie\_\_;
You will cut your wood in a hurry; a -\_\_?ak, you will cut;
si\_?, wood (1.3 ).

For the uses of duplication and reduplication to perform
functions corresponding to those of adverbs see 4.69.

2.26. Adjectives. The uses of the following forms correspond
closely to those of English adjectives: (1) simple stems such
as sak, 'white', u\_\_?S, 'good' ; (2) stems with suffixes -(o)\_?,
-\_\_?il, or -\_\_?en, as in no'ho\_?, 'large', 'ohsil, 'poor',\_\_?a\_\_?en,
'acceptable' (3.40, 4.71, 4.57); (3) verb stems with suffixes
-(a)k, -(a)l, -aan, or -bil, similar to participles in European languages, as in le 'ka∫e 'le? 'the broken egg'; ka∫-al, constr. V-(a)l; le 't∫ak 'bil 'ka∫'o∫e? 'the cooked chicken; t∫ak-bil, constr. V-bil. Forms in the first two groups usually precede the noun: le no∫hot 'ka∫'ka∫', this large town. Those in the third group either precede or follow the noun.

hat∫, 'very', preceding the adjective, is used for the comparative and superlative: le hat∫ 'o∫t∫e∫, 'the poorer one', when two objects are compared; 'the poorest one' when more than two objects are compared. For Yucatec numerals and "numerical classifiers" see 4.68; for demonstrative adjectives see 4.51.

2.27. **Articles.** There are no forms that correspond specifically to the English articles 'the', 'a', and 'an'. In many instances the pronoun u (2.4) is used to signify 'the', no possessive sense being indicated; e.g., u 'nuukul, 'the tool': u before parts of the body; e.g., u 'hol, the head; u kal, the neck; u jok, the foot. In some instances the suffix -il is required by the noun preceded by u signifying 'the': u ka∫'i'lo∫o∫, the chickens (4.60). Expressions corresponding to 'the other', 'the one', 'another' consist of u followed by lak' or hel (Cf. 2.8).

hun p'el, hun tul and other terms for 'one' (4.68) are frequently equivalent to 'a' or 'an': hun p'el kah,
a village; hun tul tjan pa:'leʔ, a little boy. le ... -oʔ, 'that', is often equivalent to 'the' (4.51): le hatj kpa:'s oʔ, the worst one.

2.38 Nouns. The following forms have uses which correspond to those of English nouns: (1) simple stems such as kah, 'village'; k'in, 'day'; (2) compound stems (\(\overline{\text{c}}\)) such as 'okk' in, 'evening'; 'k' an, 'hool, 'pillow'; (3) stems with a suffix such as -ben (3.41), -ab (3.4), -(a)m (3.39) and very frequently -(a)l (4.52) and -il (4.60) affixed to a number of verb stems; e.g., ki'mil, death (kim, to die); 'silil, sin (sin, to err); ha'nal, cooked food (han, to eat); tʃa'kil, action of chopping (tʃak, to chop). Stems used as nouns become nouns with changed denotation when suffixed by -il; e.g. k'i'nil, time, season (k'in, day, sun).

Forms used as nouns, particularly proper nouns, follow the verb when they are equivalent to the English "subject": tu ji'l ah 'pedro, Peter saw him; when both "subject" and "object" are nouns, the former follows the latter: tu ji'l ah hwan 'pedro, Peter saw John. If the speaker wishes to emphasize the subject, the statement is: 'pedro hwan tu ji'l ah, Peter saw John.

Plurals are indicated by the suffix -o:b (Cf. 2.5): le 'nao;:boʔ, those houses; le 'mak:boʔ, the men; le ... -oʔ (4.51). The plural suffix is omitted in about one-fourth of the specimens studied.
2.29. **Prepositions.** *ti* or *tiʔ* corresponds to a general preposition signifying 'to', 'of', 'at', 'on', 'in', 'for', 'by'; *ti* ʔ u *taː*ʔa, to the father; *ti* hun *p*’el *k*’aːŋ,tēʔ, on a stool; *ti* le *k*’aːŋ, noʔ, in the hammocks; *te* be’oʔ, by the road (for contraction of *ti* le to form *te* Cf. 1.5).

*tu* men is often equivalent to the English preposition 'by'; *ka* t’aŋ *tu* men le *baʃal* taːk’i, in the gambler; *ka* t’an, irregular AHAB passive.

*ti* *wik’nal, ta* wik’nal, *tu* jik’nal correspond to the prepositional phrases 'near me', 'in your presence', 'under his care', 'to where you are', or to the French *chez*: *ka* uʃ’aik ta wik’nal, *Take* him with you (to your house); *ma* k’uʃ’uk *tu* jik’nal, He could not reach him (come next to him, get at him).

Certain verb stems with suffix -(a)l have prepositional uses (4.52): *i’ril, in, within; ‘janal, under; ‘jok’ol, on; ‘jetel, with; i’ril le *k*’aːk’oʔ, into the fire; ‘jok’ol le *pila, oʔ, over the basin; *ka* bin ‘jetel ‘pedro, and they went with Pedro.

2.30. **Conjunctions.** *ka* is commonly used for 'and' although *‘jetel, ‘with’, often signifies 'and' when it occurs between two nouns: a *kumapa,le ‘jetel a *kuma,le, your compadre and your comadre. jan, ‘also’, lei’li, ‘still’, and the sequence of one sentence after another are each equivalent to 'and' in a number of examples (4.62).

*tu* men, 'by' also signifies 'because', 'so that', 'since',
'on account of': tu men 'a:lab te:'ne?, because I have been told. wa is equivalent to 'if', 'whether', 'or' (4.70): wa a 'ihō wa a wai tan, whether your son or your wife; wa ka 'wolte, (I'll go) if you wish.
PART 3

The purpose of Part 3 is to enumerate the formal devices in Yucatec. In the analysis of forms, conclusions have been based, in so far as is possible, on the contemporary language. In a few instances, however, it has been found necessary to resort to etymologic analysis, this practice having been considered preferable to presenting certain phenomena without explanation. The monosyllabic lexical elements which comprise a large proportion of the morphemes occurring in the texts are treated only incidentally in this part; they are, of course, more properly the subject matter of a dictionary than of that part of a grammar which deals with forms. Verb forms, because of their complexity and variety, receive major attention.

Application of the terms 'transitive,' 'intransitive,' and 'passive' to Yucatec verb forms is determined ultimately by morphologic considerations, although in almost every instance the criterion in English and other Indo-European languages ('takes an object,' 'does not take an object,' etc.) is also satisfied. Thus, in the expression: tu Yeeh tah 'nasario, "Nasario laughed," we have called the verb transitive; in u So kol u bel, "to finish one's affair," the verb is classed as intransitive; and a few other exceptional instances were observed in our specimens in which the classification of the verb was not determined by its taking or its ability to take an object, but by its form, the decision being counter to that which would be made on the basis of English habits. For the unusual behavior of certain passive forms, see 4.10.
We deal below with stems, prefixes, terminal suffixes, pronominal suffixes, and, finally, with a large number of suffixes, difficult to characterize either by position in the form or by function, which have been arranged rather arbitrarily in five groups. In the concluding paragraphs (3.50 ff.), irregular verb forms are registered.
3.1. With regard to stem formation, it is convenient to postulate two classes of stems: (1) simple stems, and (2) composite stems. The first class is morphologically simple, consisting almost exclusively of monosyllabic lexical elements; the second class is more diffuse in character. So far as concerns the elements comprising composite stems, the following broad statements may be made:

1. The stem may consist of a simple stem plus a formative of Group 2 (3.2 ff.): hant, eat (something); han-t; -t (3.26). k'om, knock; k'on-n; -n (3.24). kol in kol'nal, milpa tiller; kol-n-al; -n (3.24); -al (3.14).

2. The stem may consist of a simple stem plus two or more formatives, one of which is a suffix of Group 2: ma'hant, help; mah-an-t; -an (3.47); -t (3.26). 'alkabn, run; al-kab-n; -kab (3.33); -n (3.24).

3. The stem may consist of two lexical elements and a formative of Group 2: 'sibolt, imagine; sib-ol-t; sib, paint; ol, mind, thought; -t (3.26).

Simple and composite stems differ with respect to the suffixes which follow them in certain intransitive and passive forms (3.49, 4.52), namely: -(a)l, -(a)k, -al, -al, -ak, -aak. Suffixes -(a)l and -(a)k follow simple stems; the suffix vowel and stem vowel agree vocalically. Suffixes -al, -al, -ak and -aak follow composite stems, the vowel quality being invariable. (Of examples below.)

Exceptional examples are found of apparently simple stems which are followed by suffixes required by composite stems. Some
examples can be explained by etymological evidence; e.g., be:t, make; bo:t, pay (Old Yuc. belt and bolt); u be:'taal, it is made; u be(l)-t-aal; -t (3.26); -aal (3.15). A few others occur for which no explanation is offered; e.g., il, see (i'laal, i'laak); tub, spit at (tu'baal). For the irregular intransitive forms with suffix -ak, where -(a)k might be expected, see 3.51.

In the analysis of verb forms, transitive composite stems are generally given with the suffix of Group 2 included, but intransitive composite stems are given without the suffix: kins, kill; but 'alkab, run (occurs frequently as al-kab-n). This convention derives from the fact that in transitive stems the suffix of Group 2 is invariable, while in intransitive stems certain variations of suffix occur (Cf. 3.51 ff.).

Examples of simple and composite stems:

**tan** in 'kimi'l, I am dying; kim-il; V-(a)l; kim, 'die', simple intransitive stem; -(a)l (3.4).

**ku** jo'kok, he entered; j-ok-ok; V-(a)k; ok, 'enter', simple intransitive stem; -(a)k (3.11); j- (3.2).

**bin** 'uk'ul, nak, he is going to drink; uk'-ul-n-ak; V-ak; 'uk'ul,'drink', composite intransitive stem; -ak (3.12); -n (3.24).

**ku** 'bestir,tal, he is being dressed; 'bestir-t-al; 'bestir,'dress', composite transitive stem; -al (3.14); -t (3.26).

**ku** kin'saal, he is killed; kin-s-aal; V-aal; kins, 'kill', composite transitive stem; -aal (3.15); -s (3.25).

**wa** ka u be:'task, if it is done; be:t-aak; V-aak; be:t, 'do', composite transitive stem; -aak (7.13); -t (3.26).

**me'k'el, armful; mek'-el; mek,'hug', simple intransitive stem used in noun with suffix -(a)l; cf. 4.32.
Prefixes

3.3. j-, w- . Required after pronouns in, a, u (2.4) before stems with an initial vowel. Prefix j- is found after u and w- after in or a. Neither prefix is found before Spanish words which begin with a vowel. The occurrence of j- without a preceding pronoun is observed in irregular forms such as 'jetel, 'with', and 'jok'ol, 'on (4.52), and in other irregular constructions (3.50).

  in wa'tan, my wife; a wa'tan, your wife; u ja'tan, his wife; a'tan, wife.
  tan in wo'hel, I know it; tan a wo'hel, you know it; tan u jo'bel, he knows it; o'bel, know (3.56).
  a 'iho, your son; ku 'enkantar'tik, he enchants him;
  Spanish words without prefix.
  ho:p' ju:'bik, he began to feel it; j-ub-ik; (expected construction ho:p' u ju:'bik); for omission of u see 3.50.

3.3. f-. As in Old Yucatec, f- is used to indicate the female, often in disparaging terms. It also occurs without apparent reference to the female in certain names of insects, snakes, and trees; and in the term slaʔ, 'old'.

  slʔu, woman; slʔ'unal, girl.
  slʔas, hen; slʔas, chicken.
  slʔnuk, old woman (disrespectful term).
  slʔku:klin, beetle.
  slʔk'u:k'i:kan, rattlesnake.
  slʔki'tin, name of a tree.
  slʔleʔ, naʔ, old house.
3.4. h-. From Old Yucatec prefix ah, of wide occurrence, h- is now found preceding only the stems men and kutj in speech of Type A. In speech of both types, occurrence of these stems without h- is common.

le hme:'noʔ, the shaman; h-men-ʔ; le ... -oʔ (3.5).

le hku:4joʔ, the bearer; h-kutj-ʔ.

Terminal Suffixes

3.5. -aʔ, -oʔ. Found as the final suffix of demonstrative device bei, he(1), le(1), te(1), or wai; or as the final suffix of any morpheme ending a phrase, clause, or sentence which begins with bei, he(1), etc. (4.51). The demonstrative device is omitted occasionally before nouns which are preceded by a possessive pronoun. The demonstrative device is used but the terminal suffix frequently omitted: (1) when -oʔ is required after a word ending in o; (2) when -aʔ is required after a verb form ending in a; (3) when the form ends in -o:b; (4) when -oʔ is required after a rather long, complex unit introduced by le; (5) when two terminal suffixes are required in close succession, in which case the first is omitted; and (6) when -oʔ and -eʔ are both required as final morphemes of a word, in which case -oʔ is more frequently omitted.

le ko:'loʔ, that milpa; le ... -oʔ, the, that; kol, milpa.

le no'hotj ka:'haʔ, this large town; le ... -aʔ, this;
no'hotj, big; kah, town.

bis le 'huun 'tiʔaʔ, Take this letter to her; bis,
take; le ... -aʔ, this; 'huun, letter; tiʔ, pronoun
of Class 0 (2.6); for loss of see 1.3.

tja in wo:'koʔ, Let go (that) my foot; expected tja le
3.6. -e². Observed mainly in two kinds of instances: (1) preceded by demonstrative devices he(1), le(1), or wai (4.18, 4.51); and (2) as the final suffix of a word which is the last or only word in a clause (4.58). It is also observed occasionally at the end of a sentence; in a random sampling of 500 sentences, about 10% ended in -e².

le me'hen 'nifano:he², the little souls; le ... -e², rather than le ... -e² when the object is unseen (4.51).

... he a ṭu'ikik ka'je², (If you do what I tell you), you will catch fish; he ... -e².
tas 'ten 'wa:'je?, Bring him to me here; wai-e?, here.
wa ku wo'ko,le?,... If he comes in ...; w-ok-ol-e?.
ti 'waakbal tu hol na'e?. There he was standing
at the door of his house.

3.7. -i, -i?. Found almost invariably as the final morpheme
of a sentence, -i (variant -4?) occurs frequently and with
high predictability after constructions which require a pronoun
of Class B. -i or -i? is never observed, however, when -a? or
-o? is required, and it is omitted occasionally when -e? is
required. See 4.59 for descriptions and examples of many
uses of -i, -i?.

'kimo:bi, they died; kim-o:b-i; V-PB-i.
ma k'o'haane,ni?, I am not sick; k'oh-aan-en-i?; V-aan-PB-i?
ka 'ok'otna,hi, and she danced; 'ok'ot-n-ah-i; V-n-ah-PB-i;
PB null for 3rd. pers. sing. (2.5).
he ken ma if'kina,ke?, those who have not bathed;
if-ki-n-ak-e?; V-ak-PB-e?, PB null; -i? omitted
after -e? required in construction he ... -e?.

Pronoun Suffixes

3.8. It was considered advisable to give in Part 2 (2.4 ff.) a
relatively complete presentation of the Yucatec pronoun
system. Listed below are the suffixes which are pronouns
or terminal components of pronouns:
<table>
<thead>
<tr>
<th>Pronouns of Class B</th>
<th>Reflexive Pronouns</th>
<th>Pronouns of Class A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st. person</td>
<td>-en</td>
<td>-e:n</td>
</tr>
<tr>
<td>2nd. person</td>
<td>-etf</td>
<td>-e:J</td>
</tr>
<tr>
<td>3rd. person</td>
<td>---</td>
<td>-o:b</td>
</tr>
</tbody>
</table>
Suffixes of Group 1

Included in this group are suffixes of the sort which might be termed "main verbal devices," with reference to their most common occurrences. They serve as complete or partial indices of such phases of verbal action as voice, mood, tense, or transitivity—intransitivity (Cf. above). With few exceptions, they occur either in final position or followed only by a pronoun suffix or a terminal suffix.

3.9. -ab. Suffix found in passive form V-ab (4.10). -ab usually occurs as -a:b before another suffix (1.4). In archaic forms and after stems ending in a vowel -ab precedes passive suffixes -al and -ak (3.49) when these suffixes are required.

bi' sab ti?, it was taken to him; bis-ab; ti?’(2.6).
ka’a'holta; ti, he was recognized; k’ah-ol-t-ab-i;
kah-ol (3.56); -t (3.26); -i (3.7).
ka  t’b’abal, it is given; t’b’-a-(a)b-al; -al (3.48).
ka  ’hant’bak, it will be eaten; archaic form;
han-t-ab-ak; -t (3.23); -ak (3.13).
3.10. -ah. Suffix in transitive form t-PA V-ah (4.9). If a pronominal suffix is required, -ah is frequently omitted when the verb stem is composite or reduplicated; when the stem is simple, the vowel a of -ah is often elided, particularly in speech of Type B (Cf. 1.4).

As an intransitive formative, -ah is found frequently in formulas V-ah-PB, V-l-ah-P3, and V-n-ah-PB, constructions in certain irregular intransitive conjugations (3.51 ff.). In V-ah-PB forms, the a of -ah is often elided.

For the restricted use of suffix -ah in formulas PA V-ah-ma and V-ah-aan-PB see 3.21 and 3.47, respectively.

tu be:tah, he did it; be:-t-ah; -t (3.26).
tu be:to:b, they did it; be:-t-(ah)-o:b; -o:b (2.4).
tu lom'ho:b, he stabbed them; lom-(a)n-o:b; -o:b (2.5).
ta pula'he?, you threw it; pul-an-e?; -e?(3.6).
-wala'ni, wal'ni, he stood up; wal-ah-i, wal-n-i; V-(a)n-PB; -i (3.7).
-heklahe'ni, I rode; hek-l-ah-en-i; V-l-ah-PB; -en (2.5);
-i (3.7).
-k'aina'hi, he sang; k'ai-n-ah-i; V-n-ah-PB; -i (3.7).

3.11. -(a)k. Found in the intransitive and passive form V-(a)k-PB, where V is a simple stem. The vowel of -(a)k agrees vocalically with the stem vowel. In the passive forms the stem vowel is often doubled if the accent is on the stem and no other suffix follows -(a)k: (4.37). In certain intransitive uses, -(a)k may be preceded or followed by a number of formatives, as described in 4.49.
3.12. -ak. Suffix in intransitive and passive forms V-ak-PB (4.37). V is a composite stem; in passive forms, V is most frequently polysyllabic.

ka 'gikbanako:n, we will talk; 'gik-ba (3.30); -n (3.24);
-0:n (2.5).

ken 'jila'kob, when they will lie down; 'jila-ak-o:b; 'jila (3.51);
-0:b (2.5).

ka 'kontestar, tak, she will be answered; 'kontestar-t-ak;
'kontestar, Spanish stem; -t (3.26).

3.13. -aak. Found in passive form V-aak-PB (4.37). The suffix -aak is almost invariably in final position; i.e., PB is a null sign for 3rd. pers. sing., and there is no terminal suffix (2.5, 3.5 ff.) In non-final position, -aak is found as -a:k or -ak, in most instances.

ka kin'saak, he will be killed; kin-s-aak; -s (3.25).

bi'nak be:'ttaak, maybe it will be done; be:-t-aak; -t (3.26).

wa ka bisak'ken, if I had been taken; bi(n)-s-aak-en;
-s (3.25).

3.14. -al. Suffix in intransitive and passive form PA V-al (4.13). V is a composite stem, and in passive forms is frequently polysyllabic. Suffix -al is found after composite stems in a few nouns (4.52).

tjen p'e'ilak u 'tjanatale?', as soon as he retires;
'tjan-ajt-al-e?; -ej (3.40); -t (3.26); -e? (3.6).

'tani, li u kul'tal, first he sits down; kul-t-al; kul
(3.57); -t (3.26).

jakin, quadruped; jak-n-al; -n (3.24).
3.15. -aal. Suffix in passive form PA V-aal (4.13). In most instances, V is a monosyllabic composite stem, and -aal is the final suffix in the form.

u 'ti?al u men'taal, in order that it be made; men-t-aal;
-t (3.26).

ku 'jensaal, it is being brought down; j-em-s-aal; for change of m to n before s see 1.3 ; -a (3.15).

3.16. -ankil. Found in the intransitive form tan PA V-ankil; the verb stem is frequently reduplicated (4.54).

tan u 'sisit'an,kil, he is jumping; si-sit'-ankil.
tan u 'k'ak'atankil, he is crossing (the street);
k'a-k'at-ankil.

3.17. -bil. Suffix found in passive form V-bil-PB (4.55). With kast, 'find', in speech of Type A, instead of the common form kast'bil, 'it should be looked for', we find ka'jan, bil (kas-an-bil). For -bil followed by -ak see 4.49.

'k'atbiloe?be?, they should be asked; k'at-bil-o:b-e?
-o:b (2.5); -e? (3.6).

bin u kah hant'bil, it is going to be eaten; han-t-bil;
-t (3.26); bin u kah (4.58).

jen 'a:bi,lak ti'e?, as he was saying this to him;
al-bil-ak.

3.18. -e. Suffix in transitive forms PA V-e and V-e', the latter found in imperative uses (4.37). Suffix -e, always in final
position, occurs in a form which is the last or only component of the clause or sentence.

bin a han'te, you will eat it; han-t-e; -t (3.26).
wa u k'a:'te, if he wants it; k'at-e.
kaʃ'te! Find it! kaʃ-t-e; -t (3.26); - (3.3).

kule'neːʃ, You (plur.) sit down; kul-en-e:ʃ.
ʧui'len, Hang! ʧui-l-en; -l (3.34).
'paʃn-en, Play! paʃ-n-en; -n (3.24).

3.20. -ik. Suffix in transitive form PA V-ik (4.13 ff.).
kut aː:tik, he takes it; ta(l)-s-ik; for loss of 1
before s see 1.3; -s (3.15).
tan u 'jaːlko:'beʔ, they were saying it; j-al-(i)k-o:b-eʔ;
for elision of i see 1.4; -o:b (1.4); -eʔ (3.6).
'kooʃ beː:tik, let us do it; beː-t-ik; 'kooʃ (4.21).

3.21. -ma. Suffix found in transitive form PA V-ma, variant PA V-ah-ma (4.66). The occurrence of -ah-ma is unpredictable.
-ma is usually followed by -h when a terminal suffix is required.
in k'ub'ma, I have delivered it; k'ub-ma.
k beːt'ma, we have made it; beː-t-ma.
in wi'llah,ma, I have seen it; w-il-ah-ma.
le 'suuk u kutʃma'hoʔ, the hay he has carried; kutʃ-ma-h-oʔ;
-oʔ(3.5).
Suffixes of Group 3

The suffixes of this group serve primarily or exclusively (1) to convert intransitive or non-verbal stems into transitive stems, or (2) to convert non-verbal stems into intransitive verb stems. They occur frequently as components of composite stems (3.1), and are almost invariably found in medial position.

3.22. -in. Suffix which converts certain non-verbal stems into transitive stems. Formative -in is always followed by -s or -t (3.25, 3.26).

ka 'hifin'sab, and they bathed him; itf-in-s-\text{-}ab; for itf, of. itf-il, within; -ab (3.9).

u 'ti\text{'}fal u bu'kint, so that he puts on clothes;

buk-in-t; buk, clothes.

'kooʃ 'hanin\text{'}\text{-}tik, let's make him our son-in-law;

han-in-t-ik; han, son-in-law; 'kooʃ (4.21); -ik (3.20).

3.23. -kin, -kun. Suffixes which convert stems otherwise found in irregular intransitive conjugations into transitive stems. Always followed by -s or -t, -kin-s or -kin-t is used when the stem vowel is o or u; -kun-s or -kun-t is used when the stem vowel is a, e, or i. No determinants are observed for the use of -s or -t after -kin and -kun.

ka 'walkunta: bi, he stood him up; wal-kun-s-\text{-}ab-i; wal, 'stand', irregular verb of v-an conjugation (3.51);

-ab (3.9); -i (3.7).
ku 'tso'kol u ku's'kinti,ke?, after he revived him;
ku's'kin-t-ik-e?; ku's', 'live', V-l-ah conjugation (3.52);
-ik (3.20); -e? (3.6).
'tani,li u -ilkun'taal, Immediately he was caused to lie
down; -ilkun-t-aal; -il (3.51); -aal (3.15).
kul'kinta:ba, kul'kinsa,ba. Sit down! kul-kin-t-a-ba
or kul-kin-s-a-ba; kul (3.51); -a-ba (2.7).

3.24. -n. Converts Spanish words into irregular intransitive
verbs of the V-n-ah conjugation (3.53). This suffix is required by
monosyllabic composite stems and by nearly all polysyllabic stems
used intransitively. For the conjugation of such stems, see the
V-n-ah forms (3.53). Suffix -n is observed in a few noun forms.
bi'nak 'pribarna,ki, maybe she will faint; pribar-n-ak-i;
-ak (3.12); -i (3.7)
aw-at na, it cried out; aw-at-n-ah-i; aw-at (3.28); -ah
(3.10); -i (3.7).
'k'opna,hen, I knocked; k'op-n-ah-en; -ah (3.10); -en (3.5).
'ak'ak'nak, it is slimy; ak'ak-n-ak (4.49).
met'nal, Hell; met-n-al; -al (4.52).

3.25. -s. Serves to convert many monosyllabic intransitive stems
into transitive stems. The morpheme -es, archaic form of -e,
is found when the stem has no other suffix and is not accented.
Formatives -en-es, -kin-es, and -kun-es are registered above;
for -es see 3.29.
'hok'sa:,bi, they were brought out; hok'-s-ab-i; hok', come
out; -ab (3.9); -i (3.7).
'ut'al k bi'se, in order that we may take it; bi(n)-s-e;
... bin, go; for loss of n before s see 1.3; -e (3.18).

tan in 's'o:k's-ik, I am finishing it; 's'o:k-s-ik; 's'o:k, end; -ik (3.20).

han 's'o:k'es, Hurry up and finish it; 's'o:k-es.

3.26. -t. Converts most polysyllabic stems and a number of monosyllabic stems, otherwise found in intransitive verbal units or in nouns, into transitive verb stems. Spanish verbs and, so far as our limited data indicate, Spanish nouns, are converted into Yucatec transitive verb stems by means of formative -t.

This suffix is required in such transitive stems as ant, 'help', and be:t, 'do', which are never found without -t. It is observed in certain transitive stems only when these are preceded by an adjunct verbal stem (4.50).

Formative -t is required in these intransitive forms: PA V-t-əl, a verbal unit found in most of the irregular intransitive conjugations (3.51 ff.); and S-aan-t-ak (4.49), a form restricted to plural references in certain uses. Suffix -t is found in a few nouns: e.g., kus'tal, life; kus't-əl.

tu 'u'finnol,tah, he bowed his head; u'fin-pol-t-ah; u'fin, incline; pol, head; -an (3.10).

u'jek'ta: bi, he was stepped on; u'jek'-t-ab-i; u'jek', footprint; -ab (3.9); -i (3.7).

va ka in han'te, if I eat it; han-t-e; nan, eat (intran.); -e (3.18).

tin 'nombrar,tah, I appointed him; nombrar-t-ah; 'nombrar, name; -an (3.10).

a ke 'maldic, sjont, 'bo:bo, and a curse was uttered against them; maldic, a curse; -ab (3.9); -o:bo (2.5).
ku 'jantaal, he is being helped; j-an-t-aal; j- (3.2); -aal (3.15).

ka het tjin'tik, you throw it with all your might; tjin-t-ik; het, adjunct verbal stem; tjin, throw (trans.).

tan u 'sastal, it is becoming dawn; sas-t-al; PA V-t-al.
ta'k'aan, tak, they are stuck; tak'-aan-t-ak; S-aan-t-ak.

3.27. -ya. Followed by -h (3.31); -ya-h converts a number of non-verbal stems into irregular intransitive stems, for the conjugation of which see 3.54. Many verbal units with -ya-h signify entrance into a state or condition. The suffixes -ya-l are observed only in the intransitive forms S-ya-l-ak (4.49).

k'oh'aant'hen, I got sick; k'oh-an-ya-h-en; k'oh'aan, sick (3.47); -en (2.5).

no'hont'hi, he grew large; noh-otf-ya-h-i; no'hont, big (3.40); -i (3.7).

bi'nak 'sasth'ana,ki, perhaps it will dawn; sae-ya-h-ak-i;
'sasil, light; -ak (3.12); -i (3.7).

'ohta'1ak, (overripe, fruit) is dropping (from tree); S-ya-l-ak.
Suffixes of Group 3

In this group we include a rather heterogeneous set of suffixes. Some of them may be analogous to those of Group 2; but their occurrences are either too infrequent or equivocal for inclusion in that group. Others are apparently used to modify the significance of the stem more radically than do the suffixes of Group 2.

3.28. -(a)t. Component of several irregular intransitive stems and a few nouns; the vowel of the suffix usually agrees vocically with that of the stem. In most instances, the stem without -(a)t has different significance or is not found.

'ok'otna, hi, he danced; ok'-ot-n-ah-i; V-n-ah form (3.53);
-1 (3.7). le 'ok'o, to?, the dance; ok'-ot-o?;
le ... o? (3.5); cf. o'k'ol, cry (3.49).

A'watna, ki, he will yell; aw-at-n-ak-i; irregular V-n-ah form (3.53). le a'wa, to?, the cry; aw-at-o?.

K'a'bet, it is necessary; invariable form (3.55).

Ts'o'not, very deep pool (Motul: donot, deep pool); don, shoot.

3.29. -b. Usually followed by -es (3.25). Formatives -b-es convert certain stems into transitive verbs. The occurrence of -b without -es is probable in two or three composite stems of doubtful analysis.

Ma 'sahbes, ken, Don't frighten me; sah-b-es-(i)k-en;

Sah, fear; for elision of -i see 1. 4; -en (3.5).
u 'ti?al a kin'bes, so that you may hurt him; kin-b-es.
ku 'gibal, it is barking; tji-b-al, or perhaps tji?-b-al.
tan u 'tu?baal, it was being spat out; tu-b-sal.

3.30. -ba. Found in a few intransitive stems: e.g., lem'ba, shine; kil'ba, thunder. Required in the intransitive constructions S-(a)k-ba-l and S-ba-n-ak (4.49), and in a few stems which are used transitively, intrasitively, and as nouns. For reflexive -ba see 2.7.

kuluk'bal, he is seated; kul-uk-ba-l; S-(a)k-ba-l.
alba'nak, (candle) is soft (due to heat); S-ba-n-ak.
tsilba,tab, he was notified; tsik-ba-t-ab; tsik-ba-t, to relate, explain, notify; -t (3.26); -ab (3.9).
'tsilba,ko:n, so that we can converse; tsik-ba-n-ak-o:n;
tsik-ba-n, to talk; -n (3.24); -ak (3.12); -o:n (2.5).
tsik'bal, conversation; tsik-ba-l; cf. tsik,ben, worthy of respect; tsik-ben (3.41).

3.31. -h. Found after suffix -pa, -ja, or k'a (cf. 3.37, 3.28).

3.32. -j(a). Indicates repeated action, as in Old Yucatec, but is found in our sampling with only two stems.
'tsaja,tsil, generous gift, charity, mercy, grace; ts'a-ja-tsil;
ts'a, give; -ja, frequent, abundant, etc.; tsil (3.45).
me'jah, to work; me(n)-j(a)-ah; me(n), Old Yuc. men, 'work';
me'jah,nen ! Work! me(n)-j(a)-ah-n-en; -ah, unidentified;
-n (3.24); -en (3.19); for conjugation of me'jah see 3.53.
3.33. -kab. Indicates rapid action or action which takes place on the ground; and is found in a few transitive and intransitive verbs. This morpheme is also found in compounds (cf. 'luumkab, Earthman; kol'kab, milpa-tiller).

ku 'walkatku;ba, Right away he stopped; wal-ka(b)-t-(i)k-u-ba; wal, stand, stop (3.51); for loss of -b and -i see 1.3, 1.4; -t (3.26); -ik (3.20); -u-ba (2.7).

ku 'kulkatku;ba, At once she sat down; kul-ka(b)-t-(i)k-u-ba; kul, sit (3.51).

'al'kabna,hi, he ran; al-kab-n-ah-i; V-n-ah form (3.53); al not found with this meaning without -kab.

3.34. -I. Suffix required by certain stems which are found in verbal units of the V-1-ah conjugation (3.52); it is also found in the intransitive form S-(a)k-ba-l (4.49) and after composite stems ending in a vowel in the irregular intransitive form PA V. For -l after -tfa, -pa and -y'a see 3.37, 3.28.

'hekla,hi, he rode; hek-l-ah-i; V-1-ah form; -I (3.7).

ku'sla'ki, he will live; kuf-l-ak-i; cf. 3.23 for transitive form.

kahak'bal, he resides in a village; kah-ak-ba-l; S-(a)k-ba-l form; kah, village.

tan u sim'bal, he is walking; sim-ba-l; PA V (3.53); sim-ba, walk (3.30).

3.35. -lah. Signifying 'all', -lah is found affixed to stems of passive and intransitive verbal constructions (4.64).
p'ukla'ho:b, they all bent over; p'u:k-lah-o:b; p'uk, bend over; -o:b (2.5).
ka manla'hak, that all be bought; man-lah-ak; man, buy; -ak (3.12).

3.36. -lan. Suffix found in certain transitive and passive verbal constructions specified in 4.65; it is always followed by -t (3.26).
tu k'eʃ'lan-tah, they exchanged (clothes) with one another;
k'eʃ-lan-t-ah; k'eʃ, exchange; -ah (3.10).
ku 'kinslan-taal, they are killed; kins-lan-t-aal; kins, kill; -s (3.25).

3.37. -pa, -k'a. Suffixes required in certain composite stems which are conjugated as regular intransitive verbs. -pa and -k'a are followed by -h (3.31) except in the forms S-pa-1-ak and S-k'a-1-ak (4.49). With a few stems, -k'a is interchangeable with -pa or -fa (3.27).
tan k kinna'hnl, we are getting hurt; kin-pa-h-al;
oc. kins'bes (3.29); -al (3.14).
't'okpa-lak, it is fragile; 't'okpa-1-ak.
't'otk'a-hen, 't'otk'a-hen, I tripped; t'otk-k'a-h-en,
t'otk-pa-h-en.
'kukk'a-lak, 'kukk'a-lak, (restless person) turns over repeatedly in bed; kuk-k'a-1-ak; kukk-fa-1-ak.
Suffixes of Group 4

The following suffixes are found primarily as components of nouns or other non-verbal forms, and secondarily as components of verb forms derived from non-verbal forms.

3.38. -(a)b. Found in a number of names for tools and utensils, and in various unclassified nouns. The stems of some of these nouns occur without -(a)b as simple verb stems, or with -(a)b and a suffix of Group 2 as composite verb stems.

'hatσ'ab, swords; hatσ-ab-o:b; hatσ, strike; o:b (2.28).
ήτσ'ub, hanging-net; τ'ui-ub; τ'ui, hang (3.52).
 fleeing, fish-hook; fled-ub.
 illib, daughter-in-law; illib.
'ak'ab, night; tan u 'jak'ab-tal, it is becoming night;
 j-ak'ab-t-al; PA V-t-al (3.54); j-(3.2).

3.39. -(a)m. A suffix found in some nouns, the majority of which are names of animals.

tσ'e:lem, hornet; tσ'el-em.
'ulum, turkey; ul-um.
 kil'tam, wild boar.
 ke'lem, Lord.

3.40. -(a)τι. Suffix found in certain nouns and in many forms which are comparable in function to English adjectives. A number of instances were observed of verbal use of forms with -(a)τι.

o'totf, home; ot-τι.
 tu:'ntif, stone; tan-τι.
 be:'ntif, thin; be'in-τι.
 ki'litf, saintly; kil-itf.
no'ho'tf, nu'kutf, large, great, aged, important; nu'kutf is preferred for plural references: e.g., le nu'kutf 'o'eo:bo', the big trees; le no'ho'tf 'wini'ko', the big man.

tan in no'ho'tf'tal, I am getting big; noh-otf-t-al; PA V-t-al (3.54).

3.41. -ben or -b-en. Component of nouns and other non-verbal forms. In some specimens -ben is comparable to English suffixes -ible and -able; in others it signifies 'worthy of' (4.57).

'k'o'ben, kitchen; k'o'-ben.

-tf'a'ben, acceptable; tf'a-ben, tf'a, fetch, take.

-tsik,ben, worthy of respect; tsik-ben.

3.42. -el. A suffix found in many collective nouns referring to parts of the body. These are preceded by pronouns of Class A (2.4). Miscellaneous instances of -el include such words as pa:'sel, 'milpa-hut', ko'lel, 'lady', o'hel, 'to know' (3.56).

u ba'kel, his bones; bak'-el.

in ts:sel, my hair; tsot-sel.

u ba'k'el kaf', the meat of the chicken; bak'-el.

u tf'or'gel le ta'man, the intestines of a lamb; tf'or'g-el.

3.43. -il. Suffix found in nouns, the stems of which are otherwise used in verbal units or as nouns with different significance. -il also serves to convert both verbal and
non-verbal constructions into nouns. For the conditions governing the use of pronoun u before forms with suffix -il see 4.60.

ku: 'gil, burden; kuf-il; kuf, carry a burden.

u tfe'ilo:b, the poles; tfe-il-o:b; tfe?, tree.

'kanbana,ha:ni'lo?, the learned one; kan-ba-n-ah-aan-il-o?;
  'kanbana,ha:ni, he is learned; V-aan-PB (3.47).

u non'gil, a big one; non-ef-il; non-otf, big (3.40); for omission of o see 1.4.

a 'tikbe:nil, your grace (respectful address); tik-ben-il;
  tsik-ben, worthy of respect (3.41).

3.44. -ul. Found after verb stems in the following non-verbal specimens:

'naku,lo:b, helpers; nak-ul-o:b; nak, lean against, take
  along extra food, money, etc. against a contingency when traveling; -o:b (2.28).

ujikul, variant of tji'kil, sign, indication; tik, be visible.

mei'hu1, task, labors; cf. me(n)-j(a)-ah, work.

na:mu'1ak, at once; nan-ul-ak; nan, snap at; -ak unidentified.

3.45. -sil. Required by kinship terms which are not preceded by a possessive pronoun. Found in various noun forms and in certain intransitive verbal units. For uses see 4.71.

le 'kiksililo:bo?, the sisters; kik-sil-o:b-o?; le ... -o?
  (3.5); -o:b (2.28).

le a'tanusi,lo?, the wife; at-an-sil-o?; at-an (3.47);
le ... -o?, (3.5); cf. 3.2.

jum-tsil, respected gentleman; jum-tsil; jum, sir.
o(tsil, poor, worthy of sympathy; ol(tsil; ol,'mind!', will,
other psychological significances; for omission of
1 see 1.3.

k'an-tsil-en, I was yellow; k'an-tsil-en; k'an, yellow; -en (2.5).

Suffixes of Group 5

The three suffixes included in this group involve
characteristics of two or more of the preceding groups;
their functions and their position in the form are
unusually diverse.

3.46. -ki. Suffix in intransitive form V-ki (4.63),
found only in 3rd. pers. sing. The few stems with
suffix -ki are reduplicated. Formatives -ki-n are
found after the non-verbal stem ifj, and serve to convert
it into an intransitive verb stem.

'napat,ki, he was smeared all over; pa-pat-ki.
ifj'kina,ki, he will bathe; ifj-ki-n-ak-i; cf. iifjil,
within; -n (3.24); -ak (3.12).
3.47. -aan. Affixed to a transitive or intransitive stem in form V-aan-PB, which is roughly comparable in function to the English past participle (4.53). Variants of -aan are: -an, which usually occurs when this suffix is unaccented, and -en (after kim, 'die'). With the stem bin, 'go', -aan is preceded by -ah; with a few polysyllabic stems -aan is preceded by -n-ah; and in certain uses -aan is followed by -ak or -t-ak (4.49).

In a number of specimens -aan or -an is a component of non-verbal forms and in many cases is apparently equivalent to a noun suffix; by addition of a suffix of Group 2 (3.22 ff.), certain of these forms are converted into verbal stems.

When -an is followed by formative -s (3.25), -an-s serves to convert the intransitive stem 'alkab, 'run' into a transitive stem.

- ka'lanetj, you are drunk; kal-aan-etj; V-aan-PB.
- wata'nae, if he is asked; k'at-an-e7; V-aan-PB.
- ki'men, he is dead; kim-en; V-aan-PB.
- bin'haan, he has gone; bin-an-aan; V-aan-PB.
- 'huntarnana, no:b, (those) who had gathered together;
  hunter-n-an-an-o:b; -n (3.24); -o:b (3.5).
- hu'lanta, ko:b, they are joined together; hul-aan-t-ak-o:b (4.4).
- t'ut'ana, (the squirrel) perching...; t'ut'-aan-ak (4.49).
- ka'tan, guard; ka'tant, to guard; kan-an-t; -t (3.26).
- -i'fan, small; -i'tfan(ta-h), to get small; -ta-h (3.27, 5.4).
- 'alkabansa, bi, he was scared (caused to run); al-kan-an-s-ab-i; -ab (3.3); -i (3.7).
3.48. -(a)l. Suffix in intransitive or passive form PA V-(a)l. The verb stem is always simple. Omission of -(a)l or substitution of -el is observed in intransitive specimens after certain stems (3.50, 3.57). In passive forms, the stem vowel is usually doubled and the accent is on the stem.

Suffix -(a)l is also found in intransitive forms S-(a)l-ak-PB and V-(a)l-PB, which are comparable in function to V-aan-PB (4.49, 4.52).

A number of stems, many of which are intransitive verbs, are converted into nouns and other non-verbal forms by means of -(a)l (4.52). Certain nouns with suffix -(a)l occur as stems of intransitive verbs of the V-n-ah conjugation (3.53) or, without other formatives, as transitive stems.

tan in 'lubul, I am falling; PA V-(a)l, intransitive.
tan in tal, I am coming; PA V-(a)l, intransitive, with -(a)l omitted after tal, come.

ku 'nuuk'ul, it is stirred up; PA V-(a)l, passive.
'nuuk'ul, it is shredded; 'nuuk'al-ak; S-(a)l-ak.
'luubul, (leaf) which is fallen; 'luub-ul, V-(a)l-PB; stem vowel doubles under certain conditions (4.52).

'kimil, death; kir-il; kim, die.
lo'tfol, twisted; lo't-fol; lo't, twist.
'jetel, with; j-et-el; -et, accompany
'ok'ol, (the) cry; 'ok'ol(n), to cry; see 7.53.
'uk'ul, (the) drink; 'u'ul(n), to drink; see 5.53.

I am thinking (of it); tuk-(a)l-ik.
Main Verbal Formulas

3.49. The most common verbal formulas are:

<table>
<thead>
<tr>
<th>Usage Class (Cf. 2.17)</th>
<th>Transitive</th>
<th>Intransitive</th>
<th>Passive</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHAB</td>
<td>t-PA V-ah</td>
<td>V-PB</td>
<td>V-ab</td>
</tr>
<tr>
<td>IKAL</td>
<td>PA V-ik</td>
<td>PA V-(a)l</td>
<td>PA V-(aa)l</td>
</tr>
<tr>
<td>k-IKAL</td>
<td>k-PA V-ik</td>
<td>k-PA V-(a)l</td>
<td>k-PA V-(aa)l</td>
</tr>
<tr>
<td>NULLAK</td>
<td>PA V-(e)</td>
<td>V-(a)k-PB</td>
<td>PA V-(aa)k</td>
</tr>
</tbody>
</table>

Examples with al, say; han, eat; k’ub, deliver (3rd. pers. sing.)

<table>
<thead>
<tr>
<th>Usage Class (Cf. 2.17)</th>
<th>Transitive</th>
<th>Intransitive</th>
<th>Passive</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHAB</td>
<td>tu 'ja:lah</td>
<td>han</td>
<td>k’u’bab</td>
</tr>
<tr>
<td>IKAL</td>
<td>u 'ja:lik</td>
<td>u ha’nal</td>
<td>u ’k’uubul</td>
</tr>
<tr>
<td>k-IKAL</td>
<td>ku 'ja:lik</td>
<td>ku ha’nal</td>
<td>ku ’k’uubul</td>
</tr>
<tr>
<td>NULLAK</td>
<td>u 'ja:le</td>
<td>ha’nak</td>
<td>’k’uubuk</td>
</tr>
</tbody>
</table>

Variants represented by these formulas are:

- PA V-(e): PA V-null or PA V-e.
- PA V-(a)l: PA V-(a)l when V is a simple stem. PA V-al when V is a composite stem.
- V-(a)k-PB: V-(a)k-PB when V is a simple stem. V-ak-PB when V is a composite stem.
- PA V-(aa)l: PA V(doubled stem vowel)-(a)l for simple stems. PA V-aal for monosyllabic composite stems. PA V-al for polysyllabic composite stems.

The k-IKAL forms differ from the IKAL forms only with respect to the preceding k-(4.27). In certain uses the NULLAK forms are preceded by k’ (4.37). IKAL forms are usually preceded by a cooperator such as tan (4.14), tso:k (4.15), or jan (4.18).
3.50. **Omission of Pronoun of Class A (PA).** The PA of an intransitive IKAL form is omitted when the form follows another verbal construction with a pronoun (PA or PB) of the same person. PA is more frequently omitted than employed in IKAL forms which follow (1) ma, negative sign (4.24); (2) 'kooʃ or ko'neʃ (4.21); (3) a pronoun of Class C (4.25). IKAL and k-IKAL forms used in relative clauses are found without PA after maf, 'who' and 'baas', 'what' (4.34). The pronoun u is often omitted in IKAL and transitive NULLAK forms when the verb stem begins with a vowel and the form is preceded by u 'tiʔal (4.23, 4.41). Occasional omission of PA is observed, IKAL forms preceded by tan (4.41), tso:k (4.15), and hoo': about half of these specimens are omissions of u before verb stems which begin with a vowel.

in k'at 'n'atal wa:'jeʔ, I wish to stay here (in k'at in 'n'at-al).

'naaken we:'nel, I climbed up to sleep ('naaken in wen-el).

ma. kaj'tik, he can't find it (ma u kaʃ-t-ik).

ten han'taal, it is I who am being eaten (ten in han-t-aal).

'(kooʃ tuʃ'tik, let us send for him ('kooʃ k tuʃ-t-ik).

'baas 'lubul, that which fell ('baas u lub-ul).

u 'tiʔal 'ja:le, in order that he may see it (u 'tiʔal u j-ol-e).

u 'tiʔal ji'ilik, in order that he saw it (u 'tiʔal u j-il-ik).

tan 'jufi'l, it is happening (tan u j-uf-ul).

hoo'pu ju:vik, he began to feel it (hoo'pu j-ub-ik).

tʃ'o:k be:taal, it was done (tʃ'o:k be:-t-aal)
Irregular Conjugations and Irregular Verbs

With the exception of composite intransitive stems with -pa-h or -k'a-h (3.37), each of the composite intransitive stems is conjugated in accordance with one of the following conjugations which are irregular with respect to the verbal formulae just described. Whereas transitive composite stems retain the same suffix of Group 2 in all conjugations and in nearly all instances are conjugated regularly, the primary characteristic of all except the V-n-ah conjugation is the alternation of formative -t in the IKAL forms with other formatives.

3.51. V-ah forms. Typical examples (3rd. pers. sing.):

<table>
<thead>
<tr>
<th>AHAB</th>
<th>IKAL</th>
<th>NULLAK</th>
</tr>
</thead>
<tbody>
<tr>
<td>V-an-PB</td>
<td>PA V-t-al</td>
<td>V-ak-PB</td>
</tr>
<tr>
<td>kul-ah</td>
<td>u kul-t-al</td>
<td>kul-ak</td>
</tr>
<tr>
<td>t'il-an</td>
<td>u t'il-t-al</td>
<td>t'il-ak</td>
</tr>
<tr>
<td>wal-ah</td>
<td>u wal-t-al</td>
<td>wal-ak</td>
</tr>
</tbody>
</table>

Classed in this group but occurring predominantly or exclusively in the V-an-PB form: jab, be many; 'tunloob, get well; pen, get busy; suk, get in the habit of; wii, be hungry; uk', be thirsty; jan, be delayed; fol, kneel. For the V-an-PB form for jan, 'be', and pant, 'be possible', see 3.58 and 3.55 respectively.

With some stems, both V-an-PB and V-n-PB forms are found; with others, only the elided form occurs; uk'a'n-en, uk'?en, I was thirsty; 'wiihen, I was hungry.
3.52. V-l-ah forms. In our sampling, only three verbs fall in this classification; examples (3rd. pers. sing.);

<table>
<thead>
<tr>
<th>AHAB</th>
<th>IKAL</th>
<th>NULLAK</th>
<th>Stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>V-l-ah-PB</td>
<td>PA V-t-al</td>
<td>V-l-ak-PB</td>
<td>hek, ride</td>
</tr>
<tr>
<td>hek-l-ah</td>
<td>hek-t-al</td>
<td>hek-l-ak</td>
<td></td>
</tr>
<tr>
<td>kuf-l-ah</td>
<td>kuf-t-al</td>
<td>kuf-l-ak</td>
<td></td>
</tr>
<tr>
<td>-yui-l-ah</td>
<td>-yui-t-al</td>
<td>-yui-l-ak</td>
<td></td>
</tr>
</tbody>
</table>

3.53. V-n-ah forms. Typical examples (3rd. pers. sing.);

<table>
<thead>
<tr>
<th>AHAB</th>
<th>IKAL</th>
<th>NULLAK</th>
<th>Stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>V-n-ah-PB</td>
<td>PA V</td>
<td>V-n-ak-PB</td>
<td>'alkab, run</td>
</tr>
<tr>
<td>al-kab-n-ah</td>
<td>u al-kab</td>
<td>al-kab-n-ak</td>
<td>'alkab, run</td>
</tr>
<tr>
<td>sut-n-ah</td>
<td>u sut</td>
<td>sut-n-ak</td>
<td></td>
</tr>
<tr>
<td>segir-n-ah</td>
<td>u segir</td>
<td>segir-n-ak</td>
<td>'segir, continue</td>
</tr>
</tbody>
</table>

Other stems with V-n-ah forms include: a'-at, cry out; ha'jab, yawn; 'heetim, sneeze; hum, make noise; keb, belch; me'jah, work; o'k'ol, cry; 'ok'ot, dance; sit', jumo; tul, sprout; u'l'ul, drink; wi's, urinate; 'jimba, stroll, visit; -j, shake off; -seeh, laugh; -eneb, pry; k'a'i, sing; k'il'kab, sweat; k'op, knock. Most polysyllabic stems and all Spanish words used as intransitive verbs are conjugated by means of the V-n-ah forms. In the PA V form, verb stems ending in a vowel are followed by -l: u 'zik'bal, he conversed; 'zik-bal, he conversed; -ba (3.30); -l (3.34). A few k-PA V forms were found: kin 'jalkab, I will run; k-in jal-kab.
3.54. **V-ʧa-h forms.** Typical examples (3rd. pers. sing.):

<table>
<thead>
<tr>
<th>AHAB</th>
<th>IKAL</th>
<th>NULLAK</th>
</tr>
</thead>
<tbody>
<tr>
<td>V-ʧa-h-PB</td>
<td>PA V-t-al</td>
<td>V-ʧa-h-ak-PB</td>
</tr>
<tr>
<td>ak'-ab-ʧa-h</td>
<td>u j-ak'-ab-t-al</td>
<td>ak'-ab-ʧa-h-ak</td>
</tr>
<tr>
<td>kal-ʧa-h</td>
<td>u kal-t-al</td>
<td>kal-ʧa-h-ak</td>
</tr>
<tr>
<td>sas-ʧa-h</td>
<td>u sas-t-al</td>
<td>sas-ʧa-h-ak</td>
</tr>
</tbody>
</table>

Other stems in this group, most of which occur with or without formatives as adjectives or nouns, include: 'ajik'al, get rich; al, get heavy; natʃ, go far; no'hotʃ, become large; tʃi'tʃan, get small; k'o'haan, get sick. These verbs as well as certain stems in the V-ah forms, indicate entrance into a state or condition. Some stems have interchangeable V-ah and V-ʧa-h forms: jab'ni, jantʃa'ni, there came to be many; jantʃa'ni, jab'ni, it came to pass (3.58); jantʃa'ni, jab'ni, there was delay.

3.55. **Impersonal verbs.** Verbs conjugated exclusively in the 3rd. pers. sing. include: k'a'bet, be necessary; ho:p', begin; utʃ, happen; naht, succeed. Forms for these verbs are:

- k'a'bet, invariable in form.
- ho:p', conjugated regularly.
- utʃ, conjugated regularly except for these forms: NULLAK variants 'utʃik, 'utʃak, 'urʧak.
- naht, conjugated regularly; also two V-(a)h forms ('natʃa, 'nanti) and a V-ʧa-h form ('natʃa'ni) are used interchangeably.
3.56. **Defective verbs.** The following transitive verb stems are found without verbal suffix: k'at, want; o'hel, know (something); k'a'hol, know (a person). Typical paradigm:

\[
\begin{array}{ll}
\text{PA V} & \\
\text{in k'at, I want (wanted, will want) it} & \\
\text{a k'at} & \\
\text{u k'at} & \\
k k'at, k 'k'ate:j & \\
a 'k'ate:j & \\
\text{u 'k'ate:b} & \\
\end{array}
\]

Exceptional V-aan examples were observed for k'a'hol and o'hel; e.g., ma o'hel:laan, it is not known. Regular transitive verbs with these stems are: k'at, ask; o'helt, find out; k'a'holt, recognize (a person).

3.57. **Irregular in IKAL and k-IKAL forms.** The stems tal, 'come', and tan, 'pass' are typical of stems which are conjugated regularly except in forms PA V-(a)1 and k-PA V-(a)1, where -(a)1 is omitted or, in archaic speech, is replaced by -el.

- ku man, he passed:
- tan in ta'lel, I am coming (archaic speech).

3.56. **Individual Irregularities.**

1. ui, ub, feel, hear. Conjugated as a regular transitive verb, ui, ub occurs with the stem ub in the third person, and with the stem ui in other persons: tu ju: 'ban, he felt it; tin wu: 'jan, I felt it; ta wu: 'jan,
you felt it.

2. **bin, go.** Regular in V-PB form, bin lacks -(a)l in IKAL and k-IKAL forms (Cf. above). It is impersonal in the V-(a)k-PB form, in which it signifies 'perhaps' or 'maybe', and the suffix is -ak instead of -ik as expected: bi’nak, X-variant bi’na’ki (4.47). Bin occurs uninflected before NULLAK forms (4.42), before PA kah (4.56), and in certain other instances specified in 4.56.

3. **jan, be, have.** Regular in V-PB and V-(a)k-PB forms, jan has been found in impersonal V-(a)h, V-[a]-h, and V-t-al forms: jan’ai (A-variant an’hi) and jan’ai, 'it came to pass (4.61), or 'it had to..' (4.18); u jan’tal, there is. A V-il-PB form is found in all persons and signifies 'to be in a specified state or condition': jan’ilen, I was..; ja’nil (A-variant o’nil), he was.. For uninflected jan in various uses see 4.18, 4.61.
PART 4

USAGE

The plan of this part is to some extent like that of a dictionary. The chief aim here, as in a dictionary, is to indicate in each entry what is referred to by a certain symbol in the various kinds of contexts in which it occurs. The symbols in the present case are mainly the constructions described in Part 3. Regardless of how diverse the uses of one of these constructions may be with respect to grammatical or semantic categories, they will be treated as subdivisions of a single topic; the topic being simply how the construction is used. Since a label has been provided for each of the constructions dealt with, it would have been possible to arrange the entries alphabetically; but it has seemed preferable to adopt a plan that seems to make increasingly easy the task of analyzing the examples of each usage. Relying, let us say, on the pedagogical effect of repetition and prior explanation, the comment on the analysis of the examples will be increasingly brief.

In order to guard at least to some extent against vagueness and ambiguity, some neologisms are made use of in various instances in which the current technical or ordinary expressions seem to the author to be particularly inadequate. We proceed to indicate what will be referred to by the neologisms which will be needed most frequently. Others will be explained where they occur for the first time.
4.1. We need to refer by a single term to whatever is signified at least by the verbs of the languages which are now said to have verbs. Such a term will relieve us of the task of deciding in some cases whether one should say, for example, 'the action signified by this verb', or 'the state (or condition, or relation) signified by this verb'. We mention this difficulty only by way of illustration. It is by no means the only one involved in the uses of such expressions as 'action', 'state', 'relation', 'state of being ...', etc. To evade in these pages some of these difficulties, the term *occurrence* will be used. By this term we will refer to whatever can truthfully or otherwise be said to be the case. Thus, we would say that at least one occurrence is referred to by each of the following sentences: 'You are sick', 'He is taller than you', 'Oxygen is a gas', 'It may rain tomorrow', 'He believed it', 'The Earth is flat', 'Caesar murdered Brutus'. The question of distinguishing what is said to be a single occurrence from what is said to be more than one will be dealt with below (4.5).

4.2. Due to the difficulties pointed out in Note 7, it has seemed advisable not to employ the usual terms 'tense' and 'aspect' in this discussion of Yucatec usage. We propose
to rely on the terms introduced below. To facilitate their introduction, let us first agree upon the conventions we proceed to explain. The expression 'datable interval' will be used (as is frequently done at present) to refer to a period of time specifiable, or assumed to be specifiable, with respect to a local time by an expression of this form: 'From $t_1$ to $t_2$', or, as we shall write hereafter, '$t_1 - t_2$'.

The numerical order indicated by the subscripts affixed to 't' will stand for chronologic order. Thus, if we say that $t_1 - t_2$ is the datable interval of event $E_1$, and $t_3 - t_4$ is the datable interval of event $E_2$, then it can be inferred that $E_1$ occurred before $E_2$. Also, given events $E_1$, $E_2$, whose respective datable intervals are $t_1 - t_4$, $t_2 - t_3$, the subscripts indicate that $E_1$ began to occur before $E_2$, and came to an end after the end of the occurrence of $E_2$.

Similarly, the datable intervals of overlapping occurrences can be specified thus: $t_1 - t_5$, $t_2 - t_5$, $t_4 - t_7$, $t_5 - t_8$. It may not be superfluous to remark that $t_1 - t_2$, for example, can stand for an ordinary time specification such as 'At five o'clock', as well as for a time specified as 'From 5:00 to 5:30' (Note 8). Of course, in either case it is understood that the specification refers to one or two dates; viz., 'At 5 o'clock a.m. on July 4, 1940, A.D.', 'From 5 o'clock p.m. on July 4, 1918 to 5:30 a.m. on March 3, 1930'.
To avoid prolixity, and to guard against certain ambiguities in the use of the word 'during', it will be convenient sometimes to say that an occurrent occupies a datable interval, taking advantage of the common practice of using the same terms for time and space in various expressions. Thus, speaking of a given occurrent, O₁, we will say 'O₁ occupied t₁-t₂', which will be equivalent to saying 'O₁ began to occur at t₁ and its occurrence ended at t₂.' The time from which a datable interval is reckoned will be said to be its initial limit; and the time up to which it is reckoned will be said to be its terminal limit. E.g.: the initial limit of t₄-t₅ is t₄; and its terminal limit is t₅.

4.3. Let 't₁-t₄' stand for any given datable interval. Any datable interval included in t₁-t₄ will be said to be a segment of t₁-t₄. For example, t₁-t₂, t₂-t₃, t₃-t₄ are three segments of t₁-t₄. Two datable intervals will be said to be contemporary if they have at least one segment in common. Thus, t₁-t₃ is contemporary with t₂-t₄; and t₁-t₄ is contemporary with t₂-t₃. If two datable intervals are not contemporary they will be said to be mutually exclusive. The terms prior and subsequent will be used to specify the chronologic position of two mutually exclusive intervals with respect to each other. Accordingly, given t₁-t₂ and t₃-t₄, we will say either that t₁-t₂ is prior to t₃-t₄ or that t₃-t₄ is subsequent to t₁-t₂. A given datable interval with respect to
which the chronologic position of another is specified in a given instance will be said to be the *time-index* in that particular specification. Thus, given $t_1-t_2$, $t_3-t_4$; if we choose to say that $t_1-t_2$ is prior to $t_3-t_4$, then $t_3-t_4$ is the time-index of that specification; and if we say that $t_3-t_4$ is subsequent to $t_1-t_2$, then $t_1-t_2$ is the chosen time-index. The terms 'prior', 'subsequent', and 'contemporary', employed in the senses above specified, will be useful in our discussions of Yucatec usage. For it so happens that some Yucatec constructions definitely indicate that the reference is to an occurrent whose datable interval is prior, or contemporary, or subsequent (as the case may be) with respect to a particular time-index; but they do not indicate whether that time-index is a present time, or a past, or a future time. Hence, the terms 'past', 'present', 'future' are not adequate to specify the distinctions which govern the uses of those constructions.

We all know that a given time can be asserted to be past, or present, or future, only with respect to the very moment in which the assertion is made. That moment is the time-index with respect to which the speaker or writer specifies the chronologic position of the interval he refers to as being present, or past, or future, as the case may be. Such a time-interval will be called *cardinal time*. From
the foregoing, it may readily be inferred that with respect to a given cardinal time, \( CT \), a past time is an interval which is prior to \( CT \); a future time is an interval subsequent to \( CT \); and a present time, at least so far as ordinary communication is concerned, is an interval contemporary with \( CT \). Of course, the terms 'prior', 'subsequent' and 'contemporary' are equivalent to 'past', 'future', and 'present', respectively, only when the time-index is a cardinal time.

4.4. In some chronologic specifications, two time-indices are made use of: a cardinal time and another time-index which will be said to be supplementary. In the following diagram, the lines representing the intervals are labeled thus: \( C \), cardinal time; \( S \), supplementary time-index; \( GI \), the given interval whose chronologic position is specified either with respect to \( C \) only, or with respect to both \( C \) and \( S \). Under the heading 'Designations' we list the terms which will be used when the chronologic position of \( GI \) is specified as indicated in the diagram.
<table>
<thead>
<tr>
<th>DESIGNATIONS</th>
<th>CHRONOLOGIC POSITIONS OF GI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Discrete-Past ....</td>
<td>$t_1$-----------------$t_2$-----------------$t_3$-----------------$t_4$</td>
</tr>
<tr>
<td>2. Present ........</td>
<td>$t_1$---------$t_2$---------$t_3$---------$t_4$</td>
</tr>
<tr>
<td>3. Discrete-Future ....</td>
<td>$t_1$-----------------$t_2$-----------------$t_3$-----------------$t_4$</td>
</tr>
<tr>
<td>4. Prior-Past .......</td>
<td>$t_1$-----------------$t_2$-----------------$t_3$-----------------$t_4$-----------------$t_5$-----------------$t_6$</td>
</tr>
<tr>
<td>5. Contemporary-Past ...</td>
<td>$t_1$-----------------$t_2$-----------------$t_3$-----------------$t_4$-----------------$t_5$-----------------$t_6$</td>
</tr>
<tr>
<td>6. Subsequent-Past ...</td>
<td>$t_1$-----------------$t_2$-----------------$t_3$-----------------$t_4$-----------------$t_5$-----------------$t_6$</td>
</tr>
<tr>
<td>7. Prior-Future ......</td>
<td>$t_1$-----------------$t_2$-----------------$t_3$-----------------$t_4$-----------------$t_5$-----------------$t_6$</td>
</tr>
<tr>
<td>8. Contemporary-Future ..</td>
<td>$t_1$-----------------$t_2$-----------------$t_3$-----------------$t_4$-----------------$t_5$-----------------$t_6$</td>
</tr>
</tbody>
</table>

In cases 2, 5, and 8, the diagram represents only one of the possibilities to which the term 'contemporary' applies, as previously defined (4.3). This omission has been made only for the sake of simplicity, and not to signify that the terms 'contemporary-past', 'present' and 'contemporary-future' do
not apply in any other instance in which $G$ is contemporary with $Q$, or with $S$. The following are examples of chronologic specifications illustrating the eight cases represented in the diagram: 1, 'He did it'; 2, 'He is doing it'; 3, 'He will do it'; 4, 'He had done it'; 5, 'He was doing it'; 6, '(He said) he would do it the next day'; 7, 'He will have done it'; 8, 'He will be doing it'. It may not be superfluous to remark that each of the sentences 4, 5, 7, and 8 depends on its context for the specification of its supplementary time-index. For example, referring to an occurrent occupying $t_1-t_2$, we may say at a cardinal time $t_5-t_6$ either 'He did it' or 'He had done it'. If we say 'He had done it', we expect that in the discoursive or circumstantial context of that sentence an interval $t_3-t_4$ (or an occurrent occupying $t_3-t_4$) has been spoken of. Suppose N meets M on the street, and the first thing he says to M is; "Your uncle had arrived." If we assume that N conforms to English habits of speech, we expect that M and N had previously discussed the question of whether or not M's uncle had arrived before something else (x) occurred. Hence, the time of the occurrence of x is the supplementary time-index in "Your uncle had arrived." Needless to say, the foregoing (4.4) does not provide for all the possibilities concerning chronologic specifications; nor even for some which are distinguished in various languages. The aim has been simply to provide for those which have to be dealt with in the present
discussion of Yucatec usage.

It will occasionally be convenient to use the terms past and future unqualified, and in their ordinary senses. In such cases 'past' will apply to any time prior to the cardinal time; and 'future' to Cases 7 and 3, and any other time subsequent to the cardinal time.

Since the difference between the chronologic position of an occurrent and the chronologic position of the datable interval it occupies is purely verbal, it will not be ambiguous, and it will often be convenient, to specify the chronologic position of an occurrent by means of the designation that is applicable to the datable interval it occupies. Thus, the expression 'a contemporary-past occurrent' will be equivalent to 'an occurrent which is said to occupy a datable interval whose chronologic position is specified as being contemporary-past' (Case 5 in the above diagram). The same will hold for the rest of the eight chronologic specifications for which special terms were provided above.

4.5. To delimit the uses of some Yucatec constructions, a distinction must be made between a reference to a single occurrent and a reference to what will be called a multiple occurrent. Let us compare these two statements: 'He is smoking a cigar' (at this very moment), 'He smokes cigars'. We readily see that the second statement refers to more
than one occurrence of the sort referred to by the first; and that in the first only one occurrence of that sort is referred to. Of course, what is one occurrence, or more than one, is to be determined in each case on the basis of particular words, expressions, or other symbols of particular languages. With regard to this distinction, the consideration that there may be no event which is not divisible into two or more is irrelevant. The instances that concern us are those in which the linguistic habits of a given people are such that they indicate when they refer to a single occurrence of the sort which they designate by a given symbol, and when they refer to more than one occurrence of the same sort. In the latter case, we will say that they refer to a multiple occurrence. It may be mentioned here that the terms introduced above (4.4) are adequate to specify the chronologic positions of multiple occurrences. Take, for example, the statement 'He used to get up early'. Here, the multiple occurrence consists of an undetermined number of occurrences each one of which is an instance in which a certain individual got up at a certain time evaluated by someone as being early. Let $t_1 - t_2$ be the datable interval of the first of those instances; and let $t_m - t_n$ be that of the last one. Accordingly, the datable interval of the multiple occurrence is $t_1 - t_n$. We can deal with the interval $t_1 - t_n$ exactly as we have dealt above with others, without regard to whether they delimited one or more than one event.
4.6. To discuss the uses of some Yucatec constructions, several kinds of references to multiple occurrences have to be distinguished. At this point we shall take account of the two kinds which have to be dealt with most frequently. They are: (Kind A) references to occurrences which are said to take place on a single occasion; and (Kind B) references to occurrences which are said to take place on more than one occasion. Any reference of Kind A, and any reference to a single occurrence will be said to be monochronic. References of Kind B will be said to be polychronic. It may be obvious that the question of what is one occasion, and not more than one, is mainly a discoursive matter. The distinction cannot rest exclusively on a description of the occurrences themselves; for that which may be one occasion with respect to the theme of a given discourse, can be more than one with respect to the theme of another. One must, therefore, depend on the context of each reference to decide whether the reference is monochronic or polychronic. As one would naturally expect, contexts are not always unambiguous with regard to this distinction. In the samplings of Yucatec discourse at our disposal, the context has been ambiguous in approximately 18% of the cases in which it was necessary to decide whether or not the use of a given construction depended on the distinction in question. Clear cases of polychronic references occurred in descriptions (a) of customs, (b) of habits of a
single individual, (c) of procedures in hunting, cooking, agricultural techniques, and the like; and (d) in generalizations concerning diseases, the weather, properties of bodies, and various occurrents other than human or animal behavior. Common instances of monochronic references to multiple occurrents are: (a) those in which two or more individuals collaborate in the performance of a task, or two or more agencies, other than individuals, are factors in the production of a given result; e.g., 'They fetched firewood to cook the turkey', 'The pigs have ruined my garden'; (b) those in which two or more occurrents of the same designational class (i.e., referred to by the same word) take place contemporaneously, or during an interval spoken of; e.g., 'When I passed by the house, they were drinking chocolate'; (c) those in which two or more occurrents other than human or animal behavior.

Frequent instances of monochronic references are also those which are distinguished in Yucatec by the use of reduplication and duplication (4.49). These two devices are generally employed to refer to a more or less rapid repetition of an action by a single individual, or by each of a number of individuals, aiming in either case to accomplish a single result. For example, aiming to scare away an animal that has entered a cornfield, a single individual, or each of two or more individuals in collaboration, repeatedly throws stones
at it till the animal is beyond reach or out of sight. In such a case, the monochronic reference in Yucatec can be simply 'y'iny'ina:bi, which is approximately equivalent to 'It was stoned'.

4.7. One of the most pervasive items of discourse in oral and written communication is that which we propose to call 'declarative modality'. One expects to find means of indicating declarative modality in the language of any people who may not be entirely unconcerned with whether what they are told is true or not; and in the language of any people who may not be thoroughly conditioned to speak only when they are sure that what they say is true. The declarative modality of a statement, or of a part of a statement, is the declarative value which the one who makes the statement ascribes to it. An individual ascribes a declarative value to his statement if explicitly or otherwise he communicates (a) that what he says is true, or (b) that he is sure, or that he is not sure, that what he says is true, or (c) that he does not know whether it is true or not, or (d) that he does not commit himself as to whether he knows or not that it is true, or that it may be true.

It may be noted here that the term 'declarative value' is not synonymous with the term 'truth-value'
employed in contemporary logic. The latter, as the author understands it, refers to the validity of a statement as determined by corroboration or by rules of valid inference. Truth-value, thus understood, is entirely irrelevant to our application of the term 'declarative value'. Whether or not an individual vouches for the truth of his statement, and whether or not his statement is true are obviously entirely different questions. It may also be obvious that the term 'declarative modality' is not synonymous with the term 'mode', or, as some grammarians prefer to say, 'mood'. When either of these grammatical terms is used to refer to that which a given linguistic device signifies, it can happen in some instances that what the device signifies is the declarative modality of a statement. But when the term 'mode' or 'mood' is used to refer to a class of devices, then mood and declarative modality are at least as different as a knife and a cut made with a knife. The kind of device has nothing to do with whether that which it signifies in a given instance is to be classed as a declarative modality. To illustrate the difference between mode and declarative modality let us compare these four statements: 'He is sick', 'I think he is sick', 'Perhaps he is sick', 'They say he is sick'. If we are not mistaken, most grammarians agree that no other than the indicative mode or mood is used in each of those sentences. We agree with them, if it is understood that in this instance
the term 'indicative mood' is the name of a class of English devices. Now, attending not to the devices but to what is communicated by them in those four instances, we would say the following: Assuming a certain context and a certain intonation for each of those four sentences, it can be inferred that four different declarative values are therein ascribed to the expression 'he is sick' by the individual or individuals who made those statements. Of course, it is rarely, if ever, justifiable to speak with confidence about what is signified by a given written sentence without context. Even the grammarian who claims to understand the term 'mode' as being the name of a form of the verb has to depend occasionally on the context of a sentence to determine in what mode its verb is there used. For example, that would have to be done before one can decide whether in the sentence 'You may go' the verb 'go' is in the imperative mode or in some other mode. We do not propose to enumerate the many Yucatec words and other devices which serve to indicate differences of declarative modality. But such differences will have to be taken into account when dealing with frequent uses of some devices. To take account of those differences it will not be necessary to provide a scale of declarative values. It will be adequate to our aim to specify that a higher declarative value is ascribed to the statement by using a certain device than by using another. It may be clear that
'higher' and 'lower' refer respectively to degrees of certainty and uncertainty. The declarative values which fall under specifications c and d in the above definition can be said to be undetermined.

4.8. In Yucatec, as in other languages, two constructions which seem to be equivalent may differ with respect to the contexts in which they occur. Both may serve to communicate the same items of information, but one occurs chiefly or exclusively when one of the items of information happens to be of special concern at a certain point in the course of the narrative or dialogue, or circumstances to which the utterance is relevant. In such cases the construction may conveniently be said to distinguish the topic in question from others touched upon in the same sentence. This will be called topical distinction. The devices thus employed will be said to distinguish the dominant topic from the incidental topics or items of information. Topical distinction is commonly effected in English by pronouncing some components of the utterance with more emphasis than others. Emphasis thus understood seems frequently to go together with whatever other device indicates topical distinction. But, as is well-known, in some languages emphasis alone, without the use of special wording or construction is not employed as freely as in English. In fact, if differences in emphasis were estimated in terms of
acoustic intensity, it is possible that in some languages the word or words referring to the dominant topic are in some instances uttered with less emphasis than some other component of the sentence. I can adduce no experimental data in support of this conjecture, but the ear may be trusted sufficiently to conclude from a study of our phonographic records of Yucatec discourse that it should not be taken for granted that acoustic emphasis and topical distinction are inseparable.

To illustrate what is referred to by saying that wording or construction or both can indicate topical distinction, let us compare these two sentences: 'I saw him yesterday', 'I am the one who saw him yesterday'. Assuming that both statements were made by the same person, and that both are about a single instance in which that person saw a certain individual on the day there referred to as 'yesterday', those two statements are equipollent (Note 9). All the information communicated by the first statement about the incident of seeing the person in question is communicated also by the second statement, and the converse is true. But it does not conform to prevalent habits of English-speaking peoples to use the second sentence in all the contexts in which the first can occur. One expects at least that when the second sentence occurs, the topic of seeing the individual referred to has been previously spoken of. A
similar topical distinction could be made by uttering the first sentence with an emphatic 'I'. What is known about topical distinction hardly goes beyond the unreliable rationalizations of the native speaker. All that seems justifiable to say with respect to the above sentences is that the second has a narrower range of application than the first, and that topical distinction accounts at least in part for its narrower range. That is as far as we propose to deal with the subject of topical distinction in Yucatec, and only when topical distinction accounts for the apparently exceptional uses of some constructions.
USES OF THE AHAB-CONSTRUCTIONS

As already stated (3.49), the constructions referred to by the label AHAB are t-PA V-ah, transitive; V-PB, intransitive; and V-ab, passive. The uses of these constructions will be divided into three classes hereafter referred to as Usage A, Usage B, and Usage C. The most frequent usage of each of these three constructions is Usage A. Usage B is observed in certain kinds of conditional sentences. Usage C can justifiably be said to be exceptional; for only one verb (al, say, tell) has been found so used. The fact that Usage A and Usage B are served by the three constructions is the basis for grouping them under one heading. The choice of one or another of the three is determined by what the terms 'transitive', 'intransitive', and 'passive' indicate with reference to Yucatec (*\`). Since the passive V-ab differs in at least two respects from the passive voice devices of other languages, special attention will be given to it below (4.19).

**USAGE A**

4.9. Usage A is identifiable by these two specifications:
(a) the reference is monochronic (4.6), and (b) the chronologic position of the occurrent is discrete-past (4.4, Case 1). Those two specifications hold for each of 86% of the instances in which the AHAB-constructions were used in the specimens of discourse recorded. In an additional 2% of the cases, specification \( \beta \) applies definitely, but it is not clear
that only one occasion is referred to. Nevertheless, it is certain that what is spoken of in those doubtful cases is not a custom, or the habitual behaviour of an individual. The only exceptions to the rule that the AHAB-constructions are not used in reference to customary action are those dealt with below (4.11). From the foregoing remarks it may readily be gathered that these constructions are frequently used where other languages ordinarily employ one of the tenses or other devices called in different grammars 'simple past', or 'past definite', 'preterit', 'aorist', or 'past tense, momentaneous aspect'.

Examples of Usage A, construction t-PA V-ah with simple V-unit.

1. tin t\'o\'rah hun tul keh. I shot a deer. t-in t\'on-ah, I shot; t- and -ah, distinctive components of the construction t-PA V-ah; in, 1st. pers. pron. Class A; t\'on, shoot, also 'gun' in other contexts. hun, one; tul, numerical classifier for animate referents (4.68); keh, deer.

2. he le kaf ta mana\'ho\?. There is the chicken you bought. t-a man-ah, you bought; a, you, singular. In this sentence, -o\? is the terminal component of two constructions: he .. -o\?, approximately equivalent to 'Look, there it is', more like French voil\'a (4.51); and le .. -o\?, the, that (4.51). kaf, chicken.
3. le ka tu jila'he?, tu ma'tyah u t'on, ka tu 'ts'on'ts'o,nah. As soon as he saw him, he got his gun and fired at him repeatedly. le ka ... -e?, distinctive components of one of the temporal clauses employed in references to rapid sequences of events. (4.62). In this sentence there are three examples of the construction t-PA V-ah with the pronoun u; namely, t-u j-il-ah, he saw; t-u ma't?-ah, he got, he grabbed; and t-u 'ts'on-t's'on-ah, he shot at (him) repeatedly. j-, prefix required after pronoun u before initial vowel (3.2). t's'on-t's'on, duplication signifying rapid succession of several repetitions (4.69). The equivalent of 'him' in the first and third clauses is a null sign (2.5). For the use of ka in the third clause see 4.62.

4. ka t i'ilah hun tul j-nuk t'sumuk le 'bep?. And we saw an old woman in the middle of the road. t i'il-ah, we saw. For the use of t with reference to the speaker and another or others, see 2.9. hun tul, as in Ex. 1. j-nuk, old woman; j- used in some expressions referring to female (3.3). t'sum-uk, be in the middle or center (4.49). le ... -o?, as in Ex. 2. be, road.

5. in wo'heJ a le in no:'k'o?. I know you took my clothes. in w-on-el, I know (3.56). t-a t'j'a-(a)h-e:j, you took; in this context, t'j'a signifies 'to take and carry away'; in other contexts it can be ren-
ordered by 'fetch'. a ... -e:\, you, plural (2.4).
le ... -o?, as in Exx. 2 and 4; nok', clothes; le ... nok'-o?, approximately equivalent to 'those clothes of mine' (4.51).
6. ka tu t'su't'a'ho:b. And they kissed him. t'su't', kiss.
   u ... -o:b, they (2.4). As in Ex. 3, 'him' is signified by a null sign.

   Examples of Usage A, construction V-PB with simple V-unit.
7. ku 'sasta,le?, o'ken i'fil le ko:'lo?. At daylight, I went into the cornfield. k-u sas-t-al-e?, at daylight; for temporal clauses of this type, see 4.33. ok-en, I went into, I entered (illustrating constr. V-PB); -en, 1st. pers. pron. Class B. i'fil, into, within (4.52). le ... -o?, the (as in Exx. 2, 4, 5). kol, cornfield, milpa.
8. ku t's'o:ko,le?, ta'leq 'jetel a bat. Then you came with your ax. k-u t's'o:k-o1-e?, then (after the incident previously mentioned); for the construction of such temporal clauses, see 4.33. tal-et\, constr. V-PB, you came; tal, come; -et\, 2nd. pers. sing. Class B. i-et-el, with, and, be together with, or in the company of (4.52). a, 2nd. pers. sing. Class A, equivalent to 'your' in substantival constructions (2.4). bat, ax.
9. le ka eme:'ne?, lu'k'i. As soon as I came down, he left. le ka ... -e?, as in Ex. 3. em-en, constr. V-PB.
I came down, or went down; -en, 1st. pers. pron. Class B. luk'-i, he left, departed, went away; constr. V-PB with null sign for 3rd. pers. (2.5 ); -i, required when V-PB with null for 3rd. pers. is the last word of the sentence (4.59).

10. be:'jo? ho'k'o:n. That is the way we got out. bei-o?, that way, thus (referring to a procedure previously spoken of); see 4.51. hok'-o:n, we went out, or came out; -o:n, we, excluding the listener in this particular instance (2.5 ).

11. 'baaj ten bi'ne:j te:'lo? ? Why did you go there? 'baaj ten, why? (2.19). bin-e:j, you (plural) went; bin, go; -e:j, 2nd. pers. plur. pron. Class B; in constructions requiring pronouns of Class A, the suffix -e:j is the terminal component of the form a . . -e:j, as in Ex. 5.

12. ka k'utjo:b ti hun p'el no'hoj kah. And they arrived at a large town. k'utj-o:b, they arrived; -o:b, 3rd. pers. plur. suffix, with uses corresponding to those of -e:j for 2nd. plur. (2.5 ), as explained in Ex. 11. ti, at; in other contexts 'to', 'from', etc. (2.29). hun, one; p'el, general numerical classifier for inanimate referents (4.68). noh-otj, large; elderly, important (with reference to persons); -otj, formative (3.40), a component of many words whose uses are in some cases like those of English adjectives. kah, village, town.
Examples of Usage A, constructions t-PA V-ah and V-PB, with miscellaneous V-units. Some of the examples illustrate the use of pronouns of Class B as grammatical objects (2.5) in construction t-PA V-ah.

13. ka tu kul'kintah ti hun p'el 'k'antje?'. And she sat him on a stool. t-u kul-kin-t-ah, she sat him (constr. t-PA V-ah); kul, sit down (when used in an intransitive construction); -kin, formative when kul and various other words are used in transitive constructions (3.23); -t, one of the two formatives which follow -kin or -kun in transitive constructions (3.16). ti, on (see Ex. 12). hun p'el, numeral 'one', and numerical classifier. k'antje?, stool; k'aw, first element of some compounds designating objects used for comfort, as k'aw, hool, pillow; k'aw, it, cushion (to sit upon); k'antje?, special cushion placed under the load to protect the back; k'aw is also the word for 'hammock'. tje?, wood, wooden, tree, stick, etc.

14. mis mak tu jila'hen. Nobody saw me. mis mak, nobody; mak, person; mis, negative (4.32). t-u jila-ah, constr. t-PA V-ah; j-, as in Ex. 3; il, see; -en, 1st. pers. pron. Class B.

14. ta pul'hen tso:note? tu men tu p'at'hefsa wa'tan. You threw me into the cenote because your wife left you. t-a pul-(a)h-en, you threw me, constr. t-PA V-ah.
Examples of Usage A, constructions t-PA V-ah and V-PB, with miscellaneous V-units. Some of the examples illustrate the use of pronouns of Class B as grammatical objects (2.5) in construction t-PA V-ah.

13. ka tu kul'kintah ti hun p'el 'k'än'tfe? And she sat him on a stool. t-u kul-kin-t-ah, she sat him (constr. t-PA V-ah); kul, sit down (when used in an intransitive construction); -kin, formative when kul and various other words are used in transitive constructions (3.23); -t, one of the two formatives which follow -kin or -kun in transitive constructions (3.16). ti, on (see Ex. 12). hun p'el, numeral 'one', and numerical classifier. 'k'än'tfe?, stool; 'k'än, first element of some compounds designating objects used for comfort, as 'k'änhool, pillow; 'k'änit, cushion (to sit upon); 'k'änpatf, special cushion placed under the load to protect the back; 'k'än is also the word for 'hammock'. tfe?, wood, wooden, tree, stick, etc.

14. mif mak tu jila'hen. Nobody saw me. mif mak, nobody; mak, person; mif, negative (4.32). t-u jil-ah, constr. t-PA V-ah; j-, as in Ex. 3; il, see; -en, 1st. pers. pron. Class B.

14. ta pul'hen c'ono'te? tu men tu p'at'hetj a wa'tan. You threw me into the cenote because your wife left you. t-a pul-(a)h-en, you threw me, constr. t-PA V-ah;
for the elision of the vowel of a of -ah, see 1.4. -en, 1st. pers. pron. Class B. pul, throw away, or 'let something drop'. Ts'on-ot, denote, a kind of natural well common in Yucatan; for the composition of this word see 3.28. -e?, discoursive device used between clauses (4.58). t-u men, because (4.52). t-u p'at-(a)h-ef, (she) left you (constr. t-PA V-ah), with the elision of the a of -ah, as in the preceding case; -ef, 2nd. pers. sing. pron. Class B. a, 2nd. pers. sing. pron. Class A.

w-at-an, wife; w-, prefix required by initial vowel after pronouns in and a (3.2); at-an, analysis justifiable only on etymologic possibilities (3.0); at, a variant of et; obsolete e'tan, wife, married woman; obsolete eta'il, friend, companion; et, be together with, in the company of; -an, often performs an office similar to that of the past participle in some languages (4.53).

16. ma tu 'lefta\'hi. He did not trap him. ma, negative
(2.24). t-u lef\'t-ah, constr. t-PA V-ah; lef\', trap, ensnare with a special device made of strings or cords; -t, formative required by the use of lef\' in a transitive AHAB-construction (3.16). -i, required by the AHAB-constructions in negative sentences under certain conditions (4.59).

17. ka tu jo'heltah tjan 'konkaj. And the little fish-
vender found it out. t-u j-oh-el-t-ah, constr. t-PA V-ah; oh-el without formative -t signifies 'to know' (3.56); with -t, to find out what has happened or is the case, most commonly, or perhaps exclusively, by being told about it. t-jan, little, small; various other senses (4.35).

kon-ka'i; kon, sell; ka'i, fish.

18. ka tu mat'lan-tah u k'a'bo:b. And they grasped each others hands. t-u mat'-lan-t-ah, constr. t-PA V-ah; mat', grasp, take hold of; -lan, each other (in this context); in most cases it refers to a distribution of some sort (4.65); -t, formative, as in Exx. 13, 16, 17. u k'ab-o:b, their hands; u .. -o:b, 3rd. pers. plur. pron. Class A; k'ab, hand.

19. ka tu k'ub'lan-tah. And he delivered them. Contextual implication: in conformity with a certain plan, he delivered the objects in question, handing to each person concerned one or more of them. t-u k'ub-lan-t-ah, constr. t-PA V-ah with k'ub-lan-t* for V-component; k'ub, deliver; -lan, designation of distribution (4.65); -t, formative, as in Ex. 18.

20. in su'kuno:be? tu k'ark'a'e:no:b. My elder brothers tied me up. in su'kun-o:b-e?, my elder brothers; in, 1st. pers. pron. Class A; su'kun, elder brother (also, though obsolescent, 'paternal grandfather'); -o:b, plur. (2.23); -e? and the syntactic position of the unit in su'kuno:be? constitute a discoursive device which indicates that the
The dominant topic is the circumstance that the ones who perpetrated the cruel act in question were his own brothers; hence, approximately equivalent to 'My own brothers' pronounced with the proper emphasis. For the uses of -e?, see 4.58. t-u k'ə-a-k'əʃ -(ah)-en-ə:b, constr. t-PA V-ah with reduplication of k'əʃ, to tie; reduplicated k'əʃ denotes multiple, firm tying. For elision of -ah see 3.10. -en, 1st. pers. pron. Class B; u ... -ə:b, 3rd. pers. plur. pron. Class A.

21. sit'na'hen. I jumped. sit'-n-ah-en, constr. V-PB; sit', jump; -n, special intransitive formative (3.24); -ah, required after formative -n in AHAB-constructions (3.53); -en, 1st. pers. pron. Class B.

22. t-e-je? ma tʃeəhnahefəʃi. You (emphatic) did not laugh. t-e-je?, you; composite pron., 2nd. pers. sing. Class C (2.6), with a special intonation, t-e-je? is in various contexts equivalent to 'As for you, ...', 'You yourself, however, ...', etc. (2.6); cf. Ex. 20. ma, negative, with -i at the end of the sentence, as in Ex. 18. tʃeəh-n-ah-əf, constr. V-PB; tʃeəh, laugh; -n and -ah as in Ex. 21; -əf, 2nd. pers.sing. pron. Class B.

4.10. Usage A. construction V-ab. The discursive uses of this construction and those of the past tenses of what is called 'passive voice' in the grammars of various languages have much in common. Nevertheless, due to the lack of adequate statement as to what is expected to distinguish that
which is to be called 'passive voice' from that which is to be named otherwise, there seems to be at present no way of determining whether the term is properly applied to the Yucatec construction in question. If one of the requirements in the application of this term is that the grammatical subject of what is termed 'passive voice' be the so-called "logical object" in a corresponding active voice construction, then the term is not applicable in this case. Take, for example, the sentences tu jila’hen in wà’tan, my wife saw me; and i’la:ben tu men in wà’tan, which is equivalent to 'I was seen by my wife'. One notices that the person who was seen is referred to in both sentences by the pronoun -en. The same holds for the indirect object. Thus, the person to whom something was told is referred to by ti’e? in these two sentences: ka tu ’ja:lab ti’e? bin u kah u be:’te (and he said to him that he was going to do it), and ka ’a:lab ti’e? bin u kah u be:’te. To translate the latter sentence in conformity with English usage, one must render ti’e? by a subject pronoun: 'And he was told that he was going to do it'. Rendering ti’e? by an indirect object, one would have to say 'And it was said to him that he was going to do it'. However, such a Yucatec sentence very frequently occurs in contexts in which the English passive voice would not be used. The above example, and numerous others with the same construction, occur in reports of dialogues of this form: 'He told his brother that it was necessary to do it, and he (his brother) said to him that he was going to do it.'
The italicized portion of this sentence is the translation of the above V-ab construction which in other contexts could adequately be rendered by the English passive. Thus, the V-ab construction and the passive voice of other languages differ both with regard to the conversion of grammatical object into grammatical subject, and with regard to usage. What they have in common may be loosely indicated on the basis of the following statements concerning the passive voice in the most commonly known European languages. (a) Given a non-passive sentence, $S_1$, whose main verb is used transitively therein, it is possible to construct a passive sentence, $S_2$, such that $S_1$ and $S_2$ be equipollent (See Note 9). Example: 'He saw her', 'She was seen by him'. (b) Given a non-passive sentence, $S_1$, which satisfies the conditions already stated, it is possible to construct a passive sentence, $S_3$, such that all the information communicated by $S_1$ is communicated by $S_3$, save the specification of the subject of $S_1$. Example: 'My uncle gave me this watch yesterday', 'This watch was given to me yesterday'. Of those two sorts are the correspondences observed between the Yucatec constructions t-PA V-ah and V-ab, with this qualification: V-ab cannot be converted into t-PA V-ah when the agent is not known. Thus, whereas in English the passive 'My hat was stolen' can at least in some contexts be replaced by 'Some one stole my hat', in Modern Yucatec there seems to be no t-PA V-ah construction which can
replace V-ab in the sentence 'oklab in p'ok (my hat was stolen), when the speaker claims not to know who committed the theft. Those instances offer no difficulty, but for all others the data at our disposal are insufficient to infer with certainty under what circumstances construction V-ab, and not t-PA V-ah, occurs in Modern Yucatec discourse. As is probably the case also with regard to the uses of the passive voice in other languages, some individuals employ one of these two kinds of constructions much more frequently than others. This statement rests on the results of a special study of contexts whose differences can hardly be the determinants of the use of either of the two constructions in question, and the contexts, therefore, were in this study assumed to be comparable. It is, of course, from the context that one would expect to derive the information necessary to disclose what determines the occurrence of construction V-ab. In the specimens of discourse available to us, such information could be inferred with certainty in only 53% of the total number of instances in which construction V-ab occurred. In 79% of the cases in which the contextual circumstances were thus favorable, the following was observed: (a) the identity of the agent of the action referred to by the V-ab construction is unknown to the speaker; or (b) the dominant topic is the action which was performed, or whether it was performed or not, rather than who performed it; or (c) the speaker serves some personal interest by not
disclosing the identity of the one who performed the action. Under a we class chiefly the instances in which the Yucatec sentence can be rendered by the English active voice by using such expressions as 'someone', 'somebody' to refer to the agent of the action. Typical examples of the instances classed under b are answers to questions such as 'Did you (plural) give him the money?', in which cases the V-ab construction frequently occurs: qa:bi, literally, 'It was given', or, as one would more likely say in English, 'We did', or simply, 'Yes'. In such a case, the one who thus replies may, or may not, be the particular member of the group addressed who performed the act of handing the money. As a matter of fact, in some contexts it is justifiable to interpret the question as being equivalent to 'Has the money been given to him?', since no information is requested as to which of the individuals addressed was the one who delivered the money. As may be readily seen, specifications a and c cannot apply in instances in which the agent of the action is explicitly referred to in the sentence in which construction V-ab occurs. Such explicit references are always introduced by the expression tu men, which in this case performs the same discoursive office as the English word 'by' when the latter introduces the agent of the passive voice. In other cases (4.52), tu men is equivalent to 'because', or 'due to', 'on account of', 'on behalf of', etc. Specification b applies clearly in many instances in which explicit reference to the agent is made by means of the
of the expression tu men, but in many others it would be arbitrary to infer that the specification of the agent is a less dominant topic than the occurrence of the action. Moreover, the agent is clearly an incidental topic (4.8) in many cases in which t-PA V-ah occurs. Apparently, it is at least as difficult to specify what determines the use of construction V-ab as it is to specify what determines the uses of the passive voice in all the instances in which it occurs in English and in other languages. For obvious reasons, it has seemed desirable to include in the notes to the following examples some information concerning the context in which each sentence occurs.

Examples of Usage A, construction V-ab.

25. ka i'la:be? ti le:'ti? jan. And it was seen that he was the one who had it. Context: The owner and the foreman of the plantation were searching some of the workers suspected of having stolen the money. Upon searching one who had been suspected on previous occasions, the money was found. The context shows that the owner and the foreman were not the only ones who witnessed this disclosure. To all those who witnessed it, or to the one or ones who searched the guilty party, reference is made by il-ab-e?, constr. V-ab. The disclosure, rather than who disclosed it, seems to be the dominant topic. For the use of -e? before a subordinate clause, see 4.58. ti le:'ti? jan, he had it (emphasizing 'he'); le:'ti?, he, pron. Class C (2.6); j-an, exist, be present, have, etc. (4.61). When the dominant topic is: What is possessed?, rather than: Who possesses it?, jan is
ordinarily the first component of the construction; e.g.: jan ten, I have; jan ti?, he has.

And the man told him to buy it. Context: A asked B ("the man") to give his opinion as to whether he (A) should buy a certain house, and B told A to buy it. al, tell, say; -ab, distinctive component of constr. V-ab. ti?, to him.
le mak-e?, the man, the person already spoken of, and not present; for le ... -e? see 4.51. t-u men would be equivalent to 'by' if one chooses to translate the above sentence thus: 'And he was told by the man to buy it', or, more literally, 'And it was said to him by the man to buy it'. For the construction of ka u man-e?, see 4.37. man, buy.

25. sen tj'in-tj'in-na:ben. I was stoned furiously. Context: It was rumored that a sprite of the sort called a'luʃ took care of a certain cornfield. A previously skeptical hunter, who on a bet dared to trespass, reports how he was driven out, but without referring explicitly to the sprite throughout his account. sen, extremely, with utmost violence, and many other senses: it serves to evaluate quantity or degree enthusiastically or deploringly. tj'in-tj'in-ab-en, constr. V-ab with duplication of tj'in, to throw stones or other small objects at; -en, 1st. pers. pron. Class B, which performs here the same office as in tu tj'ina'hen, he stoned me (constr. t-FA V-ah).

26. 'tu:ʃta'beʃʃ a 'kin, sen. You were sent to kill me. Context: The speaker suspects that the person addressed
IIP had not come merely to visit him, as he said; but rather that he had been ordered by some enemy of his to murder him.

\textit{tuʃ-t-\textit{ab}-etʃ}, you were sent; \textit{tuʃ-t}, to send someone on an errand, order someone to go somewhere to perform a task; -\textit{t}, formative, as in Exx. 16, 17; -\textit{ab}, distinctive component of constr. \textit{V-ab}; -etʃ, 2nd. pers. sing. pron. Class B. a \textit{kim-s-en}, a NULLAK-construction (4.41); a, 2nd. pers. sing. pron. Class A; \textit{kim-s}, kill; \textit{kim}, die; m changes to n before -s (1.3). -en, 1st. pers. pron. Class B.

27. \textit{ka \textit{tʃastʃab tu 'ne,e?}, ka \textit{hats'a;bi}. And he grabbed him by the tail and beat him. Context: Pig got too bold in an interview with the Lord of the Sweet-potatoes, and the latter punished him as specified in the sentence. This illustrates one of the uses of constr. \textit{V-ab} in cases in which the identity of the agent is specified in the context. \textit{tʃastʃ}, to grab violently. \textit{t-u}, contraction of \textit{ti} and \textit{u}; \textit{ti}, by, at, from, etc. (2.2). \textit{u ne-e?}, his tail; \textit{u}, 3rd. pers. pron. Class A; \textit{ne}, tail; -e?, discoursive device at the end of a clause or sentence which is a component of a composite sentence (4.58). \textit{haʃ'-\textit{ab}-i}, constr. \textit{V-ab}, with -\textit{i} at end of sentence, as in constr. \textit{V-PB} (4.59); see Ex. 9; \textit{haʃ'}, strike, hit.

Examples of Usage A, with \textit{V-components} of Spanish origin in the three AHAB-constructions. The formatives -\textit{t} and -\textit{n} (3.26) are affixed to the infinitive of the Spanish verb, or to a Spanish noun used verbally in Yucatec.
In conformity with the general use of these formatives in the AHAB-constructions, -n followed by -ah (3.53) occurs in the intransitive construction V-PB and -t is used in the two transitive constructions t-PA V-ah and V-ab.

28. ka 'bautisart:ibi. And they baptized him.

29. ka tu 'maldisjon'ta. And she uttered a curse against him.

30. ka 'maldisjon'ta:to:b tu men u ta:'ta. And a curse was uttered against them by their father.

31. ka 'seginnah u bin. And he kept on going.

Usage B

4.11. The three AHAB-constructions occur in protases of conditional sentences of these three kinds: (a) Reference
to a contingency concerning a particular occurrence; e.g., 'If you find it, bring it to me.' (b) Inference from an assumption concerning a particular past occurrence; e.g., 'If (it is true that) it happened, then ...' (c) Generalizations in descriptions of customs, rituals, or technological procedures. The sentences under (c) can be said to be conditional only in consideration of the circumstance that their construction, and the components of their construction, do not differ from those of true conditional sentences (4.35, 4.44). Their referential usage, however, is obviously quite different. The assertion in such sentences is of this form: 'Whenever \(x\) is the case, one does so-and-so'; but the wording is comparable to that of the English sentence 'If \(x\) happens to be the case, one does so-and-so (habitually).'. Thus, Usage B differs from Usage A (4.9) in at least these two respects: in Usage B, (a) an ANAH-construction refers in some cases to a future occurrence; and (b) the reference in other cases is not exclusively to a particular occurrence, or to a single occasion; whereas in Usage A a particular past occurrence, or a past occasion, is referred to. Common to the two usages is the circumstance that the reference is monochronic (4.6).

Examples of Usage B, constructions t-PA V-ah, V-ab, and V-PB.

32. wa tin kaštah hun p'ẽ'le', kin ta'sik ti teʃ. If I find one, I will bring it to you. wa, if. t-in
kaj-t-ah, constr. t-PA V-ah; kaf-t, find (in IKAL-constructions, 'look for'); -t, formative, as in Exx. 16, 17, 26.

hun p'el-e?, numeral 'one' and numerical classifier for inanimate referents; -e?, marking the end of the protasis, as in previous examples. k-in ta(l)-s-ik, I bring, a k-IKAL-construction (4.35). ti, to (2.27). t-etf, composite pron., 2nd. pers. sing. Class C.

33. wa ma tu ta:sah-e?, jan a kim'sik. If he does not bring it, you have to kill him. wa, if. ma, negative. t-u ta(l)-s-ah-e?, constr. t-PA V-ah with composite V-unit, as in Ex. 32. j-an a kim-s-ik, you have to kill (4.18).

34. wa 'kime, ne?, ka t'jaik ta wik'nal. If I die, take him to your home. kim-en-e?, constr. V-PB; kim, die. ka t'ja-ik, constr. k-IKAL, imperative in a composite sentence (4.36); t'ja, take, fetch. t-a w-ik-n-al, near you, in your presence, under your care, and several other senses with no precise English equivalent (2.27); in this case what is requested is that a godfather take care of his godchild in case the father dies.

35. wa tu men pre:'sotabo:'ne?, 'ma:lo; wa tu men j-an ma'e?, lai'il 'ma:lo,be?'. If we are arrested, it will be all right; (and) if we are not, it will be all right too (equivalent to 'It is indifferent to us whether they arrest us or not'). wa t-u men, if, if it should happen (2.10). preso-t-ab-o:n-e?, constr. V-ab; Spanish prese, one who has been arrested, or past participle, 'arrested';
-t, formative (see Exx. 28-31); -o:n, we, us, pron. Class B; -eʔ, as in preceding examples. ma-lob, (etymological analysis) 'no evil', 'no harm'; in Mod. Yuc. 'good', 'well', 'it is right', common expression of approval. ḫan, also, even so. ma-eʔ, negative, with -eʔ at the end of the clause (4.58). la-il-i, an A-variant of le-il-i, always, still, even so. For the final -eʔ of ma-lob-eʔ, see 3.6.

36. wa tu men tu ji'ilah su'keʔ, ku 'heelel u ṣuk-te. If he sees that it has the habit, he lies in ambush waiting for it to come. Context: If a hunter observes signs indicating that deer are in the habit of drinking at a certain place, he takes advantage of the observation as specified in the sentence. wa t-u men, as in Ex. 35. t-u j-il-ah, constr. t-PA V-ah. il, see. suk-eʔ, to have a habit, to be a custom; -eʔ, as in preceding examples. k-u heel-el, an intransitive k-IKAL-construction (4.28), 'he rests', or 'he stays'. uṣuk-t-e, in order to watch for, waylay, spy; for the construction of this clause, see 4.41.

37. wa tu men t i'ilah la'k'in ik' ku bes'ti'keʔ, ...
If we see that the breeze is coming from the east, ...
Context: Description of hunting techniques. t il-ah constr. t-PA V-ah with null sign for 'we' (2.7), speaker and others excluding the listener. la-k'in, east. ik'
wind, breeze.  b-e:t-ik-e?, a k-IXAL-construction (4.28);  
b-e:t, make, do, cause; Mod. Yuc. idiom 'make wind', like  
Spanish idiom hacer viento, for the wind to blow.

Usage C

4.12 Usage C has been observed in only 18 instances, 5  
of which were found in speech of Type A. The specifications  
of this usage are as follows: (a) construction t-PA v-ah  
is used in the expression tu 'ja:lah to refer to a future  
occurrent; (b) the occurrent is referred to in a temporal  
clause conforming to the formula le ka ... -e? (4.62); and  
(c) the reference made by the temporal clause is of either  
of these two forms: 'By the time x occurs, (such-and-such  
will be the case)' or 'Soon after x may begin to take place,  
(do so-and-so).'

Temporal clauses with the same construction  
and the same use of the expression tu 'ja:lah can refer also  
to past sequences of this sort: 'By the time x occurred, y  
had already taken place.' Of course, such references to  
the past do not concern us here, since they are common in-  
stances of Usage A (4.9). Reference to a future occurrent  
by means of an AHAB-construction is observed both in Usage  
B and in Usage C; but, so far as our observations go, it is  
only in Usage C that an AHAB-construction does not occur  
exclusively in monochronic references (4.6). The peculiar  
use of the expression tu 'ja:lah in the temporal clauses  
under consideration may perhaps be difficult to understand  
for one who is not acquainted with a very similar idiom  
frequently employed in the colloquial Spanish of Yucatan
and in that of other Spanish-speaking countries. We refer to the use of decir, to say or tell, in such sentences as, *Cuando dijo a llover, ya estábamos llegando*. This is popularly understood as a personification of this sort: "When it said "Rain!' we were almost there." The personified subject is variously supposed to be "nature" or "the rain" itself. On the basis of this interpretation, the personified subject either orders the rain to come down resolutely, or the rain says to itself "Let's go!" and it pours down. Freely rendered, the Spanish sentence is approximately equivalent to: 'By the time it began to rain hard, we were almost there.' Similarly, one hears in *Modern Yucatec* le ka tu 'ja:lah u 'k'asal ha'e?, 's'o:k in k'um'ful, a literal translation of which can be: 'When it said that water was pouring, I had already arrived', or, in reference to the future, 'By the time it will say that water is pouring, I shall have arrived.' The analysis of tu 'ja:lah is as follows: t-u j-al-ah, constr. t-PA V-ah ; al, say, tell; j- required by pronoun u (he, she, it) before initial vowel.

Examples of Usage C.

38. le ka tu 'ja:lah a k'um'ful tu i?i? k'iq'ke?, 's'o:k in ta: 'sik. By the time you reach the entrance to the square, I shall have brought it. (In a different context, the translation could be: 'I had already brought it
by the time you reached the entrance to the square.

49. k'ut-ul, intransitive IKAL-construction (4.26); k'u, arrive. t-u, contraction of ti (at, to) and u. The literal translation of u tji? k'iw-ik is 'the mouth of the square'; tji?, mouth; -e? marks the end of the temporal clause (4.58). t'o:k in ta(1)-s-ik, transitive form of constr. t'o:k+IKAL (4.15), 'I shall have brought' (in other contexts, 'I have (had) brought').

39. le ka tja:la jo'ko k'i:'ne?, ka tal a wi'len wa:'je?. As soon as the sun begins to set, come to see me here. t-j-al-a, B-variant of tu 'ja:lah. j-ok-o, B-variant of j-ok-ol; ok, enter. k'in, sun. k-a tal, come; imperative in composite sentences (4.36). a w-il-en, to see me (4.41); -en, me. wai-e?, here (4.51).

40. le ka tu 'ja:lah u 'tso:sik le 'baaf ku be:ti'ke?, t'o:k in 'kimil. By the time he finishes what he is doing, I shall be dead. u t'o:k-s-ik, he finishes (4.28). le 'baaf, the thing. k-u be:t-ik, he is doing, k-IKAL constr. (4.34). -e?, as in preceding examples. t'o:k in kim-il, I shall have died; intransitive form of constr. t'o:k+IKAL (4.15) (see Ex. 39); kim, die.
USES OF THE IKAL-CONSTRUCTIONS

4.13. As previously indicated (3.49), the constructions referred to by the label IKAL conform to one or another of these three formulas: PA V-ik, transitive; PA V-(a)l, intransitive; and PA V-(aa)l, passive. These constructions have two kinds of discoursive offices which will be treated separately. We say that in a given sentence an IKAL-construction is a dependent IKAL-construction when these two statements are true: (1) the IKAL-construction itself provides no information concerning the chronologic position (4.3) of the occurrent for which it stands; and (2) another component of the sentence provides some information concerning the chronologic position of the occurrent for which the IKAL-construction stands. If neither of those two statements is true, the IKAL-construction is said to be an independent IKAL-construction. To facilitate further comment on the dependent IKAL-constructions let us consider how the following English sentences are translated into Modern Yucatec:

1. I have climbed 1. ts'o:k in 'naakal
2. I had to climb 2. jan'hi in 'naakal
3. I certainly did not climb 3. ma teg in 'naakal
4. I am climbing (just now) 4. tan in 'naakal
5. I have to climb 5. jan in 'naakal
6. I need to climb 6. k'a'bet in 'naakal
7. I can not climb 7. ma: tan u 'pahtal in 'naakal
8. I will certainly climb 8. he in 'naaka,le
Before proceeding, it should be remarked that, although those Yucatec sentences can be adequate translations of the English sentences, it does not follow that the English and the Yucatec sentences are equivalent in all contexts. For example, in different contexts the translation of the first Yucatec sentence can be 'I had climbed', or 'I shall have climbed', as well as 'I have climbed'. Out of context, all that can be inferred from this Yucatec sentence with respect to time is that the chronologic position of the occurrent referred to by in 'naakal is asserted to be prior to a time-index (4.3). To determine whether the time-index is a past, a present, or a future time, the context has to be known. The unit in 'naakal exemplifies the intransitive IKAL-construction PA V-(a)l. Its components are: in, 1st. pers. pron. Class A; naak, climb; -al, untranslatable component. We observe that the occurrent referred to by the dependent unit in 'naakal is a past occurrent in the first three sentences, a present occurrent in the fourth, and a future occurrent at least in the eighth. This dependent unit by itself conveys no chronologic information; not even chronologic information of the sort frequently indicated by various Yucatec devices; namely, the information that the occurrent referred to is prior, or contemporary, or subsequent (4.3) to the time-index indicated by the context. This dependent unit is equally non-committal with respect to the declarative modality.
(4.7) of the sentence. In all these respects it is like the English infinitive in sentences 2, 5, and 6, above. But a better comparison would be with what some grammarians call an "infinitive clause"; that is, a construction such as 'me to go' in 'He wished me to go'. Such infinitive clauses, like the dependent IKAL-constructions, can designate not only the act, but the doer; and in both languages these dependent units can be expanded to include any other descriptive particulars pertaining to the act, or other kind of occurring spoken of; as in '(I suppose) them to be utterly ignorant of their own condition', and in several of the Yucatec examples given below.

In most cases in which the term 'auxiliary' has been used in the description of a language, it has been applied to one of the components of a construction that is said to be a tense, or a mode, or a voice. In the words of Tucker and Wallace (English Grammar, Cambridge, England, 1917, p.80), an auxiliary is a "verb divested of independent meaning, and helping another verb to express tense, mood, or voice." It may be profitable to consider whether this definition applies to the devices on which the dependent IKAL-constructions depend, although the notorious lack of precision in grammatical parlance will prevent us from reaching any conclusion. To facilitate reference, let us call co-operants the devices in question; that is, 'o:k, tan, jan, k'a'bet, he ... -e', etc.
in the above examples, and others similarly used with dependent IKAL-constructions. One of the difficulties in determining what co-operants are auxiliaries according to the definition just quoted, is that of deciding whether some of them can be called verbs in the sense or senses in which the word 'verb' is generally understood. Some of the co-operants can not be conjugated; viz.: tan (sentences 4, 7); k'a'bet, it is necessary, there was a need of, etc. (sentence 6); he ... -e0(8); na:pu'lak, immediately after, at once; and others. A few can be conjugated only in the third person singular; viz.: ho:p', begin; paht, be possible (sentence 7); ui, happen. At least two others can be conjugated only in the third person when they require a dependent IKAL-construction, but they have a different sense and can be conjugated in any person in other instances; viz.: ts'o:k (sentence 1), and jan (sentences 2, 5). Still others are conjugated in all persons without alteration of their general senses; viz.: kah(-s-ik) and yun(-s-ik), both signifying 'begin', 'commence'; y'en(-el), cease; ya, to let or permit someone do something, to let something happen; il, to see; ub(-ah) or ui(-ik), to hear; and o'hel, to know. The definition quoted above specifies that an auxiliary is "divested of independent meaning". It is difficult to see how this applies to all the English words which those authors class as auxiliaries. For there is no doubt that the verb 'to have' has a "meaning" independently
of the instances in which it is said to be an auxiliary (whether or not it is the same "meaning"), and the same holds for 'to be', classed by the authors as a voice-auxiliary. If what is asserted is that in such a construction as 'I have seen it' the verb 'have' is "divested of independent meaning", then I must confess that I do not know what it is that those authors and others refer to by the word "meaning". The qualifier "independent" of the phrase "independent meaning" is more confusing than clarifying; for it can well be the case that in most instances, if not in all, no component of a sentence can without the aid of the other components signify precisely what it signifies in the particular sentence and context in which it occurs.

The foregoing may have served to indicate that generalizations on the uses of the IKAL-constructions themselves, apart from the constructional units in which they have a dependent office, would not be of much help in understanding Modern Yucatec discourse. It has seemed advisable, therefore, to deal separately with each of several units of the form 'Co-operant + IKAL'. These units occur with great frequency in all kinds of discourse, but the co-operants are comparatively few.

The following observations concerning passive IKAL-construction PA V-(aa)l (3.49) may be useful. We questioned above (4.10) whether it was justifiable to class construction V-ab as a passive voice. The chief objection was the circumstance that in V-ab there is no conversion of the so-called "logical
subject" into "grammatical subject". No such objection can be raised in this case. Let us compare these four sentences:
1. tu bisə'hef te:'lo', He took you there. 2. bisə:'həf te:'lo', You were taken there. 3. tan a bi'ısaal te:'lo', You are (were) being taken there. 4. tan a bi'sik te:'lo', You are (were) taking it there. We notice that in sentences 1 and 2 the person that is said to have been taken is referred to by the pronoun -əf of Class B; showing that the V-ab construction of sentence 2, which we rendered by the English passive voice, requires the same pronoun as the transitive construction t-PA V-ah of sentence 1. In contrast with this, we find that in sentence 3 the person that is, or was, being taken is referred to by the pronoun a of Class A. The same pronoun of Class A serves in sentence 4 to refer, not to a person who is taken, but to one who takes. That is to say, in sentence 3 we observe a transformation of the sort that characterizes the passive voice in other languages.
4.14. tan + IKAL. We divide the uses of this structural unit into two classes labeled 'Usage A' and 'Usage B'. In Usage A, the construction serves to refer to an occurrent contemporary (4.3) with the time-index indicated by the context. In Usage B, the construction serves to refer to an occurrent subsequent (4.3) to the time-index indicated by the context. In both usages the reference is generally monochronic (4.6). In some cases the reference is polychronic, but it is not a reference to a habitual occurrence. In Usage B, the references made by this construction and those in which he + IKAL + -e? occur (4.16) are quite similar. Both constructions serve to make predictions and to refer to predictions made at a time prior to that in which they are referred to; and both constructions serve to express assurance with regard to the fulfillment of the prediction. It is observed, however, that in 82% of the cases in which such predictions were made by means of tan + IKAL the sentence was negative; while he + IKAL + -e? was used in negative sentences in less than 1% of the instances in which he + IKAL + -e? occurred. We suspect that in affirmative sentences the latter expresses a higher degree of assurance than the former; but, of course, it is hardly feasible to find reliable evidence in support of a conjecture of this sort. The negative construction ma: tan + IKAL was used in 66% of the cases to express a refusal. Thus, ma: tan in
be:'tik signified more frequently 'I refuse to do it' than 'I am not doing it', or 'I was not doing it'. On the other hand, tan in be:'tik was most frequently equivalent to 'I am doing it' or 'I was doing it'; and occasionally, 'I shall be doing it' or 'I plan to do it'. The word tan serves frequently to answer affirmatively a question made by means of construction tan + IKAL. For example, an answer to the question tan a pa'k'al? (Are you planting?) can be simply tan, signifying 'I am' or 'Yes'. There is no word in Modern Yucatec signifying 'Yes' which can be used in reply to any disjunctive interrogative sentence ('Yes'-'No' type). How to say 'Yes' depends on the construction of the interrogative and on what is asked. In all instances other than in the construction tan + IKAL and the affirmative and negative answers tan and ma: tan, the word tan is used in references which have little in common with what tan might be said to signify in construction tan + IKAL. The closest analogy is found in expressions in which tan signifies 'in the midst of', 'about the middle of', as in tan 'fumuk. Usage A and Usage B of construction tan + IKAL are on the whole special developments of Modern Yucatec which have replaced almost entirely the uses of some Old Yucatec constructions (Note 10 ). Save for the phonologic fusion of tan with the pronoun of the IKAL-construction (1.5), tan remains unaltered in all the uses and conjugational variations of construction tan + IKAL.
In this respect this construction differs from others dealt with below.

Examples of Usage A.
1. 'baaj tun ka be:'tik? ŋen tan in Jo'kik le ŋan li'bro a 'ts'ama te:'na?. What are you doing? I am just reading the little book you gave me. For the construction of the interrogative sentence see 4.3. ŋen, just, only; frequently used to signify that what is spoken of is of no special consequence. tan in Jo'kik, constr. tan + IKAL. le ... -a?, this (4.5). ŋan, little, small. li'bro, Spanish libro, book; pronounced in Yucatec with accent on the ultima. a b'a-ma, you have given; (-8.). ten-a?, 1st. pers. pron. Class C with terminal component -a? of constr. le ... -a?.
2. le:'la? mis tan u we:'nel. This one is certainly not asleep. le-kap, this one (4.5). mis, Mod. Yuc. fusion of ma if (4.32), emphatic negative. tan u wen-εl, constr. tan + IKAL, intransitive formula PA V-(a)l; u, 3rd. pers. sing. pron. Class A.
3. tan u 'sastal. It is dawning. u sas-t-al, intransitive IKAL-construction PA V-(a)l; u, 3rd. pers. sing. pron. Class A; sas with formative -t (3.26), to dawn (sas-il, light, clear vision).
4. ka k'uife?, tan u 'paat al. When he arrived they were waiting for him. ka ... -e?, construction of temporal clause
(4.62); k’t$}, arrive; intransitive AHAB-construction (4.9).
tan u pa?-t-al, literally: 'he was being awaited' (one or
more persons were waiting for him); pa?-t, await (always tran-
sitive), pak§ with formative -t; for phonetic change see 1.3 .
5. ğen ka tin wila'he?, tan u 't'aat'a,k'asti'ko:b le 'osil man'k'ek'eno; bo?. At the very moment I saw them, they
were binding all over (with ropes) the poor pig traders.
ğen, just when, precisely at that time (when used in a tem-
poral clause). ka ... -e?, temporal clause construction
(4.62). t-in w-il-ah, I saw; transitive AHAB-construction
(4.9). tan u t'aa-t'a(a)-k'af-t-ik-o:b, constr. tan + IKAL;
u ... -o:b, 3rd. pers. plur. pron. Class A; t'aa-t'a(a),
duplicated t'aa, to do in a thorough manner, or profusely,
all over a place or body; k'af, to tie; the composite verbal
unit requires formative -t (3.14). le ... -o?, those (4.51).
\(\text{e}(\cdot)-\text{t}^{\text{il}}\)
\(\text{e}^\text{a}-\text{t}^{\text{i}}, \text{poor (4.71)}\). \(\text{man}'k'ek'\text{en}-o:b, \text{traders in pigs; man,}\)
buy; 'k'ek'en, pig; -o:b, plural.
6. ka k’u$t$e?, tan in hæ's'aal tu men u ju$m'il le
ko:'lo?. When he arrived, I was being beaten by the owner of
the cornfield. ka k’u$t$-e?, when he arrived (See Ex. 4).
tan in hæ's'-aal, I was being beaten; passive IKAL. t-u
men, by (4.10). u jum-il, the owner of (4.60). le ... -o?,
that (4.51). kol, cornfield, milpa.
7. le ha'o? ma teg' u 'saap'al hun pu'li, ke$ 'sansa,mal
tan k 'y’a-ik. That water does not diminish at all, although we are using it constantly. Context: The sentence refers to the water in a magic container which produced as much of it as could be used. le ... -o?, that (4.51). ha?, water; for phonetic change see l.3. ma teŋ u sap'-al, emphatic negative with passive IKAL (4.20); sap’, to use up the liquid contents of. hun pul-i, altogether, at once, without further ado. keʃ, although. san-san-al, constantly; reduplication of san (4.67) changing m to n before s (1.3). tan k y’a-ik, constr. tan + IKAL; y’a, fetch, get.

Examples of Usage B.

8. ma: tan in 'ts'a-ik teŋ. I will not give it to you.
ma:, negative ma or ma?; always with long vowel before constr. tan + IKAL. ts’a, give. teŋ, 2nd. pers. sing. pron. Class C.
9. ma: tan a w-il-ik-en miʃ bi’k’in. You will never see me (again). a w-il-ik-en, constr. IKAL with 1st. pers. pron. -en of Class B as grammatical object of 11, to see. miʃ bi-k’in, never; cf. miʃ in Ex. 2; k’in, day, sun. We have no information concerning bi- other than the observation that it occurs also in bi-k’i(n)-ʃ, interrogative 'When?'
10. ma: tan u 'tak’al u ji'yį. His eye is not going to stick to it. Context: Said facetiously to signify: "He can do you no harm by looking at it. Let him see it!" u tak’-al, intransitive IKAL; tak’, to adhere by sticking,
as with glue. u j-iɡ, his eye or face; u, 3rd. pers. sing. pron. Class A. In speech of Type B, the suffix -i can be the terminal component of constr. ma ... -i? (4.59), or the B-variant of -i1 (4.3).

4.15. ʦ'ɔːːk + IKAL. The component ʦ'ɔːːk of this structural unit differs from the component tan of the unit tan + IKAL in various respects which are worthy of note. The latter, as shown above, remains unaltered so far as conjugation is concerned, but ʦ'ɔːːk conforms to the rules governing intransitive conjugation. Thus, besides ʦ'ɔːːk + IKAL, we find ʦ'ɔːː'koːk + IKAL in temporal clauses introduced by ken (4.46); and we find ku 'ʦ'ɔːkəl + IKAL in the uses dealt with below (4.33). In other constructions, ʦ'ɔːːk signifies 'to end', 'to be over'. For example, the expression ʦ'ɔːː'ki is in some contexts equivalent to 'that's the end', 'that's all', 'it is done'. In construction ʦ'ɔːːk + IKAL, the word ʦ'ɔːːk signifies in different instances that the occurrent specified by the dependent IKAL-component was, is, or will be, prior (4.3) to the time-index indicated by the context. Thus, ʦ'ɔːːk in beːˈtik can signify in different contexts 'I had done it', 'I have done it', or 'I shall have done it'. With the simple word ʦ'ɔːːk, the construction has been observed only in monochronic references (4.6). With ku 'ʦ'ɔːkəl or ʦ'ɔːː'koːk, the reference is monochronic or polychronic depending on circumstances elsewhere specified. We see that three
chronologic positions can be specified jointly by ū'ćo:k + IKAL and its context. Employing the designations explained in 4.4, those three chronologic positions are: discrete-past (Case 1), prior-past (Case 4), and prior-future (Case 8). It should now be noted that references to occurrents whose chronologic positions are specified as being discrete-past are served also by Usage A of the AHAB-constructions (4.9). This question should, therefore, be asked: Under what conditions does a speaker use ū'ćo:k + IKAL, and not an AHAB-construction, to specify the chronologic position of the occurrent as being discrete-past? The data at our disposal are not sufficient to answer this question satisfactorily. We have observed that upon reporting as a piece of news an incident which took place a few seconds or a few minutes before it was reported construction ū'ćo:k + IKAL is used. We have not observed a single instance in which an AHAB-construction was used to report in that manner as recent an occurrence. It should be noted, however, that after using ū'ćo:k + IKAL to report an incident, the same construction is not used in the subsequent sentences describing the incident. For example, it is required in the first sentence 'Gonzalo fell off his horse', but not in the next sentence 'He fell on a rock'. In references to occurrents which took place at a less recent time, the rules which govern the uses of this construction are probably as complicated as those which govern the uses of the present perfect and simple
past tenses in English. Moreover, we suspect that if we could specify under what circumstances one must, for example, say in English, 'I have done it' and not 'I did it', the specifications would hold by and large for Yucatec, excepting, of course, the reports of recent events above mentioned. But, as we point out in Note 11, what the grammarian says about present perfect tenses stands no rational test; and what contemporary linguists say about "perfactive aspects" is of no help. We suspect that a careful inquiry into an adequate number of samplings of discourse, with adequate information concerning the circumstances in which each sampling of discourse occurred, would disclose not one rule but a set of rules. One of the rules, for example, might be: when a speaker argues that he will succeed in doing something, and in supporting his argument, refers to a previous instance (or collectively to previous instances) in which he succeeded, he can use construction ñ'0:k + IKAL in Yucatec and the present perfect tense in English in an assertion such as 'I have done it many times'. Another rule may be: when an individual says that something should be done or orders someone to do it, without knowing that the matter was attended to before he spoke of it, his interlocutor will use construction ñ'0:k + IKAL to inform him that the matter has already been attended to; provided, however, that the sentence used by the latter does not contain some expression which re-
quires the use of another construction. Such are the rules that may have to be formulated before it is justifiable to generalize upon the uses of the linguistic devices in question. The following examples illustrate some of the most frequent uses.

1. ts'ok in kinpa'hal. I hurt myself. Context: Exclaimed by one who was still on the ground after falling from a tree.
in kin-pa-h-al, intransitive IKAL-construction PA V-(a)l;kin with formatives -pa-h (3.37) to get hurt; kin-b-es, to hurt someone.

2. 'heelo'. ts'ok a tal. Approximate translation: 'Well! Here you are!' Context: Said to an expected visitor as he is about to enter the house. A visitor, however, customarily announces his presence by means of an AHAB-construction:ta'len, I came. he-äl-o?, equivalent to French voilà.
ts'ok a tal, literally: 'You have come' or 'You came';a tal, irregular IKAL-construction; formerly, and occasionally in the speech of the old folk in some localities, a tal-el.

3. ts'ok u 'ho:p'ol u 'k'ajal ha?. It has begun to rain.
Context: Said upon noticing the first drops. Here we have an IKAL-construction, u k'aj-al, dependent on another IKAL-construction, u ho:p'-ol; both conform to the intransitive formula PA V-(a)l. ho:p', begin; one of the co-operants (4.13) requiring an IKAL-construction (4.17). k'aj with ha? (water) 'to rain'; with bat (hailstone) 'to hail'; in other contexts: 'to tie', 'woods', and various other divergent senses.
4. He bij ts'o:k u 'lubul u tu'kul tu jik'nal a 'tsik-be:ni'le? jan in k'a'mik. Since it is your grace's suggestion, I must accept. Literally: 'It being the case that the thought of it (of asking me to serve as Bearer) has fallen on your grace (your reverence, your lordship), ...'

Context: Ritual answer to the master of ceremonies at the time the New Bearer ('tun, ben ku:ji) assumes his duties.

he bij ... e?, it being the case that. u lub-ul, IKAL-construction dependent on ts'o:k; intransitive formula PA V-(a)l. u tuk-ul, the thought of it; in other contexts, 'his thought' (2.4). t-u j-ik-n-al, an A-variant of tik'nal, in the home of, at the disposal of; similar in some uses to French chez; see 4.I, Ex. 34; 3rd. pers. pron. u instead of 2nd. pers. a, due to substitution of reverential expression a tik-ben-il for pronoun; tik, respect, veneration; -ben (4.57); -il (4.60). j-an in k'am-ik, constr. jan + IKAL, transitive, 'I must accept (it)' (accept the kuj, duty, charge, load, burden, previously mentioned)(4.19).

5. ts'o:k u ta'sik le 'si,o'. He has already brought the firewood. Context: Said in reply to 'Is he helping you?'

The firewood for roasting the pig had been brought the previous day. u ta(l)-s-ik, IKAL-construction; tal, come; with formative -s, bring. le ... -o?, the, that (4.51); si?, firewood; for phonetic change see 1.3.

6. ts'o:k in man 'tuuf mas 'jaab 'baabal jan. I have
gone through places where there were many more devils. Context: The speaker is warned not to go to a certain place because three beings of the sort called 'baabal had been seen there. He boasts he is not afraid. in man, irregular IKAL-construction; formerly, and occasionally at present, man-el, to pass, go through or by. 'tuuʃ, where. mas, very probably Spanish más, more. jaab, to be many, to abound. ja-an, there is, was, or will be; have, and other senses (4.18 and 4.61).

7. ku k'uf'loobe?, ʃ'o:ʃ u 'kimil le ʃan pa:'loʃ. By the time they arrived, the child had died. k-u k'uf-(u)l-o:b-e?, by the time they arrived (1.4); k-IKAL-construction in temporal clause (4.33); u ... -o:b, 3rd. pers. plur. pron. Class A; k'uf, arrive; -e?, terminal component of temporal clause. u kim-il, IKAL-construction; kim, die. le ... -o?, the, that (4.51). ʃan, little, small. pal, boy.

8. ken 'sasak 'domingo,ɛʔ, ʃ'o:ʃ u ta'hal le 'sa,ɔʔ. Next Sunday at daybreak the atol will be ready. ken sas-ak ... -ɛʔ, temporal clause (4.46); sas-(t-al),
to dawn; Spanish domingo, Sunday. *tah-al, intransitive IKAL-construction; *tah, to be done (in the sense of having boiled sufficiently). *le ... ʻo (4.51); *sa?, atol, a corn-meal gruel.

9. *sam-al o'kaa*n k'i:'ne?, *t'o:k u be:'tik le 'tusbe;*o* le pa:'lo'. Tomorrow evening the boy will have done the errand. *sam-al, tomorrow (4.52). *ok-aan, having entered (4.53). *k'in, sun. *e?, terminal component of temporal clause or time expression (4.58). *u be:-t-ik, IKAL-construction; be:-t or men-t, with formative -t (3.26) do or make. *le ... ʻo (4.51); tus-be, errand (someone else's affair); tus, falsehood, make-believe; be, occupation, affair, way, road, etc.

10. Additional examples under other headings: 4.12, Ex. 38, 40; 4.23, Ex. 9; 4.30, Ex. 15; 4.41, Ex. 52; 4.64, Ex. 3; 4.70.
4.16. he + IKAL + -e?. This construction serves to refer to an occurrent whose chronologic position is specified as being subsequent to a time-index (4.3). This generalization applies in three kinds of instances: (1) when the construction serves to communicate a prediction, a promise, a threat, or a resolution; e.g., he in ta'sik te:'ye?, I will bring it to you; (2) when the construction serves to refer to a prediction, a promise, a threat, or a resolution, which was made at a time prior to the cardinal time; e.g., tin 'wa:lah te' he in ta'sik te:'ye?, I told you I would bring it to you; (3) when the construction serves to communicate an expected permission or order to do something previously spoken of; e.g., he u 'pahtal a bin ta nai'le?, You may go home (now). These specifications, however, are not sufficient to delimit the uses of this construction; for it happens to be the case that other constructions (4.14, 4.42, 4.52) serve to refer to subsequent occurrents in the first two kinds of instances just mentioned. In the first of those two kinds of instances, the choice of he + IKAL + -e? seems frequently to depend on whether or not the speaker chooses to signify (a) that his promise can be depended upon, or that he is sure of what he predicts, or that he is determined to carry out his threat or resolution; or (b) that the predicted or promised occurrent will take place sooner than expected, or without delay. In the second kind of instances the reference seems to be generally to predictions, resolutions, promises,
or threats which are reported to have been made with assurance or determination. The most reliable evidence we have that such is the basis for the choice of this construction is derived from the translations given by informants who had a good command of Spanish. No single Spanish idiom is equivalent to construction he + IKAL + -e⁸ in all its uses, but some informants managed to obtain translations which proved to be satisfactory in various degrees to others who had a good command of both languages. In most cases the future tense of the Spanish verb without the aid of some other expressions was not considered a precise equivalent. What the Spanish future tense lacks was sometimes provided by the use of the word va, as in va verás, 'You'll see;' said to express confidence with regard to some prediction. That seems to be the precise sense of he a wili'ke⁸; or he a wi:'ke⁸, as it is most frequently said. In other instances, the special use of the Spanish present tense to promise immediate action, or to give assurance that something will be done was said to correspond satisfactorily to the use of the Yucatec construction. Thus, he in ta'sik te'f 'sama,le⁵ was rendered by Manana te lo traigo, an approximate equivalent of which is, at least in some contexts, 'I will surely bring it to you tomorrow'. All this, however, fails to account for the use of he + IKAL + -e⁸ in all the specimens of discourse recorded. This is especially the case when the construction in question occurs in the protasis of
a conditional sentence. In some instances one may more or less plausibly infer from the context that the speaker implies by the choice of this construction that he is sure that what he states conditionally will occur (high declarative value).

Take, for example, a context of this sort: A traveler comes to a cornfield and says to the owner that he is very thirsty. The owner says: "If you look under that bush, you will find water in my gourd." The use of construction *he + IKAL + -e?* in the clause signifying "If you look under that bush" may imply what we now insert in parentheses: "If you look under that bush (and you surely will look if you are so thirsty)", but that is just one of the possible implications in such a context. Another possibility is that the sentence is equivalent to "Just look under ..."

It should be noted that the terminal component of construction *he + IKAL + -e?* is always -e?, and not also -a? or -o?, as might be expected from the observation that this is one of the constructions conforming to formula *he ... -c(a,o)*. The uses of other constructions conforming to this formula are dealt with separately ( 4.51 ). Conforming to the rule stated in 4.53, -e? is always the last component, and it is affixed to whatever component may precede it. It was said above that *hel* is an X-variant of *he*. This X-variant, however, is always employed instead of *he* when the construction consists entirely of its initial and terminal components;
e.g., he: 'la?, he: 'lo?, he: 'le? or 'heele?. Each of the two
variants he: 'le? and 'heele? is equivalent to the whole con-
struction he + IKAL + -e? when the context supplies the in-
formation that would be communicated by the omitted IKAL-com-
ponent. Thus, an affirmative answer to such a question as
'Will you do it?' can be simply 'heele?', instead of he in
be:ti 'ke?, or hel in be:ti 'ke?. This is, in fact, the
shortest expression that can be used in such contexts,
since there is no word like the English 'yes' which can be
used to communicate an affirmative answer in all contexts.
(Cf. the independent use of tan mentioned in 4.14). 'heele?
is said frequently also in response to a request or an order,
and signifies willingness or readiness to do what is requested
or commanded.

Examples in which construction he + IKAL + -e? refers to
a future occurrent.
1. he in bo: 'tik te:'ye?. I promise to pay you; or: I will
certainly pay you. Constr. he ... -e? with IKAL-component
in bo: -t-ik (formula PA V-ik, transitive); in, 1st. pers. pron.
Class A; bo: with formative -t (3.26), pay, reward. tey-e?,
2nd. pers. sing. pron. Class C with terminal component -e? of
constr. he ... -e?.
2. he in 'nas'al in wi'le?. I will go near it to see it.
Context: defiance of danger. in nas'-al, IKAL-construction
formula PA V-(a)l, intransitive; nas', approach, get close to.
in w-il-e°, indicating aim (‘4.4’), and terminal component -e° of constr. he ... -e°; il, to see.

3. he a wi’lik wa ma he u k’u’bik teq’ a wa’tape°. You will see whether or not he will return your wife to you. Context: An ogre has stolen a woman. A deer assures her husband that he can force the ogre to give her back to him. Here we have constr. he + IKAL + -e? with a component which is also constr. he + IKAL + -e?; and the -e° at the end of the sentence serves as the terminal component of both. he a w-il-ik ... -e°, You will see; a w-il-ik, IKAL-construction PA V-ik; a, 2nd. pers. sing. pron. Class A; w- (3.2); il, to see. wa, if. ma, not. he u k’ub-ik ... -e°, he will surrender; u k’ub-ik, IKAL-construction PA V-ik; k’ub, surrender, deliver, hand over. teq’, 2nd. pers. sing. pron. Class C. a w-at-an, your wife; a, 2nd. pers. sing. pron. Class A; w- (3.2); at-an, wife (4.9).

4. he u be:t-taal ’sama,le°. It will be done tomorrow. u be:-t-taal, passive IKAL-construction PA V-(aa)l; u,
3rd. pers. sing. pron. Class A; be:-t, do, make (3.1).
'sanai, tomorrow. -e?, terminal component of constr.
he + IKAL + -e?.

Examples in which construction he + IKAL + -e? refers to a promise or prediction previously made.
5. ka tu 'ja:lal he u 'naaka,le?. And he said that he would go up. t-u j-al-sh, he said, AHAB-construction (4.9). he u naak-al-e?, he would go up; u naak -al, IKAL-construction PA V-(a)I; naak, ascend, climb, get on top of.
6. 'tuuʃ is le ta:'k'in ta 'wa:lal he a tasi'ke? ? Where is the money you promised to bring? 'tuuʃ, where (2.19); j-an, to be at a place, to have, etc. (4.61); ta:'k'in, money (the etymology is possibly ta?, waste, excrement; k'in, sun; excrement of the sun; formerly signifying 'gold'; similarly, ta?-u, excrement of the moon, for 'silver'). t-a w-al-sh, you said (AHAB-construction).
he a ta(1)-s-ik-e?, constr. he + IKAL + -e?; ta(1)-a, bring; ta, 'come', with formative -s (3.25).
7. ka t 'a:lal teʃ he k 'hok'ol 'sanai,le?. And we told you we would go out tomorrow. t al-sh, we told,
AHAB-construction t-PA V-ah, with omission of pronoun k, we, after t- (2.9). tey, 2nd. pers. sing. pron. Class C. k hok'-ol, IKAL-construction PA V-(a)l; k, we; pron. Class A; hok', go out, come out. 'samal, tomorrow.

Examples of he + IKAL + -e? in conditional sentences.
8. ts'a ten le in no: 'k'o?. wa ma'e?, he u 'juuf ul tey hun p'el no'hoq lo:'be?. Give me my clothes. If you do not, a great evil will befall you. ts'a, give (4.38); ten, 1st. pers. pron. Class C. le in nok'-o?, those clothes of mine (4.51). wa, if. ma-e?, negative with -e? (4.58). he u j-uj'-ul ... -e?, constr. he + IKAL + -e?; u, 3rd. pers. sing. pron. Class A; uy, to happen. tey, 2nd. pers. sing. pron. Class C; hun p'el, numeral 'one' with general numerical classifier for inanimate referents. noh-oq, big, great (3.40). lob, harm, evil, misfortune.
9. wa tu men he a be:tik tu 'lakal 'baaj ka 'wa:lik te:'ne?, 'maalob. If you do all that you tell me, it will be all right. wa tu men, if; for the use of wa tu men in conditional sentences see 4.44. he a be:t-ik ... -e?, constr. he + IKAL + -e?; be:t, do, make (3.1). ten, 1st. pers. pron. Class C. ma-lob, all right, good (see 4.11, Ex. 35).
10. wa ka 'wolte?, he a tal a yan 'ante;ne'. Literally: 'If you were willing, you would come and help me a little'. This is said by way of reproach to one who sees a friend struggling with a load and does not come to his aid. The
same wording and construction has occurred in another context as the equivalent of 'If you wish, you may come tonight to my house and ...'. «wâ k-e w-ol-t-e?; if you are (were) willing (4.49); ol, will, mind, and numerous other senses of a psychological sort (3,66); with formative -t, to be willing, consent, concede, take a notion to do something. he a tal ... -e?; constr. he + IKAL + -e?; tal, come; irregular (3,56) and most frequent variant of tal-el in IKAL-construction PA V-(a)l. a ñan an-t-en; the unit a an-t is a NULLAK-construction specifying aim (4.41); an-t, help; with formative -t (3,26); ñan, little; frequently used to express modesty, politeness, etc. (4.38). -en, 1st. pers. pron. Class B.
4.17. *hɔ:p* + IKAL. So far as our observations go, the verb *hɔ:p* is not used otherwise than with a dependent IKAL-construction. It is an impersonal verb signifying 'to begin to occur'. The IKAL-construction specifies what begins to occur. The construction *hɔ:p* + IKAL has occurred about as frequently as any in which IKAL is a dependent component, and in every instance the pronoun of the dependent IKAL-component was that of the third person singular or of the third person plural. Other verbs signifying 'to begin' (4.22) were used when other pronouns were required. The converse, however, is not true. Thus, we find *hɔ:p* u 'kaltal and *yumpa'hi u 'kaltal signifying 'He began to get drunk', and referring in each case to a single occasion in which an individual was drinking. The number of such instances observed by us are too few to draw any conclusion as to whether any distinction is made by using one of those verbs rather than another. The preceding generalizations hold for the two conjugational forms *u 'hɔ:p'ol and 'hɔ:p'ok, as well as for the simple form *hɔ:p*. The examples given below illustrate the use of the simple form *hɔ:p*. With this simple form of the *hɔ:p*-component, the unit *hɔ:p* + IKAL serves to refer to an occurrent whose chronologic position is specified as being discrete-past (4.4, Case 1), and the reference is monochronic (4.6) so far as *hɔ:p* is concerned, but not necessarily so with regard to what the dependent IKAL-construction specifies. For example, in such
a communication as 'He began to climb the tree' one beginning and one instance of climbing would be referred to. In 'He began to ask every person he met', ho:p' would still be used to refer to a single beginning, but in that case it is the beginning of a set of occurrences each of which is an instance of asking. In polychronic references to more than one beginning, the construction is ku 'ho:p'ol (or ku 'hoop'ol) + IKAL (4.28).

'ho:p'ok conforms to the rules stated in 4.37.

1. ka ho:p' u ha:'nal. And he began to eat. Context: Reference to a single occasion; he decided to wait no longer for a guest. u han-al, intransitive IKAL-construction. han, to eat, requires formative -t in a transitive construction; e.g., ho:p' u han'tik, he began to eat it.

2. ka ho:p' u 'ts'o:nol. And he began to shoot. Context: Reference to a single occasion. 'son, to shoot; in other contexts, 'gun'.

3. ho:p' u bik'bal 'jetel. He began to chat with her. bik-ba-1, intransitive IKAL-construction PA V-(a)1; bik with formative -ba, to chat, to discuss; different senses without -ba. j-et-el, with her (4.52); in other contexts, 'with him', 'with them', or simply 'with', or 'and'; et, to be with, accompany, and similar senses.

4. ka ho:p' u k'at'i'ko:b ti he mas' ku ji'liko:be?. And they began to ask anyone they saw. u k'at-ik-o:b,
transitive IKAL-construction; k'at, ask; u ... -o:b; 3rd. pers. plur. pron. ti, of, to, from, etc. (2.29). he mas ... -e', whoever, anyone. k-u j-il-ik-o:b, k-IKAL-construction (4.34); il, to see.

5. ka ho:p' u kaf'tik u lak' j'¥upal us tu ji?):
And he began to look for some other young lady he would like.
kaf-t, look for. u lak', another (2.8). j-¥upal, girl, young unmarried woman; j-¥up, woman; j- (3.3); ¥upal, young woman. us t-u j-iy, literally: 'good to his eye'; t-u, fusion of ti, to, and u, 3rd. pers. pron. Class A; iy, eye, face.

4.18. jan + IKAL. The first component of this unit is the verb an with the third person prefix j- (4.61). What is signified by the whole unit depends on whether the co-operant (4.13) is jan, or jan'hI, or ka 'janak. With jan the construction serves to assert (a) that there is, or there was, or there will be a need, or duty, or other compulsion to do that which the IKAL-component specifies; or (b) that what the IKAL-component specifies is, was, or will be an expected consequence of prior or contemporary (4.3) circumstances. For example, jan in kaf'tik can be equivalent to 'I have to look for it', or 'I shall have to look for it', or the sentence may refer to a past need, or duty, which may or may not have been attended to. With
the component jan'hi, the construction serves in some contexts to assert that what the IKAL-component specifies was done to meet a need, or was done under some other compulsion. For example, jan'hi in kaj'tik is equivalent to 'I had to look for it (and I did so)'. The distinction is like that which can be made by the use of the imperfect and the preterite tenses of the Spanish verb. *Tuve que buscarlo*, like jan'hi in kaj'tik, implies that I was under compulsion to look for it, and did look for it; whereas *Tenía que buscarlo* asserts that there was a compulsion of some sort, but is non-committal as to whether I actually looked for it. The latter is the sense of jan in kaj'tik with reference to a past situation. We have found ka 'janak + IKAL only in the expression ka 'janak a wo'heltik, or ka 'janak a wo,helti'kef, which is approximately equivalent to 'Let it be known to you (sing. and plur., respectively)', or, less literally, 'I want you to know', said by way of warning, or upon revealing something which is expected to surprise the person or persons addressed. With jan'hi, and, of course, with ka 'janak, this construction has occurred only in monochronic references (4.6). But with the simpler component jan, this is one of the constructions which can be used without alteration both in monochronic and polychronic references. In narration, jan'hi and its X-variant an'hi serve frequently to indicate a transition from episode to another, or to attract attention to an incident. They are
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then approximately equivalent to 'It came to pass that ...',
'It so happened that ...', 'What happened then was that ...'.
The same usage is frequently served by 'uʧi and 'uʧik, where
uʧ signifies 'to happen', 'to be the case that ...'. Various
uses of jan without a dependent IKAL-construction are dealt
with elsewhere (4.41). To avoid unnecessary repetition,
jan, jan'h'i, and ka 'janak will be left unanalyzed in the
remarks on the following examples. The construction of
jan'h'i (j-an-h-i) is explained in 3.51; and that of ka
'janak (ka j-an-ak), in 4.37.
1. 'sansa,mal jan u 'kinsik hun tul /ka/. Every day
she has to kill a chicken. Context: To provide the proper
food for her sick husband. san-sam-al, duplication of sam
with change of m to n before s, 'every day', 'all the time'.
jan u kin-s-ik, constr. jan + IKAL; kim, die; with forma-
tive -s, kill; m changes to n as above. hun tul, numeral
'one' with numerical classifier tul for animate referents.
/ka/, chicken; in some localities, ka/, 'chicken' in general;
ʃkaʃ, hen.
2. haʃ jan u be:-tik 'toon 'baal k'as. He will surely
give us a lot of trouble. Context: What he is doing now
will inevitably have bad consequences for us. haʃ, much,
very (referring to k'as, bad). u be:-t-ik, IKAL-construction;
be: with formative -t, do, make, cause. 'toon, 1st. pers.
inclusive and exclusive pron. Class C. 'baal, thing, things.
k’as, bad.

3. ka jan’hi u waʃ’ ‘lo:b. They had to be untied. Context: They were finally compelled to untie the bundles so they could be inspected. u waʃ’ -(aa)1-o:b, passive IKAL-construction PA V-(aa)l, speech Type B (\.4). 

4. jan u ‘hantko: ’no:b. They will surely eat us up. Context: The monsters are about to overtake us. u han-t-(i)k-o:n-o:b, IKAL-construction; u ... -o:b, 3rd. pers. plur.; han-t, eat (cf. 4.17, Ex. 1); -(i)k, terminal component of PA V-ik; for the elision of the vowel of -ik see /,4 ; -o:n, 1st. pers. inclusive and exclusive pron. Class B. 

5. ka ‘janak a wo’heltike; ′se> le ṣan pal ka ’wa:li,ke:, ‘sata,lo?, ten. Let it be known to you that the little boy you say disappeared is myself. Context: A boy was abandoned in the woods, and was reared by a hunter. As a young man, he appears now before the guilty ones. a w-oh-el-t-ik-e:,transitive IKAL-construction PA V-ik with -e marking the end of the clause (4.58). a ... -e:f, 2nd. pers. plur. pron. Class A; oh-el, to know (3.56); with formative -t (3.26), to be told, to find out; le ... -o?, the,that (4.51). ṣan, little. pal, boy. k-a w-al-ik-e:, you say; k-IKAL-construction in delimiting clause (4.34); a ... -e:f, 2nd. pers. plur. sat-al, get lost, disappear; -al (4.52). ten, 1st. pers. pron. Class C; the assertion of identity,
'I am the one', is signified in part by a pause and intonation (4.67).

6. ka tu ji'lah ti'? pe'kaan hun jot' k'a:ni'l, ka jan'hi u 'y'ak. He saw a piece of twine lying there, and he happened to pick it up. Context: The trivial incident of picking up a piece of twine on the road is contrasted with the unfortunate consequences the speaker is about to narrate. ka t-u j-il-ah, he saw; AHAB-construction t-PA V-ah preceded by ka; in narratives some speakers use ka before every AHAB-construction which refers to a new incident or episode in the story. ti', there (and many other senses). pek-aan, B-variant of pek-ek-ba-l, for an object to be lying on the ground or on a flat surface; -aan (4.53). hun, one, a; no numerical classifier follows, because the unit counted in this case is a fraction (4.68). jot', piece, portion. k'an, twine, cord; -il, general reference and other uses (4.60). jan'hi, see above remarks (4.18) for its use in narration. u y'a-ik, transitive IKAL-construction; y'a, take, get, fetch, etc.
4.19. *paht + IKAL*. In the constructions here referred to by the label *paht + IKAL*, the verb *paht* signifies 'to be possible or feasible', 'to be permitted', or 'to succeed'. The dependent IKAL-component specifies what particular occurrent is said to be possible, or feasible, or what permission or success is referred to. The *paht*-component of the construction can be (1) *nænti* or *nænthi*, AHAB form (3.51); (2) ut *næntal*, conforming to the IKAL-formula PA V-(a)1; (3) ku *næntal*, constr. k-IKAL (4.27); or (4) ka *næntak*, constr. NULLAK (4.37). Construction ut *næntal + IKAL* is always a dependent IKAL-construction (4.18). Take, for example, the sentence ma: tan ut *næntal in be'rïik*, which in a reference to present circumstances is equivalent to 'I am not able to do it'. Disregarding the negative ma:, that sentence exemplifies construction tan + IKAL, dealt with above (4.14). Only, instead of having a single IKAL-component, as is most frequently the case, we have tan + IKAL + IKAL. Similarly, in he ut *næntal a be'rì'keʔ*, 'You will be able to do it', or 'You can do it', or 'You are permitted to do it', we have he + IKAL + IKAL + eʔ (4.16). In short, the rules governing the uses of the dependent IKAL-constructions apply to the unit ut *næntal + IKAL*. It is observed, however, that tan ut *næntal + IKAL* has seldom occurred in affirmative sentences. To assert that someone is able to do something
he 'pahtal + IKAL + -e? (4.16) is the construction commonly employed. 'pahti + IKAL serves to assert that someone succeeded in doing what the IKAL-component specifies. Thus, 'pahti in be:'tik is equivalent to 'I succeeded in doing it'. An X-variant of 'pahti is 'pathl. Construction ka 'pahtak + IKAL occurs in the dependent clauses dealt with in 4.4/. In those clauses, paht signifies 'to be able' or 'to be possible'.

Examples with u 'pahtal/and 'pahti.

1. ma: tan u 'pahtal k be:'tik mij 'baal. There is nothing we can do. (We are unable to help you.) ma:, negative, + tan (4.14) + IKAL (u paht-al) + IKAL (k be:-t-ix). m(a)-if 'baal, nothing; fusion of ma, negative, and if (4.32); 'baal, thing.

2. ma: tan u 'pahtal u 'lubul. It cannot fall. u lub-ul, intransitive IKAL-constr. PA V-(a)l.

3. ma: tan u 'pahtal u han'taal. It cannot be eaten. u han-t-aal, passive IKAL-constr. PA V-(aa)l; han-t, eat; transitive with formative -t; see 4.17, Ex. 1.

4. ku 'pahtal u 'hok'lo:b 'simbal he 'tuuf u 'k'ato:;be?. They could go out for a walk wherever they wished. Context: They were given that privilege. k-u paht-al, constr. k-IKAL (4.28). u 'hok'-(o)l-o:b, intrans. IKAL; u ... -o:b, 3rd. plur.; hok', go out, come out. 'sim-ba-l (3,53), 'stroll, visit. he 'tuuf ... -e?, (4.45),
wherever, anywhere; 'tuuf', where. u k'at-o:b, they wished; u ... -o:b, 3rd. plur.; k'at, with this construction, 'wish'; see 3.56.

5. ma pat'hi u 'lik'ski. He could not lift it. Context: He tried and failed. ma ... -i, negative with AHAB-constructions (4.57); pa(h)-t-(a)hj-x-variant of pah-t-i; see 3.55 and above remarks (4.19). u lik'-s-(1)k, trans. IKAL, 'lift'; lik', rise, get up.

6. ma 'pahti u 'winik:un;sik he bij u 'k'ate'. He was not able to make a man of him as he wished. Context: He failed in his attempt to train an unruly boy. u winik-(k)un-s-ik, trans. IKAL; wi'nik, man; a verbal unit with formatives -kun-s (3.23). he bij ... -e?, as, like, etc. (2.22). k'at, wish; see Ex. 4.

4.20. **Other dependent IKAL-constructions in structural units similar to the preceding (4.14 -4.19).** In the instances so far dealt with, the co-operants (4.13) of the dependent IKAL-constructions are of two sorts: those which are not conjugated; and those which are conjugated only in the third person when used with a dependent IKAL-construction. So far as our data show, there are comparatively few words or expressions which serve as co-operants of those two sorts. The following have occurred in the texts at least 10 times: (1) k'a'bet, to be necessary; tak, to have an urgent physiologic need; 'jaab, to abound, to be much or many. These three
were used in references to contemporary-past and present occurrences. With dependent IKAL-constructions, they have occurred only in the forms shown above. (2) Watkins, to happen, has the form 'utf' or 'utfik in references to discrete-past occurrences; also in narration with a usage similar to that of jan'hi (4.18); the form u 'jang'ul, itself an IKAL-construction subject to the rules governing the uses of these constructions; and 'utfak or 'umfak, signifying 'perhaps it will happen', 'perhaps it will be the case', 'may it happen (optative sense)'. (3) Jan'hi, to be delayed or retarded; used in references to past occurrences, and only in the 3rd. sing. i.e., what the person does, and not the person himself is what is said to be retarded or delayed. (4) Various expressions concerning time: 'tani,li, first, presently, at once; hun pu'lak, na;pu'lak, at once, immediately, without further ado; all three in references to past occurrences when a dependent IKAL-construction follows. mf bi'k'in, never; reference to past; in reference to future, it requires a different construction. 'samal or 'haskab, tomorrow. ma teq, emphatic denial in references to discrete-past. ka li'kil, in the meantime, while; reference to future. i'til, while; contemporary-past or/ata'tak, to be about to happen; with dependent IKAL, subsequent-past or immediate future; requires other than a dependent IKAL when it signifies 'it came close to occurring'. seb, signifying 'soon' in
references to subsequent-past, immediate future, and subsequent-future.

Miscellaneous examples.
1. k'a'bet a wen'saal. It is necessary to put you to sleep.
The etymologic analysis of k'a'bet is probably k'ab-et, but k'ab without formative -et (3.28) has not occurred in the sense of 'to be necessary.' a wen-s-saal, passive IKAL; a, 2nd. pers. sing.; wen, to sleep; with formative -s, to lull someone to sleep, to induce sleep.
2. tak in we'nel, fun. I am sleepy, dear. in wen-el, intransitive IKAL; wen, to sleep. fun, affectionate vocative, from husband to wife.
3. ma 'jaab a han'a-li? You do not eat much. ma ... -i?, negative (4.59). a han-ali, intransitive IKAL; han, eat.
4. jan'hi in t'o:k'sik, ka t'aj'a:'ben tu men 'ak'ab.
I was slow in finishing it, and night overtook me. jan-h-i, there was delay, it was retarded; for the conjugation of jan see 3.51. in t'o:k-s-ik, transitive IKAL; t'o:k, to end (cf. 4.15), with formative -s, to finish. t'aj'a-(a)b-en, I was caught; passive AHAB (4.10); t'aj'a, get, catch, fetch; -en, 1st. pers. pron. Class B; for t-u men, by, see 4.52. ak'-ab, night; etymologic analysis (3.38).
5. 'u'jak u ajik'al't-al. May he get rich! u'jak, may it happen; for -ak see 4.47. u ajik'al-t-al, intransitive IKAL; ajik'k'al, rich (data insufficient for the analysis
of this word); for formative -t see 3.26.

6. 'samal in ta'sik. I will bring it tomorrow. 'samal (probable etymologic analysis: sam-al; sam, time ago, or time hence), 'tomorrow'. in ta(l)-s-ik, transitive IKAL (see 4.16, Ex. 6).

7. na:pu'lak u na't'ik. At once he grabbed it. na:pu'lak, at once, straight away; uncertain analysis: nap-ul-ak; nap, to snap at (with teeth); -ul (3.44); -ak (4.48).

u ma't-ik, transitive IKAL; ma't, grab, take hold of.

8. tai'tak u t'a:'nik,en in ma:'ma. My mother is about to call me (i.e., I expect her to call me presently).

Tai'tak, presently, in a few minutes; X-variant: 'tiki,tak, both of obscure formation except for tak, to be on the point of happening; perhaps cognate with tak, to have an urgent physiologic need (cf. Ex. 2). u t'an-ik-en, transitive IKAL; -en, 1st. pers. pron. Class B. ma:'ma, Spanish mamá; has replaced native naʔ, mother, except in reference to animals and in insults.

9. 'tani,li u 'p'otol le 'ha,oʔ. Immediately the water bubbled up. Context: Magic production of spring. tan-il-i, at once; tan, before, first, and various divergent senses; for -il-i see 4.60 and 4.57. u p'ot-ol, intransitive IKAL.

le ... -oʔ, the (4.51). haʔ, water.

10. le k'æ,i ku'tsoʔ haŋ seb u ji'ilik mak. The song-turkey sees a person quickly. Context: The hunter must
approach a turkey of this species very stealthily. le ... -o?7,
the (4.5'); k'a'î, song, sing; kub, wild turkey. hatî, very.
seb, soon, quickly. u j-il-ik, transitive IKAL; il, see.
mak, person, man; frequently used, as here, without denoting
particularity; like English 'one', French on.

4.21. **IKAL-construction dependent on 'kooj, ko'ne:ʃ, and
va't(-ik).** In some contexts, 'kooj and ko'ne:ʃ signify 'let
us go'. In others, they are just signs of imperative utterance
equivalent to the English 'Let us...'. 'kooj is used when
addressing only one person; and ko'ne:ʃ, when two or more per-
sons are addressed. An X-variant of ko'ne:ʃ is ko:'ne:ʃ.
From this X-variant it may be inferred that -o:n-e:ʃ, you
plural and I (2.5') are affixed to ko-. But since ko-
signifying 'go' occurs only in the above words, this analysis
must be classed as uncertain. The same is true of ko'ten,
kote'ne:ʃ, come thou, come ye; where the imperative affixes
-ën, -ën-e:ʃ (4.57) may be annexed to ko-t, or to a root
kot- which occurs only in these two words, so far as the
Yucatec dictionaries and our texts show. If the root in
'kooj is ko-, the suffix -oʃ is unidentifiable in Modern
Yucatec, since it occurs only in that word with any sense
that may be attributed to it there.

When 'kooj and ko'ne:ʃ or ko:'ne:ʃ are used with a depen-
dent IKAL-construction, it is observed that in the majority of
instances the pronoun k of the dependent IKAL-construction is omitted. The omission occurs both in Speech-type A and in Type B. One informant from Pachacaan, British Honduras, omitted k only occasionally. For 'let us (two) do it' we find 'kooʃ  be:'tik in 14 instances, and 'kooʃ  k  be:'tik in 2 texts, one of which was dictated by the informant above mentioned; the other is from Chemax, Yucatan. Much more prevalent than the absence of k is that of -e:j in the IKAL-construction dependent on ko'ne:j or ko:'ne:j. In other than in these imperative sentences, a transitive IKAL-construction referring to the speaker and two or more persons has the form k  V-ik-e:j. But in these imperative sentences we find k  V-ik, or simply V-ik; e.g., ko'ne:j  be:'tik, let us (your plur. and I) do it. For other constructions dependent on 'kooʃ and ko'ne:j see 4.38.

The word pa?t, or 'pa?tik, now seldom pronounced with k' instead of ?, occurs in sentences equivalent to 'Let me ...', uttered while the speaker is in the process of doing what he speaks of; e.g., 'Let me see what is in here'; notsignifying that he asks permission to do so. In some cases, however, pa?t, and its X-variant 'pa?tik, have their usual sense of 'wait'; and the sentence is equivalent to 'Wait! Let me ...'.

Miscellaneous examples:
1. 'kooʃ  keʃ'tik  'naku,loːb. Let us look for helpers.
'kooj kaf-t-ik, let us (you sing. and I) look for; IKAL with omission of k. nak-ul-o:b, persons taken along in case their help is needed; nak, lean against, take along extra food, money, etc. against a contingency when traveling; -ul, noun suffix (3.44); -o:b, plural.

2. 'ha:li,be', 'kooj k u'k'ik·le 'k'eje,mo'. Well, let us drink the pozol. ha:lib-e?, well, so; said in narrative when passing to a new incident, after a pause; or in ordinary communication to indicate that the time to do what was expected has come; analysis uncertain, except for -e? at the end of a clause or its equivalent (4.58). k uk'-ik, IKAL-constr.; uk', drink. le k'e'jem-o?, the pozol (corn-meal dough dissolved in cool water); analysis of k'e'jem uncertain; perhaps, k'ei-em; for -em see 3.37.

3. ko'nezj 'holbe,sik tu noh u k'ab k jum ha'hal djos. Let us perform the ceremony of the first offering, in the name of our Lord, the true God. hol-be-s-ik, IKAL-constr. with omission of k and -e:j; hol, hole, opening; be, way, road; for formative -s see 3.25; in this context hol-be-s is a special verb for the performance of the ceremony; in other contexts it refers to giving something extra in barter when the other party is dissatisfied with the transaction. t-u noh u k'ab, in the name of; old religious expression found in translation of Catholic prayers; its construction does not conform to Modern Yucatec; noh,
great, right (hand); k’ab, hand, arm. k jum, our master;
Old Yucatec, ca yum, our father. hah-al, true, real. djos,
Spanish Dios, God.
4. ko’ne:j k bi’sik mu:’ke=. Let us take him and bury him.
k bi(n)-a-ik, IKAL-constr.; bi(n), go; with formative -a, take,
carry (3.15). muk-e?, bury; NULLAK-constr. (4.41); -e?,
end of a portion of the sentence from which this passage was
abstracted; the next part is a projective reference (4.23)
with tu ’jo?lal, in order that ... 
5. ’pa’tik in wo’kol in 9’a u ’joojol in tfi=. Let me go
in and give (him) the breath of my mouth. Context: Said by
the cow as she was going in the stable to warm the child Jesus.
in w-ok-ol, intrans. IKAL; ok, enter. in 9’a, in order to
give; NULLAK-constr. (4.41). u j-of-ol, the warm vapor
of; strictly, an IKAL-construction; of-on, used as a Yucatec
noun has occurred once in reference to the vapor from a boil-
ing pot. tfi?, mouth.
6. pa’t in wi’lik wa ta’h le pi:’bo?. Let me see if
the pib is done. Context: Said as the speaker proceeds to
examine the food that is being baked in the earth-oven (pib).
in w-il-ik, trans. IKAL. wa, if. ta’h, boil, bake. le
pib-o*, that which is being baked in the earth-oven; also,
'the earth-oven'.
4.22. **IKAL-constructions dependent on verbs that are conjugated in all persons.** This use of the dependent IKAL-constructions is subject to two sorts of limitations: (1) only certain verbs can be co-operants (4.13) of those dependent IKAL-constructions; and (2) not all the IKAL-constructions are commonly used after such co-operants. Some of the verbs in question take only the passive PA V-(aa)l; others take this and the intransitive PA V-(a)l; and still others allow the use of the three IKAL-constructions. When the transitive PA V-ik is not permissible, the transitive NULLAK-construction (4.37) is employed. Those which have been found with the three IKAL-constructions are: tʃ'^en(-el), to cease; tʃ'^en-s, to cause to cease; kah-s and tʃ'un-s, to begin (transitive); and the adopted Spanish verb **seguir**, to continue. It is observed, however, that kah-s requires a transitive NULLAK-construction (4.37) instead of PA V-ik in a discourse in which it is said that what was begun was not finished. The verbs which have been found with intransitive and passive IKAL-constructions (and not with transitive IKAL) are: be:t and me:t or ment, signifying 'to compel someone to do something' or 'to have someone do something'; and tʃ'a, signifying 'to let someone do something', 'to let something happen ("not to prevent its happening")'. The unit dependent on the verbs il, to see, ub or ui, to hear, to feel, and o'hel, to know, can be tən+ IKAL (4.14), hoc'h+ IKAL (4.17) tə:o+IKAL (4.15), or some of the others formed with a dependent IKAL-construction; but only the passive
IKAL-construction, PA V-(aa)l, can occur immediately after those verbs; that is, without a preceding tan, ʰ'ō:k, hos', etc.

Examples of these various uses are:
1. ku ʰ'ō:ko,le?, ku ʰ'en-el u 'repikar,tik le 'kampana,o?'. Then they stop pealing the bell. Context: description of a ceremony. k-u ʰ'ō:ko,ol-e?, afterward, then, after that is done (4.33); ʰ'ō:k, to end; see 4.15. k-u ʰ'en-el, one of the k-IKAL-constructions (4.29). u repikar-t-ik, transitive IKAL; Spanish repicar, peal, with formative -t (3.26); cf. 4.10. le ... -o?, the (4.51). 'kampa,na, Yucatec adaptation of Spanish campana, church bell (in this context).
2. ku ʰ'ō:ko,le?, tan in 'kahsik in me:-tik in pa'k'il o'totf tu 'teel. After that, I plan to begin to build my masonry house next to it. k-u ʰ'ō:ko,ol-e?, see Ex. 1. tan in kah-s-ik, construction tan + IKAL referring to a project or resolution (4.14). kah-s, begin; another form, kah-kun-s, occurred three times in speech of Type A; -s, formative (3.25); -kun-s (3.23). in me:-t-ik, transitive IKAL; for 'to do', 'make', 'cause', 'build', variants be:-t, me:-t, and men-t have occurred; the last two prevalently, but not exclusively, in speech of Type A. in pak'-il o'totf, my masonry house; in, 1st. pers. pron. Class A; pak', stone wall; for -il see 4.60. o'totf, house; etymologic analysis: ot-oq (3.4c).
t-u tseel, by the side of, next to; t-u, fusion of ti (2.29).
and pron. u referring to a house previously mentioned in the
context of the above sentence.
3. ka 'segirnah u be:ti'ko:b. And they kept on doing it.
Spanish seguir, continue, with formative -n (3,24) and -ah
(3,10). u be:-t-ik-o:b, IKAL-construction; u ... -o:b,
3rd. pers. plur. pron. Class A; be:t, do.
4. ka ho:p' u 'pa?ti,ko:b u ti'hil 'maalob. And they
began to wait for it to dry well. ho:p' u pa?-t-ik-o:b,
constr. ho:p'+ IKAL (4.17); pa-t, B-variant of pak'-t,
await (transitive). u tih-il, intransitive IKAL; tih, dry.
maa-lob, good, well (4.11, Ex. 35).
5. ka tu men"tah u "tokaal. He had it burned (i.e., It
was burned by someone else at his request). t-u men-t-ah,
he made, he caused; transitive AHAB-construction (4.9); see
Ex. 2. u tok-aal, passive IKAL; tok, burn (transitive).
6. ma: tan in 'yaik a "kinaal. I will not let them kill
you. Literally: I will not let you be killed. ma:, negative,
+ tan (4.14) + IKAL (in ya-ik) + passive IKAL (a kin-s-aal).
'ya, let happen (4.22). kin-s, see 4.19, Ex. 1.
7. ka tu ju:’bah u 'heebel u hol k'o'ben. And he heard
someone open the kitchen door. t-u j-ub-ah, he heard; tran-
sitive AHAB-construction (4.9); ub, irregular form of ui or
uj, to hear, to feel (3,58). u heeb-el, passive IKAL;
heb, to open (transitive); here the passive is used to refer
to an unknown subject; hence, the translation with 'someone'.

u hol k'o'ben, the door of the kitchen; for this use of
the pronoun u see 2.4; hol, door, hole; k'o'ben (doubtful
etymologic analysis: k'o%ben; see 4.57); kitchen, or the
three stones composing the native hearth.

8. ka tu ji'lah u jok'saal ti hun p'el pak*. And he
saw that it was put in a stone wall (i.e., in an opening which
had been made in the wall). t-u j-il-ah, AHAB-construction
(4.9); il, see. u j-ok-s-aal, passive IKAL; ok, enter;
ok-s, cause to enter (3.25). ti, in, to, etc. (2.29).
hun p'el, numeral 'one' and inanimate classifier (4.68).
pak*, masonry wall.

9. in wo:'hel bei u be:'taal. I know that is the way it
was made, in w-oh-el, I know (3.56). u be:-t-aal, passive
IKAL construction.

4.23. tu 'joq'yal and u 'tiq'al with dependent IKAL-constructions.
The unit tu 'joq'yal is a variant of tu 'jok'yal, which in turn
is an abridgment of tu 'jok'o,yal, the analysis of which is as
follows: t-u j-ok'-ol-al; u, 3rd. pers. sing. pron. Class A;
j-, prefix after pronoun u before initial vowel (3.2 ); ok'-ol,
upon, over; the construction u j-ok'-ol conforms to intran-
sitive IKAL formula PA V-(a)l; for formative -al see 4.52;
the first component t-u is perhaps a fusion of ti? or ti, to,
for, etc. (2.29) and the pronoun u, but it is safer to regard
it as unidentified, as in the case of the AHAB-construction
t-PA V-sh. The following inflexional variations have occurred: tin 'woo'yal, on my account, for my sake; ta 'woo'yal, on your (sing.) account; ta 'woo'yal,le:J, for your (pl.) sake; tu 'jo'yal in su'kun, for the sake of my elder brother. The analysis of u 'tiyal is: u ti'-al; where u is the 3rd. pers. sing. pron. of Class A; -al is the formative above spoken of; and ti? probably etymologically identical with ti? or ti, to, for, etc. (2,29). In 'tiyal, a 'tiyal, u 'tiyal, a 'tiyal,le:J, have occurred as equivalents of 'for me', 'for you', 'for him'; also 'it is mine', 'it is yours', 'it is his', etc. Without a pronoun of Class A, 'tiyal occurred three times in the question 'baaj 'tiyal, 'For what purpose?', 'Of what use?' The answers to those questions begin with u 'tiyal, in order to, so that.

It is with the senses 'in order to', 'so that' that both u 'tiyal and tu 'jo'yal (B-variant: 'tjo'yal) occur in constructions of these four forms: (1) u 'tiyal + IKAL, (2) tu 'jo'yal + IKAL, (3) u 'tiyal + NULLAK, (4) tu 'jo'yal + NULLAK (4,41). The references made by means of these four constructions, and another mentioned below, will be called projective references; and a device which in a given instance indicates that a reference is a projective reference will be said to be in that instance the sign of a projective reference. In Modern Yucatec, as well as in English, the sign of a projective reference is frequently the circumstance that a construction of a certain
kind and wording follows another construction of a special kind, and both are components of the same sentence. An English example of such constructional signs is seen in the sentence 'I went there to see him'. Neither of the units 'I went there' and 'to see him' indicates by itself that 'to see him' specifies the aim of going there. Replace 'I went there' by 'It is impossible' and it would be nonsensical to say that 'to see him' specifies the aim of an impossibility. This example may indicate what sort of Yucatec device we refer to as being a constructional sign of protective reference. This third sign of protective reference results when a NULLAK-construction (4.41) follows certain other constructions. Thus, considering as a single unit the sign together with the IKAL or NULLAK dependent constructions, five sorts of units are used in protective references. The rules governing the uses of those five units are rather complicated. We infer this from a detailed study of the 1192 instances of protective reference in the specimens of discourse collected. It would require, perhaps, five times as many instances to obtain an adequate number of each of the kinds of contexts which presumably determine when each of the five devices is employed. To illustrate the difficulty which results from the lack of a favorable distribution of the specimens required, we refer to what we may call conveniently negative projective references; that is, those which specify
that the aim is to prevent or avoid; as, 'I did x so that I would not have to do y', 'x was done in order that y might not occur'. Only 52 of the 1192 projective references were negative. In 48 of those negative references, tu 'jo?lal was used; the other 4 had u 'ti?al. In view of the complicated rules governing the uses of the devices in question, it would hardly be justifiable to infer from only 48 observations that the rule is that a negative protective reference requires tu 'jo?lal; particularly since we are unable to account for the 4 exceptions. Similarly, after dividing and subdividing the instances of affirmative projective references (i.e., those which are not negative) we have in some cases as few as 23 instances to test a suspected rule. Another difficulty is due to the kinds of distinctions which seem to be made by the use of one or another of the five devices in question. One of the distinctions seems to fall under the heading of what is here called topical distinction (4.8). Thus, in 82 of the instances in which the dominant topic of the sentence is rather clearly the question of why was this or that done, tu 'jo?lal was used. But tu 'jo?lal occurs in 56 other instances of affirmative projective references concerning which it would be arbitrary to assert that the aim is the dominant topic, although it may very well be. Since what is here called topical distinction is a phase of discourse which has received comparatively little attention in descriptions of languages, and even in corrective grammars, it may not be super-
fluous to offer an English example of the kind of distinctions which we suspect to be made in Yucatec in some cases by using one or another of the devices under consideration.

Compare these two sentences: 'I went there to see what he had done', 'My purpose in going there was to see what he had done'. We know that the latter is not likely to occur in a context in which the speaker's going there was not previously mentioned. The dominant topic of that statement is the reason for going there. Or, as we prefer to put it, the protective reference is the dominant topic. (This wording spares us the trouble of distinguishing between "reason for doing something", "purpose", "aim", "end", etc.) It seems rather clear that the second of the above sentences requires a context that satisfies at least one condition. What condition or conditions must the context of the first sentence satisfy? It is not easy to answer this question; but it is true that at least the sentence 'I went there to see what he had done' does not occur exclusively when the protective reference is not the dominant topic. Notice, for example, that the above sentence can very well be uttered in answer to the question 'Why did you go there?' Similarly, although we find some evidence in support of the conjecture that in some cases tu 'jo'kalal is preferred to u 'ti'kal when the protective reference is the dominant topic, we observe that in 16 instances u 'ti'kal is the first component of an answer to a question with one of the
Yucatec equivalents of 'Why?' or 'For what purpose?' But, again, 16 observations do not justify the conclusion that in answer to such questions tu 'jo'lal is not used.

So far as our observations go, it seems that it may be more feasible to find rules for the uses of the five units above mentioned than for the uses of each of the three signs, treated separately from the dependent IKAL and NULLAK-constructions. But, as already said, this would require a considerable number of instances of each of the divisions and subdivisions of the topic. The distribution of the five units in the 1140 instances of affirmative projective reference is as follows:

<table>
<thead>
<tr>
<th></th>
<th>+IKAL</th>
<th>+NULLAK</th>
<th>Totals</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>tu 'jo'lal</td>
<td>97</td>
<td>41</td>
<td>138</td>
<td>12.1</td>
</tr>
<tr>
<td>u 'ti'al</td>
<td>226</td>
<td>296</td>
<td>522</td>
<td>45.6</td>
</tr>
<tr>
<td>neither</td>
<td>--</td>
<td>480</td>
<td>480</td>
<td>42.1</td>
</tr>
<tr>
<td></td>
<td>323</td>
<td>817</td>
<td>1140</td>
<td></td>
</tr>
</tbody>
</table>

In the 52 instances of negative projective reference not included in the above tabulation, both tu 'jo'lal and u 'ti'al had as dependent constructions either ma + IKAL or ma; tan + IKAL; ma or ma; being the negative, and tan + IKAL the construction dealt with above (4.14). Further comment on the 817 instances with NULLAK will be made at the proper place (4.4).

So far as concerns the IKAL-constructions themselves, it is seen that in projective references, as well as in the cases previously dealt with, they serve exclusively to describe occur-
rents whose chronologic position is specified by other com-
ponents of the sentence. In projective references, the chron-
ologic position is obviously subsequent (4.3) to whatever
time-index the preceding context indicates.

Miscellaneous examples with tu 'jo'nal. Exx. 1, 2 illustr-
ate two of its uses without dependent IKAL-constructions.

1. te:'ne? tin be:'tah le u'sa? tu 'jo'nal a 'kumpal,le?.
I did (you) this favor for your compadre's sake. Context:
Individual A had just brought some food to B, with whom he was
on bad terms. He did so just to please his compadre (A's/god-
father, or the father of A's godchild). ten-e?, as for me, so
far as I am concerned; ten, 1st. pers. pron. Class C; -e?, at
the end of a clause or its equivalent (4.59). t-in be:-t-ah,
I did; AHAB-constr. t-pi V-ah (4.9). le ... -e?, this (4.51).
us, good, favor. a kumpal-e?, Spanish compadre; -e? (3.6);
a, your; 2nd. pers. sing. pron. Class A.

2. y'en tu 'jo'nal le:'lo? ka ta'lo:n. That is our only
object in coming. Literally: Only on account of that we came.
y'en, just, only. le-1-e?, that (4.51). For the conjunctive
office of ka see 4.61. tal-o:n, we came; intrans. AHAB-constr.
V-IB, exclusive 'we'.

3. ka bi'no:b ti hun p'el kah 'naay, tu 'jo'nal ma u
'yuuku,lo:b. And they went to a village far away, so that they
would not be caught. bin-o:b, they went; intrans. AHAB-constr.
V-PB; bin, go; -o:b, 3rd. pers. plur. ti, to. hun p'el, numeral 'one' and classifier for inanimate referents. kah, village, town. 'naaʃ, far. ma, negative. u џuk-ul-o:b, passive IKAL; for the double vowel see 3.48; u ... -o:b, 3rd. pers. plur.; џuk, catch, overtake.

4. ko:'ne:j k be:'tik be:'jo?, tu 'jo?lal k џ'oni'ke:j le ke:'ho' te i'jil le ko:'lo?. Let us do it that way, so that we may shoot the deer there in the cornfield.
ko-o:n-e:j k be:-t-ik, let us (you plural and I) do it, for this construction see 4.21. be-i-o?, thus; with demonstrative suffix -o? (4.51). k џ'on-ik-e:j, trans. IKAL; k ... -e:j you plural and I; џ'on, shoot, le keh-o?, the deer. te, there; in reference to place previously or subsequently mentioned and not in sight; cf. te:'lo" (4.51). i'y-il, inside. le kol-o?, the cornfield, milpa.

5. ta'len tu 'jo?lal a k'u'bik u ja'tan le 'osil ma:'ka?. I came in order that you release this poor man's wife. Context: The speaker came to force the ogre to give back to her husband the woman he had abducted. tal-en, I came; see Ex. 2. a k'ub-ik, trans. IKAL; k'ub, deliver, surrender. u j-at-an, the wife of; see 4.9, Ex. 15. le ... -a?, this (4.51). i'y-il, poor (sympathetically or monetarily); for i'y see 4.11. mak, person, man.

6. ka tu 'hunter,thah tu 'lakal le 'yako:bo?, tu 'jo?lal u 'pahtal u 'yukul 'luumikab. And he got together all the
Chac in order that it might be possible to catch the Earth-man.

Context: A human (the Earth-man) was dwelling in the abode of one of the gods of rain (Chac). During the Chac's absence he went for a ride on the Chac's horse, and it was difficult to catch him. t-u hunter-t-ah, AHAB-constr.; hunterar, Spanish juntar, gather, bring together; for -t see 4.10, Exx. 28-31. t-u lak-al, all; possibly etymologically identical with lah, all; if so, the analysis may be la(h)-ak-al; for -ak see 4.49; for -al see 4.52. le y'ak-o:b-o?, the Chacs. u pah-t-al, IKAL-constr.; pah-t, be possible; see 4.19. u y'uk-ul, passive IKAL; see Ex. 3. luum-kab, the one from below on the ground; 'luum, ground; for -kab see 3.33.

Examples with u 'ti'al. Exx. 7-11 illustrate specifications of the service which an object or something else is expected to render, or the use which is to be made of it. tu 'jo'al has not occurred in specifications which are definitely of that sort.

7. ma jan'h i t's'ak u 'ti'al 'uts-k in,tik le 'otil 'ji:p a,lo?.

There was no remedy to cure the poor young man. Context: All the remedies known to the ones concerned had proved inefficient. ma, negative. j-an-h-i, there was (3.58). t's'ak, medicine. u's-k in-t-ik, irregular IKAL-constr. (3.50); expected construction: u j-u's-kin-t-ik; u's, good, well, favor; for formatives -kin-t see 3.23. le a(j)i'il ji(b)-pal-o?, the poor young man; see Ex. 5; jib, male; pal, child, youngster, young adult.
8. he hun p'el 'nabaha, a\$ u 'ti\$al a ts'il ik le wak>'fo. 
Here is a razor for you to skin the cow. he ... -a\$, here is; 
like French vois. hun p'el, numeral and classifier; see Ex. 
3. 'naba, ha, Spanish navaja, razor (also 'knife', but not as 
adopted in Yucatec). a ts'il-ik, trans. IKAL; ts'il, strip 
bark or skin from. le wak(a)j-o\$, the cow; wa'kaf, cow, 
cattle; very probably from Spanish vacas, cows. 
9. ts'o:k a ts'aik 'toon u 'ti\$al k tsentik:ba. You 
have already given us (some) for us to eat. ts'o:k a ts'a-ik, 
you have given; ts'o:k + IKAL (4.15); ts'a, give. k tsen-t-ik-(k)-ba, 
feed ourselves; trans. IKAL; -k-ba, ourselves (2.7 ) . 
10. mi k'a'bet san si\$, u 'ti\$al k t'a'bak k'ak'. It 
seems that we need firewood also, that we may make a fire. mi, 
it seems. k'ab-et, be necessary (4.20). san, also. si\$, fire-
wood. k t'ab-ik, trans. IKAL; t'ab, to light (candle, cigare-
ettes, etc.). k'ak', fire. 
11. ja;ne\$ ku ts'aik ta;k'in u 'ti\$al u man:nel wa 
baaf ts'aibal ti le k'o'haano\$. Some give money to buy 
whatever is given to the sick person (i.e., special food or 
medicine). Context: Description of custom. Friends call on 
seriously sick person and bring presents. j-an-e\$, there are 
some (there are those who ...); see 4.61; e\$, end of clause or 
its equivalent. k-u ts'a-ik, constr. k-IKAL (4.28); ts'a, give. 
ta-k'in, money; see 4.16 , Ex. 6 . u man-al, passive IKAL; 
man, buy. wa 'baaf, whatever. ts'a-(a)b-al, irregular
passive IKAL; see /'g'a, give. ti, to. le k'oh-aan-o², the sick one; k'oh-aan, sick (4.53).

12. le kaː tul /j'upalalo-bo/ 'naako:b 'jok'ol le na'eʔ, u 'tiːal u /j'uktiko:b u 'tubul u we:'nel le /fiːpa,leʔ/. The two women got on top of the house to watch for the young man to be overcome by sleep. le ... -o², the (4.51). kaː, numeral 'two'. tul, classifier for animate referents. /j-up-(p)al-al-o:b, women (unmarried);

/j-up, woman, female; cf. jib-pal in Ex. 7; for -al see 4.56; -o:b, plural. naak-o:b, climb, go up; intrans. AHAB.

/j-ok'-ol, on; see explanation in 4.23. le na-eʔ, the house; le ... -eʔ or le ... -o² (4.51). u /j'uk-t-ik-o:b, trans. IKAL; /j'uk-t, spy on, lie in wait for; -t (3.16). u tub-ul, intrans. IKAL; tub, to become forgotten (x becomes forgotten with respect to the one who forgets x. Similar to Spanish olvidársele a uno); u wen-el, intrans. IKAL; see the circumstance that there is an English noun 'sleep' this IKAL-construction can be rendered by 'his sleep', but it would be arbitrary to hold that we:'nel is a Yucatec noun in this sentence. le /j(b)-pal-eʔ, the young man.

13. ta'len u 'tiːal in ñan ma'nik 'baal in han'te". I came just to buy something to eat. tal-en, I came; see Exx. 2,5. in man-ik, trans. IKAL; man, buy. ñan, just, no more than that; frequent expression of modesty. 'baal, thing, something (2.17). in han-t-e", NULLAK-constr. (4.37); han, eat; transitive with formative -t (3.16).
14. ka ḥi'lah tu 'booi le 'ye, 'tillal u 'helsku, ba.
And he lay down in the shade of the tree in order to rest.
ḥi'lah, irregular AHAB (3.51) referring to the act of laying oneself on the ground. t-u 'booi, in the shade of. le 'ye(?)-o', the tree; 'ye', tree. u hel-s-(1)k-u,ba, trans. IKAL; u, himself (2.7).

15. ka 'mahan, tab kan tu'l wînik u 'tillal u k'al-la-n'tik le 'bo:ib-bo'. And they engaged four men to block the roads.
mah-an-t-ab, passive AHAB (4.10); mah-an-t, to borrow, to avail oneself of the services of others who will help without pay; mah-an-o,b, those who are so engaged; analysis of mah-an uncertain. kan, four. u k'al-(1)an-t-ik, trans. IKAL; k'al, close up; -lan, distributively: each one, or each two, blocks one road (4.35). le be-o:b-o', the roads.
INDEPENDENT IKAL-CONSTRUCTIONS

4.24. ma + IKAL. This construction serves two usages here referred to as Usage A and Usage B. In Usage A, the sentence may be said to be negative imperative, for lack of a better appellation. The speaker commands, instructs, requests, begs, or otherwise tries to persuade the person or persons addressed not to do what the IKAL-component of the sentence specifies. As indicated elsewhere (4.43), this is not the only construction employed in negative imperative sentences, but it has a broader range of application than any other used in such sentences. Here, as in the constructions dealt with above (4.21), the pronoun of the IKAL-construction is more frequently omitted than employed. In this case, however, two rules are observed:

1) The 3rd. pers. pron. u of verbs which are conjugated only in the third person when they are used intransitively was not omitted in any instance; e.g., ma u 'tubul tey', Don't forget it (literally: 'let it not become forgotten to you', as in Spanish: No se te olvide). Here, ma u frequently becomes mu. (2) The 2nd. pers. sing. pron. a, and the a of the 2nd. pers. plur. a ... -e:j, are not omitted in approximately 77% of the instances in which the initial consonant of the verb is w, or the prefix w- is required before a verb with initial vowel (3.2); e.g.: ma a wo: 'k’ol, 'Don't cry'. In other cases, one finds: (a) that there is no indication of the pronoun a, or of the a of a ... -e:j (-e:j is not omitted in negative imperative sentences); or (b) that the vowel of
the negative ma is long, indicating a fusion of ma and a; or (c) in 15.8% of the cases not covered by Rule 2, ma? a or ma a occurs. In six instances, construction ma: tan + IKAL (4.14) was used in utterances which were both threats and negative imperative communications, comparable with 'You won't do anything of the sort!' In polite requests or supplications, ū'en (in other contexts: 'just', 'only') follows the negative ma or ma?.

In Usage B, construction ma + IKAL is the main verbal unit of a negative declarative sentence. In such cases, the occurrent negated is either future, or contemporary (4.3); and the reference can be monochronic or polychronic (4.6). Aside from Usage A, this construction serves mainly to negate the references made in the independent uses of construction PA V-ik dealt with in 4.25, and all those references in which construction k-IKAL occurs (4.27). The latter is used only in certain negations (4.32). Here, as well as in Usage A, ma + IKAL has a broader range of application than any other construction serving to negate.

Examples of ma + IKAL in Usage A.
1. ma 't'n'aik sah'ki. Don't get frightened. 'g'a, get, catch. sah-(a)k-i(l), Speech-type B, 'fear', 'fright'; for -ak see 4.49; for -il see 4.60.
2. ma ū'en ts'on'ken. be in 'surt'ke". Please, don't shoot me! I'll return it. ts'on-(i)k-en, Speech-type B; ts' on, shoot,
gun; -en, 1st. pers. pron. Class B. he in sut-(i)k-o?, construction he + IKAL + -e? (4.16); sut, return, give back; (intransitive: su(t)-n-ah; e.g., sun:a'hi, he came back).

3. in ju:'mil, mu 'hak'al a wol. Don't get excited, my master. Context: said by a dog to his master. in jun-il, my master, my owner; for -il see 4.60. mu, fusion of negative ma and pron. u of the IKAL-construction u 'hak'-al; hak', conjugated in the 3rd. pers., 'become astonished', 'filled with fear, awe, admiration', always with ol, mind, feeling, etc., or 'pith' (of a plant). a w-ol, your mind, will, etc.

4. ma u 'tubul tetf a 't'an,ken. Do not forget to call me. tub, to become forgotten. tetf, 2nd. pers. pron. Class C. a t'an-(i)k-en, trans. IKAL; a, 2nd. pers. pron. Class A; t'an, address a person, speak to one, call (not give a name to); also, 'word', 'language'; -en, 1st. pers. pron. Class B.

5. ma? a 'waatal. fen. Don't stand (there)! Go on! a wa(1)-t-ol, intrans. IKAL; wal*, be on one's feet, stand up, get up; -t, formative (3.26). f-en, or, more probably, f(i)-en, go, go on, go away; cf. ka 'fi-ik, let him go, that he may go; -en, intransitive imperative (4.57).

6. ma k be:'tik be:'jo?. Let us not do it that way. k be:-t-ik, IKAL-constr.; be:-t, do, make. bei-o?, thus; with demonstrative suffix -o? (4.51).

7. ma k k'itpah,le:f, bik 'saat. Let us not go each his own way, lest (some of us) get lost. k k'it-pa-h-(a)l-e:f,
intransitive IKAL; k ... -eːj, you (plur.) and I; k'it (with the above and other formatives) scatter (transitive or intransitive depending on formatives affixed); for -pa-h, see 3.37.
bik, lest; special negative sign of contingent imperative (4.43); 'seat, NULLAK-construction with bik (4.37), become lost.

8. ma: tan k 'p'atal t 'kaːhaːle?'. Let us not remain in our village. Illustration of occasional use of construction tan + IKAL in negative suggestion; similar to its frequent usage signifying refusal (4.14). p'at, remain, stay. t, fusion of ti, at, to, from, etc., and k; 'at our'; but in other instances t as well as k can signify 'we' or 'our' (2.7). kah, village, town; Kah-al, small village, hamlet, inhabited locality. -eʔ, demonstrative suffix referring to village not present; however, wai t 'kaːhaːleʔ is common for 'here in this town of ours'.

Examples of Usage B.

9. ma u to'hol-tik tiʔ mij hun p'el sen'tabo. It does not cost him a cent. Context: Polychronic reference; i.e., whenever he wishes to eat meat, he can get it without spending a cent. u toh-ol-t-ik, IKAL-constr.; toh-ol, price; with formative -t, to cost. tiʔ, to him (2.6). mij, from earlier Yucatec na mij, not even, without, and various other senses. hun p'el, numeral and classifier. sen'tabo, Spanish centavo.
10. wa mi'naan ta:'k'in te:'ye', ma u k'u'vik. If you have no money, he does not deliver it. wa, if. mi'naan, not to be; followed by a pronoun of Class C (te'y in this instance), 'not to have'. -e? at the end of a clause (4.58). u k'u'vik, IKAL-constr.; k'u', deliver, surrender.

11. ma in 'ts'ib-ol-tik bin ti nu'ku'j ka:'ho:b. I have no desire to go to big towns. in ts'ib-ol-tik, IKAL-constr. ts'ib-ol-t, imagine, fancy, have fanciful wish; ts'ib, paint, write; ol, mind, thought, will, and the like; formative -t required by compound verbal unit (3.26). bin, go. ti, to. nuk-u'j, big (3.40). kah, village, town; -o:b, plural.

4.25. **Special uses of transitive construction PA V-ik.**

Without the aid of any other device, this construction serves in some cases to refer to contemporary occurrents (4.3). This is a remnant of what the writers on Old Yucatec, and those who followed their precedent, classed as the "present tense" of transitive verbs. We observed in our texts three main kinds of instances which exemplify the uses in question:

(Kind A) when a topical distinction (4.8) is effected in the manner indicated below; (Kind B) when certain verbs refer to contemporary occurrents; those which occurred in the texts are verbs designating occurrents which take place within the individual; viz., those signifying to think, imagine, believe, be willing, love, etc.; (Kind C) the exceptional instances referred to below (4.26), and the verb al, say, tell, when
it is used in statements in which the speaker is actually saying what he refers to; as, 'I am telling you that ...'. In other cases, al requires construction tan + IKAL (4.14), the construction which has replaced in nearly all cases the Old Yucatec "present tense" and the one classed by most writers as an "imperfect tense". Thus, on the basis of what is prevalent in Modern Yucatec, it should be said that the cases under consideration are exceptional instances in which the simple IKAL-construction is used instead of tan + IKAL, or instead of the k-IKAL-construction (4.2).

So far as our texts show, the use of the simple IKAL-construction in instances of Kind B is confined to references to the present. Inquiries as to whether it is used also in references to contemporary-past occurrences (4.4, Case 5) yielded unsatisfactory results, as such inquiries generally do. Some informants asserted that for 'I was thinking' they would say tan in tu'lik; others, simple in tu'lik. Some said that it did not make any difference, while others expressed themselves vaguely as to the difference. Such questions, of course, should be settled, not on the basis of what the native says he would say, but on the basis of what the investigator finds that the native has said in actual communication. In Old Yucatec the same form of the transitive verb served for present and for contemporary-past (4.4, Case 5), which is the way in which tan + IKAL and other
constructions are used in Modern Yucatec. Under the heading of **pretérito imperfecto** (imperfect tense) writers on Yucatec have always repeated the "present tense" paradigm with the addition of the word **cuchi** or **cachi**; e.g.,: (Coronel, 1620)

**Present:**  *cambeçah in cah*, I teach; **Imperfect:**  *cambeçah in cah cuchi*, I used to teach, I was teaching. (Beltran, 1746)

**ten cambeziec**, I teach (him);  **ten cambeziec cuchi**, I used to teach (him), I was teaching (him). (Lopez Otero, 1914)

**ten cin hantic**, I eat (it);  **ten cin hantic cachi**, I used to eat (it). (Pacheco Cruz, 1920)  

**in vacuntlc**, I love;  **in vacuntlc cachi**, I loved (Yo amaba). The Hotul dictionary lists both **cuchi** and **cachi** as signs of the **pretérito imperfecto**, and specifies that the latter is used in reference to what happened "today," i.e., a recent past. Coronel (1620) makes the same distinction between **cuchi** and **cachi**. In our texts, 'kasa̱i' was used to distinguish contemporary-past from present only for clarity or contrast when the speaker said, for example, 'I used to do that, but now I do something else'. Instances of this sort constitute less than 1% of the cases in which no device was used to distinguish contemporary-past from present. Our informants always rendered the word 'kasa̱i' by the Spanish **entonces**, then, or **antes**, formerly; and that is the translation which Pio Perez (Dictionary, 1866) gives for **cachi**, before adding that it is the sign of the **pretérito imperfecto**. It is doubtless justifiable to say that a word which signifies 'formerly' is a device that serves to refer to the past; which,
incidentally, is what the "past tenses" are frequently used for. But that holds also for the words and expressions which signify 'yesterday', 'the day before yesterday', 'last year', 'a long time ago', etc. With regard to the English sentences 'I put it there yesterday' and 'I put it there every day', one could say that 'yesterday' and 'every day' are components of two "tenses" of the verb 'put' with as much justification as there is to say that in Yucatec the word 'kaaj'i is the sign of a past tense. But whether one chooses to class such words as signs of "tenses" or not, account must be taken of the fact that when the context indicates what time is referred to, 'I put' can be used for past as well as for present without the aid of any distinguishing device in the sentence of which 'I put' is a component. A similar assertion holds for the various constructions which serve in Modern Yucatec to refer to contemporary occurrences, using the term 'contemporary' as specified in 4.3.

In instances of Kind A, topical distinction is effected in two ways: (a) by an alteration of the most common order of the words in the Yucatec sentence: the word or expression which refers to the dominant topic (4.8) comes before the IKAL-structure; (b) by using a pronoun of Class C (2.6) instead of, or before, the pronoun of Class A of the IKAL-structure. Thus used, the pronouns of Class C were always translated as signifying 'It is I who ...', or 'I am the one who ...', 'It is he who ...', etc.
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Examples of Kinds A, B, and C, conforming to the divisions specified above, are:

1. ūen 'le:ti? in ko'nik. That is all I sell. Context: Said in answer to 'What else do you sell?' ūen, only. le:ti?, that, he, she, it; 3rd. pers. sing. pron. Class C. in kon-ik, IKAL-constr.; kon, sell.

2. ti? u s'o:k a 'paktik 'sa:si'ilil 'jok'ol kab. For the last time you are seeing the light in this world. Context: Said as the speaker was about to kill the hearer. ti? u s'o:k, for the last time, the last time. a pak-t-ik, IKAL-constr.; pak with formative -t, to look, see, be able to see. sas-il-il, any light; sas, clear; sas-il, light, clarity; for the use of -il, as well as -il-il, see 4.60. j-ok'-ol, on, over (cf. 4.23). kab, earth, below, etc. (4.52); 'jok'ol kab, usual way of referring to the world.

3. ten ka'nan,tik le ko:'la?. I am the one who is taking care of this cornfield. ten kan-an-t-ik, IKAL-construction with pron. ten of Class C substituted for in. kan-an (etymologic analysis), guard, caretaker; kan-an-t, as transitive verb, 'take care of'. le kol-a?, this milpa.

4. teŋ han'tik ba'kan u le? le in pa'k'al 'buulo?. So, it is you who is eating the leaves of my bean plants. teŋ han-t-ik, IKAL-constr. with pron. teŋ of Class C instead of a. han-t, eat. ba'kan, so, evidently. u le?, the leaf or leaves of; le?, leaf of plant. le in ... -o?
that ... of mine. pak'-al, planted (4.52). 'buul, bean.

5. tu men u 'jakun-sik, ko:n. Because he loves us. Context: "He" refers to the patron saint of the village. t-u men because (4.52). u ja-kun-s-ik, IKAL-constr. ja-kun-s or ja-kun-t, to love; for formatives -kun-s, see 3.23. -o:n, us; in this context the listeners are excluded.

6. 'esak tu men tan u 'ja:lik in 'kum-a,le?, k k'a'nik le hun p'el s'a:ja'si l ku 'tibil 'oltik ti to:'na?.

Since my compadre says (so), we accept this gift he bestows upon us. Context: Ritualistic style at a wedding ceremony. es-ak t-u men, since, it being the case that ...; the general sense of each of the components of this expression is irrelevant to the sense of the expression (cf. English 'nevertheless', 'notwithstanding'); es, show; from Old Yuc. et-(e)z, show, demonstrate; -ak (4.37); t-u men, because. tan u j-al-ik, constr. tan + IKAL (4.14); al, say. in kumpal(e); my compadre (see 4.23, Ex. 1); -e?, end of clause (4.53'). k k'em-ik, illustrates an instance of Kind B (4.25); k'am, accept, receive. le ... -e? (-e? at the end of the whole phrase), 'this', referring to the gift the speaker holds in his hand. hun p'el, numeral 'one' and inanimate classifier. s'a:ja'si l, generous gift; in other contexts, 'charity', 'blessing (divine gift)'; obsolescent or obsolete except in solemn style in some communities; among old folks in Chemax, Yucatan, u s'a:ja'si l ha'hal djos (the gift of the true God) is a
reverent reference to corn; \( t'\)a, give; \(-ja\), frequent, abundant (3.31); \(-sil\) (4.71). \( k-u \) tib-il ol-t-IK, construction \( k-IKAL \) (4.34); tib-il ol-t, to give as a token of affection; tib-il, kindness, propriety, refinement, etc.; ol-t, be willing. ti, to, for, etc. to:n or 'toon, we, us; pron. Class C.

7. \( k \) 'a-lik tun ti\? a \( \text{bik} \), beni'le? 'kinse 'dias ken ka ta: 'koi:n. We, therefore, say to your grace that we may come in a fortnight. \( k \) al-Ik, independent IKAL illustrating an instance of Kind C (4.25); al, say. tun, therefore, then; other uses similar to French done, or Spanish pues, or German doch. ti\?, to. a \( \text{bik} \), beni'le', your grace; see 4.15, Ex. 4; -e\?, end of clause. 'kinse 'dias, Spanish quince \( \text{dias} \), fifteen days, a fortnight, conforming to Spanish usage of quincena. ken ka ta(1)-(a)k-o:n, construction NULLAK (4.46); the sense with this construction is approximately 'If it is possible for us to come, we will come in a fortnight'; tal, come; -o:n, we; pron. Class B.

4.26. References to other uses of the IKAL-constructions. It has seemed desirable to treat some uses of the IKAL-constructions under other headings. Particularly worthy of note is the use of the intransitive construction PA \( V-(a)1 \) and the passive PA \( V-(aa)1 \) after bin PA kah (4.56). In that construction, the transitive PA \( V-Ik \) occurs only occasionally and inconsis-
tently in the discourse of some individuals whose speech is predominantly of Type B. The other uses dealt with elsewhere have to do in each case with a special word or a small group of words constituting exceptions to general rules. Those exceptional uses are pointed out and illustrated in the following places: 4.12, Ex. 38, 39, 40; 4.33, Ex. 29; 4.34; 4.36, Ex. 48, 49; 4.40, Ex. 17, 18, 19; 4.48, Ex. 91; 4.52, 4.55.

USES OF THE k–IKAL–CONSTRUCTIONS

4.27. It has been shown (3.49) that so far as structure is concerned, the k–IKAL and the IKAL constructions differ only in that the former have as their first components kin, ka, ku, instead of in, a, u. From a purely descriptive point of view, there are either no k–IKAL–constructions or no IKAL–constructions for the so-called first person plural. A hypothetic combination of the k– of the k–IKAL–constructions with pronouns k and k ... –e:ʃ would give kk and kk ... –e:ʃ. What is actually found is that the forms k V–ik, k V–(a)l, k V–(aa)l, and the inclusive plural k V–ik–eːʃ, k V–(a)l–eːʃ, k V–(aa)l–eːʃ are used in conformity with the rules which govern the uses of the IKAL–constructions and with those which govern the uses of the k–IKAL–constructions. The two sets of rules are on the whole quite different. In the few instances in which they are similar, the use of one rather than the other of the constructions depends often on whether or not certain words or expressions precede, or on the particular sense in which a word is used. For example, 'tani,li can signify 'at once'
or 'first', depending on whether IKAL or k-IKAL follows. In the same context, we find 'tani,li u ma'ýik, at once he grasps it (cf. 4.20), and 'tani,li ku ma'ýik, first he grasps it (then he does something else)'. And it should be noted that this distinction is made consistently in all the uses of 'tani,li with those two constructions.

From the eighteenth century to the present, writers on Yucatec who expected to find in the language one and only one "tense" corresponding to each of the "tenses" for which conventional grammar provides names must have found considerable difficulty in deciding what to do with the construction here labeled k-IKAL. Beltran (1743) says in his grammar (2nd. ed., p.40) that the "particle" ñi, a sign of the present tense (signo de presente) drops the i before the pronouns, giving cin, ca, cu. One of his examples is ten cin hactic, which he renders by the Spanish Yo lo azoto, I whip him. According to our observations, ten kin ha'te'ik can signify at present in different contexts 'I myself was whipping him', or 'I am the one who whipped him', or 'I myself whip him', or 'I myself will whip him'. It is now a special construction for topical distinction (4.8), the dominant topic in the above sentence being the circumstance that the whipping is, was, or will be, done by the person referred to by the pronoun ten. If this pronoun is omitted, a different translation is required: in some contexts the translation would be 'I whip
him (habitually)', or in a conditional sentence '(If x takes place), I'll whip him'; but those are not the only possibilities. One notices that although Beltran classes ci as a signo de presente, no construction formed with this sign appears in any of his many paradigms of Yucatec conjugation. Contrariwise, that is precisely the construction which Lopez Otero (Gramática, 1914) chooses for the model paradigm of the "present tense" of transitive verbs. Pio Perez (Dictionary, 1866) speaks of "tenses", not of one "tense" when he defines cin (IPA notations, kin) as the first person pronoun in some tenses: "pronombre de la primera persona para conjugar algunos tiempos del verbo". He may have said "tenses" instead of "tense" in view of the variety of uses of the k-IKAL-constructions, but it may also be due to the circumstance that kin can result as well from a combination of the word ka, required in some cases before a NULLAK-construction (4.37), and the pronoun in; as in u k'at kin be:t 'sama,le? for u k'at ka in be:t 'sama,le?', He wants me to do it tomorrow. If Beltran is right, as he very probably is, that at the time he wrote, cin was a fusion of ci and in, then an etymologic difference corresponds to a present rule of usage; namely, that in the k-IKAL-constructions the k- of the components kin, ka, ku are not separated from the pronouns in, a, u; whereas with the NULLAK-constructions we find ka in, ka u more frequently than kin, ku. The latter do not occur consistently, and the very informant
who uses kin or ku with a NULLAK-construction frequently replaces them by ka in, ka u when he is asked to repeat the sentence. With regard to the second person, the situation is different: we find ka or ka; more frequently than ka a (stressing the second a) with a NULLAK-construction. But in no instance in which we submitted a native to the test were the words kin, ka; ku of the k-IKAL-construction resolved into two components.

It seems natural that Spanish writers should equate the k-IKAL-constructions with the Spanish present tense. For the Spanish device that is called "present tense", besides being used to refer to the present time, as the name may suggest, can refer also to the past, as the "present tenses" of various other languages do in "vivid discourse", i.e., the "historical present"; it can refer to the future, as in Mañana te lo traigo, I'll bring it to you tomorrow; and it can be an imperative, as in the second clause of this sentence: Vete a su casa, y le dices que ..., 'Go to his house, and tell him ...'. In these four kinds of references, besides a few others, we find the k-IKAL-constructions. Spanish writers could have argued thus: This Yucatec device is used more like the present tense of our indicative mode than like any other Spanish device. Hence, the appellation "present tense of the indicative mode" fits it better than any other which grammar books provide. In so naming it, those writers conformed to a precedent that was quite respectable at that time. Whether or not it is equally
respectable now, it is the precedent to which contemporary linguists generally conform -- even those of us who emphatically assert that the categories of the Latin and Greek grammars are not universal. If they are not universal, it does not seem desirable to apply their names to any additional categories that may be found. Still, we find in descriptions of American Indian languages such terms as 'subjunctive', 'aorist', 'middle voice' applied to devices whose uses bear only some resemblance to those of the Greek and Latin devices for which those names were chosen. In many instances, there is less justification for this abuse of nomenclature than the Spanish writers had for calling "present tense" the Yucatec devices in question. It is by no means claimed that such a practice is consistently avoided in these pages. In the present instance, however, it would be highly arbitrary, not only to call the k-IKAL-constructions by a familiar name, but to assert that their uses constitute a single semantic category. This, of course, does not imply that this Yucatec device is unusual in this respect. Diversity of usage of a single device is common in the languages for which we have more than a superficial description. Perhaps no one regards as abnormal the variety of usage of the Latin devices referred to singly and collectively by the term 'ablative'. Nor does it seem strange that the English construction 'If I had it' refers to a past time in the sentence 'If I had it, I must have lost it', but it refers to a present time in
'If I had it, I would give it to you'. It will be seen that in a similar way the Yucatec constructions in question can refer to a past, a present, or a future time, depending on other components of the sentence, and on the context of the sentence. The uses of the k-IKAL-constructions will be divided and subdivided as follows:

A. In polychronic (4.6) references
B. In monochronic references
   (B-1) For topical distinction (4.8)
   (B-2) In construction he ... -e? (or -o?)
   (B-3) In interrogative sentences
   (B-4) In negative sentences with mif mak, mif 'baal
   (B-5) In temporal clauses
   (B-6) In relative clauses
   (B-7) In conditional sentences
   (B-8) In imperative sentences

4.28. **Usage A, polychronic references.** This usage is observed in descriptions of hunting and agricultural techniques, ceremonies which the people are in the habit of performing, and other practices and customs. In such kinds of discourse, we find some construction other than k-IKAL only occasionally, when the narrator describes some step in a procedure as though he referred to a particular occasion. He may do so in one or two sentences, and then he goes on using the k-IKAL-constructions. Polychronic references of course, are not confined to descriptions of customs of a people or of the habits of a single individual.
Thus, the k-IKAL-constructions serve also to refer to something which is said not to have happened on any occasion on which it was expected to happen or might have happened; or to that which took place several times during a certain period, or in such generalizations as 'It is bad to get drunk' (i.e., it is bad whenever it happens), or 'These birds can fly very fast'. If the reference is polychronic, a k-IKAL-construction can serve to refer to the past, or to the present, or to the future; and it can be the main verbal unit, or it can occur in a relative clause, or in some other subordinate clause, except when a particular word or expression, or an assertion of high declarative value (4.7) requires some other construction.

Examples of Usage A.

1. u 'ti'val u 'kinsa'al le ka:'oo'boº, le jum hme:'noº ku ma'ýik le ka:jcoº, Wú 'ho:p'ol u t'o'nik ba:il'yeº tu 'yiº. In order to kill the chickens, the venerable shaman takes (each) chicken and begins to pour balche in its mouth. Context: Description of rain ceremony (ya 'yaak). u ti?-al u kim-s-aal, in order to be killed; kim, die; with formative -s, changing m to n, 'kill'; for this whole construction see 4.23. le ka:j-o:boº, the chickens. le jum h-men-oº, the venerable shaman; for jum, honorable, venerable. h-men, from obsolete ah men, the one who performs, or causes; 'shaman' or 'medicine man' of a desirable sort. k-u maý-ik, k-IKAL-con-
str.; matf, take, grasp. le kaf-o*, the chicken. k-u
ho:p'-ol u t'oh-ik, begins to pour; constr. ho:p' + IKAL
(4.17) with ho:p' in its k-IKAL-form, a second instance of
Usage A; t'oh, to pour liquid from a container with small
opening. ba:l*ye?, the name of an alcoholic drink made from
the bark of a tree; ye?, tree or wood; ba:l-, perhaps ety-
omologically identical with 'baal, thing; but this analysis
is of uncertain validity. t-u ye?, into its mouth; t-u,
fusion of ti or ti?, to, into, etc., and pron. u; ye?,
mouth.

2. ku 'la:bal u no:'k'e', ku 'k'atik ti u 's'u:'lil.
When their clothes got old, they asked their masters (for
new ones). Context: Description of how the plantation owners
treated the Indians in former times. k-u lab-al, intrans.
k-IKAL; lab, be old, worn off, deteriorated. u nok', his
(their) clothes; temporal clause requiring -e? (4.33). k-u
k'at-ik, constr. k-IKAL; k'at, ask for; with other construc-
tions, 'wish' (4.40). ti, to. s'ul, master (as the word
was used in that context), 'non-Yucatecan White' in other
contexts. -il, for general reference (4.40).

3. kan p'el k'ab ku so'tik 'jetel le so'ko ku'yiijo.
She cuts off (the width of) four fingers (from it) with the
warm knife. Context: Description of how the midwife cuts
the child's navel. kan p'el, numeral 'four' and classifier
for inanimate referents. k'ab, fingers (in this context);
generally, 'hand' or 'arm'. k-u so't-ik, constr. k-IKAL;
jot, cut off or through by striking with the cutting tool.
j-et-el, with, and, etc. (4.52). \( \text{ño'ko} \), warm, hot.
ku'\( \text{y} \)ijo, Spanish \( \text{cuchillo} \), knife.

4. hun ti'\( \text{f} \) i'\( \text{y} \)il k'a\( \text{f} \) kin we'nel, i'\( \text{y} \)il k'a\( \text{f} \) kin wa'hal. Night after night without exception I slept in the
woods and woke up in the woods. hun ti'\( \text{f} \), without exception,
all the time, without ceasing; a single thread (in weaving).
\( \text{itf}^\prime \)-il, within, inside (4.52). k'a\( \text{f} \), woods. k-in wen-el,
constr. k-IKAL; wen, sleep. k-in w-ah-al, constr. k-IKAL; ah, wake up.

5. behla'e\( \text{e} \) \( \text{yen} \) sik'ba\( \text{l} \) kin wu'jik. Now I hear only
rumors. Context: Concerning the whereabouts of a certain
person who left the village after committing a crime.
be-h(e)l-a\( \text{e} \)-\( \text{e} \), now; bei, thus; he-l-a\( \text{e} \), here it is,
look.' (French \text{voici}); for -\( \text{e} \) see 4.33. \( \text{yen} \), only.
sik-ba-l, conversation (3.3C). k-in w-ui-ik, constr.
k-IKAL; ui, ub, irregular stems of verb for 'to hear'.

6. ti le ka:\( \text{ya} \)'o\( \text{o} \) ku ta'sik 'baal us, ku ta'sik 'baal k'as; tu men le 'baal k'a:'so' le:'ti' le 'a:ni,so'\( \text{o} \). From sugar-cane one gets good things, and one
gets bad things; because one of the bad things is brandy.
ti, from, to, at, etc. le ka:\( \text{ja} \)-o\( \text{o} \), the sugar-cane; from
Spanish caña. k-u ta(l)-s-ik, constr. k-IKAL, 'bring'.
'baal, thing. us, good. k'as, bad. t-u men, because (4.52).
le 'baal k'as-o\( \text{o} \), the bad thing. le:'ti'\( \text{o} \), that;
pron. Class C; the intonation of the preceding part of the
sentences and the brief pause preceding le:'ti'\( \text{o} \), together with
the special way of uttering this word, constitute a sign of assertion of identity equivalent to our verb 'is'. 'a:nis, probably from Spanish anís, is the name of a special kind of rum or brandy.

4.29. **Usage B-1, topical distinction.** In this class of instances, the occurrent referred to by a k-IKAL-construction can be past, present, or future. The chronologic specification is provided either by the preceding sentence, or in the very sentence containing the k-IKAL-construction. In many cases, the occurrent for which the k-IKAL-construction stands was spoken of in the previous sentence or sentences, and what is in question is some constituent of the occurrent, or its time, or place. Thus, the rule in instances of Usage B-1 is that the occurrent referred to by the k-IKAL-construction is not the dominant topic of the sentence. Dialogues provide frequent exemplifications of this rule, particularly in utterances which specify what an interlocutor has been asked. Take, for example, this question: 'When are you going to bring it?' In other languages, and occasionally in Yucatec, the answer can be simply 'Sunday'. So far as the texts show, and so far as my observations on ordinary conversation can be trusted, it seems that the prevalent habit in Yucatec is not to answer by saying simply the equivalent of 'Sunday', but rather 'I'll bring it Sunday',
using a k-IKAL-construction: ‘domin go kin ta’sik.

This use of the k-IKAL-constructions is difficult to differentiate from that of the IKAL-constructions mentioned in 4.25, Kind A. So far as we have been able to ascertain, certain words, among them the pronouns of Class C, are followed much more frequently by IKAL than by k-IKAL. In comparable instances some informants use only one of those two constructions, while others use one more frequently than the other. We suspect, nevertheless, that it is not altogether a matter of individual preference. But the data at our disposal are insufficient to reach a conclusion.

Examples of Usage B-1.

7. le us t-a be:’tah tin wa:’lak’ mis ka han’tik teş u ’heela’. I am doing this favor to you in return for the favor you did to my daughter. Literally: The favor you did to my daughter, that is the one I am returning to you in exchange. le us t-a be:-t-ah t-in w-al-e’, the favor you did to my daughter; le ... -e’, the (4.5?); t-a be:-t-ah, constr. AHAB (4.9); t-in, to my; fusion of ti, to, and the pronoun; al, daughter (said by a woman). le:’ti-e’, pronoun of Class C, ‘that’, with -e’ (4.28)? see Ex. 6; equivalent to ‘that is the one’. k-in cut-ik, constr. k-IKAL. teş, to you; pron. Class C. u heel-a’, in exchange; literally: ‘its substitute’; -e’, referring to the present she is handing to the interlocutor as she speaks (3.5 ).

8. bei ’sun, tak a wa:’lak’ mis ka han’tik. So, you
eat even your pet cat. bei, thus, tun, therefore, then, etc. (4.25, Ex. 7). tak, even, as far as, till. a w-al-ak' mis, your pet cat; al-ak' is applicable to domesticated animals owned by an individual; 'pet' is not a good rendering; in a text from British Honduras, a:'lak' was used in reference to the wild animals within the domain of a certain supernatural being. k-a han-t-ik, constr. k-IKAL; han, eat.

9. tu 'jo'olal, ku 'hok'ol u kast u 'kimil. Of his own accord he came out to meet his death. t-u j-ok'-o1-al, on his account (4.23). k-u hok'-ol, constr. k-IKAL; hok', come out. u kaj-t, constr. NULLAK; 'to seek'. u kim-il, his death, for him to die (4.52).

10. naq' ku pek'tal u 'haha'tal le ye' 'jetel,lo'. Far landed the chips from the tree (as he cut) with it. Context: The child Jesus played pranks on Saint Joseph. After dulling his ax by cutting stone with it, Joseph tried it and it cut better than before. naq', far. k-u pek-t-al, k-IKAL-constr.; pek-t, to lie flat on the ground. u ha-hat-al, the chips of; hat, to split, chip off; ha-hat, reduplication (4.67); for -al see 4.52. ye', tree. j-et-el, with, using as an instrument. le ... -o, the; for the inclusion of 'jetel in the form le ... -o see 4.34.

11. in ma:'ma kin tu'klik, tu men ma v in wo:h'li wa toh jol. My mother is the one I was thinking about, because
I do not know whether she fares well.  in ma: 'ma, my mother; Spanish mamá, used now instead of ma:'.  k-in tuk(u)l-ik, constr. k-IKAL; tuk-ul, thought; for -ul see 3.44; tukl-, stem of verb 'to think'.  t-u men, because.  ma: in w-oh-(e)l-i, I do not know; oh-el, to know (3.56); for -i in negative sentences see 4.59.  wa, if.  toh j-ol, to be in good health and without worry; toh, straight, right; ol, mind.

12.  e'ja, nu'fi ki'sin, beh'la? ku k'u'yul tu k'in a bo:'tik le 'baaj ta be:'tah tin wa:'ta:no'.  Hey, old devil, now is the time you are going to pay for what you did to my wife!  e'ja, hey!  nu'fi ki'sin, common insulting epithet; nu'fi for noh-rib, old man; components of ki'sin unidentified, 'demon'.  beh'la?, now; see Ex. 5.  k-u k'u'y-ul, constr. k-IKAL, k'u'y, arrive.  t-u k'in, to its day, or time. a bo:'tik-le -t-ik, constr. IKAL, special use (4.20); bo:'t-ik-t, pay.  le ... -o?, the; 'baaj, what; t-a be:-t-ah, constr. AHAB (4.9); be:-t, do.  t-in w-at-an, to my wife; see 4.9, Ex. 15.

13.  kali'kil u tah-al in k'um kin 'hok'ol in be:'te'.  While my nixtamal is cooking I'll come out to do it.  kali'kil, while; etymologic analysis; no other use of components kali'kil at present; for -il see 4.60.  u tah-al, constr. IKAL (4.20); tah, boil, bake.  k'um, corn boiled with lime, nixtamal.  k-in hok'-ol, constr. k-IKAL; hok', come out.  in be:-t-e', NULLAK-constr. (4.41).
At the very moment I passed by, his head burst. Literally: "When I passed there, then his head burst. Context: The narrator had already said that the villain's head burst with the potion they gave him to drink. It is a stylistic device to end a story by saying in jest that the narrator passed by the place where the last incident of the story took place just at the moment it occurred. ka man-en, when I passed; AHAB-constr. in temporal clause (4.62). to:'lo?, there; X-variant of te:'lo?(4.51). ti?, then, just then (2.25). k-u wak'-al, constr.k-IXAL; wak', burst. u po'l-i, his head; for -i see 4.59.

4.30. Usage B-2. Constructions he+k-IXAL+-a? and he+k-IXAL+-o? are used in references to present occurrences taking place at the very moment they are referred to, and the reference serves to call attention to their occurrence. The sentence is generally uttered in an exclamatory manner: he ku ta'lo?, Here he comes! he kin bi'sik le t'yan poa'la?, Here I come with the baby! (Literally: Here I bring the baby). The final suffix is -a? when the speaker refers to what he himself does. When the reference is not to the speaker's own action, the use of -a? or -o? depends on the general rules governing the uses of these suffixes (4.51). The difference between these constructions and he+ IXAL+ -e?
(4.16) should be noted: the latter requires IKAL with final 
-o?, and refers to a subsequent (4.3) occurrent; the former 
takes k-IKAL and always -a? or -o?. For other uses of 
he ... -a? (or -o?, or -e?) see 4.5).

Examples of Usage B-2.

15. he ku 'yibal pe:'k'o?. 's'o:k k k'u'qul ti kah. 
There are the dogs barking! We have reached the town.
he ... -o?; k-u 'yib-al, constr. k-IKAL; 'yib, bark, bite;
etymologically, -b is a formative, but the only indication 
of it in Modern Yucatec is that 'yib takes the suffix -al 
instead of -il or -el (3.1); Old Yuc. (Motul dict.) chibal, 
chiiah, chiib. pek', dog. 's'o:k k k'uaf-ul, we have arrived 
(4.15). ti, to. kah, town, village.

16. he kin k'u'bik tef le 'nuuku,la?. Here I deliver to 
you this utensil. he ... -a?; k-in k'ub-ik; k-IKAL constr. 
tef, to you; pron. Class C. 'nuuk-ul, utensil (4.52).

17. he ku jok'ol a wa:'lo?. There is your child crying!
he ... -o?; k-u j-ok'-ol; constr. k-IKAL. a w-al, your 
child (speaking to a woman); cf. Ex. 7.

4.31. Usage B-3, in interrogative sentences. There are in 
many languages, if not in all, at least two kinds of inter-
rogative sentences which are called here disjunctive inter-
rogative and definitive interrogative sentences. In a dis-
junctive interrogative sentence, what is asked is whether
the statement proposed therein is true or false; e.g., 'Are you sick?' Assuming that this question is not rhetorical or facetious, the statement 'You are sick' is there proposed without ascribing any declarative value (4.7) to it. What is asked is what declarative value does the person addressed ascribe to it. Like all interrogative sentences which are not of a rhetorical sort, this can be rendered by an imperative sentence with a verb of 'telling', e.g., 'Tell me whether or not you are sick.' A simple test is that it makes sense to answer 'Yes' or 'No' in reply to a disjunctive interrogative. That is why, for lack of a special term, they are often called "Yes-no questions". It does not make sense so to answer a definitive interrogative. What is asked in a definitive interrogative is that the person addressed specify what is indicated in the sentence by means of what the grammarian calls "interrogative pronouns" and "interrogative adverbs"; e.g., what, which, who, when, where, how, why, etc. Such words or expressions stand for the items whose specification is requested or demanded in the definitive interrogative sentence. The word or expression which in a given sentence performs that office will be said to be an interrogative substitute in the given sentence. The definitive interrogative sentence defines or delimits that which its interrogative substitute stands for, much as a relative clause does with respect to its antecedent. The k-IKAL-constructions perform this definitive office both
in interrogative sentences and in relative clauses; and, as is also the case in other languages, most of the interrogative substitutes serve also as relative pronouns. In interrogative sentences the use of the k-IKAL-constructions is subject to the following limitations: (a) the sentence is definitive interrogative; (b) the occurrent referred to is contemporary-past (4.4, Case 5) or present; (c) the sentence is not a negative interrogative. Since the k-IKAL-constructions are used in negations only in the instances labeled B-4, a negative interrogative sentence requires ma + IKAL (4.24) if the reference is polychronic (4.6), and ma: tan + IKAL (4.14) if the reference is monochronic. On the other hand, the affirmative tan + IKAL (4.14) has not occurred in any definitive interrogative. Where one would expect that construction because the fact that the reference is monochronic, k-IKAL was found.

Examples of Usage B-3.

18. 'baaf ka be:'tik wa:'je? ? What are you doing here? 'baaf, what; from 'baal, 'thing' with suffix -f from Old Yuc. ix; see 4.32. k-
2 be:-t-ik, constr. k-IKAL. wai-e?, here (4.51).

19. 'baaf ku 'juful tetf ? What is happening to you? k-u j-uf-ul, constr. k-IKAL. tetf, to you; pron. Class C.

20. 'baaf ten ka ku'tal ? Why do you sit down? 'baaf ten, why; ten is of very doubtful identification in this
expression; in other expressions, ten signifies 'time'; as, 'three times'; 'occasion'; as, ḭ’en hun ḏ’el te:’ne?, on a certain occasion. It could also have resulted from a slur of tu men, because; in speech of Type A we have found 'baaj' tu men, 'for what reason' as well as 'baaj' ten, why. The slur conjecture is not too far fetched considering that ḭ’o:k in is slurred into ḥ’in, and ku bin u becomes 'kunu. k-a ku(1)-t-al, constr. k-IKAL; cf. kul-en, sit down (imperative).

21. 'baan ten ka 'y’sik le Ḡay k’a:’so? ? Why do you take the worst ones? 'baan ten, why; 'baan is used instead of 'baaj' (cf. Ex. 20) in this expression with an implication of absurdity or perplexity. k-a ḧ’a-ik, constr. k-IKAL. le ... -o?, the. Ḡay, very; in a context in which two or more things are compared its sense is that of the so-called "comparative degree" of European adjectives and the absurdly named "superlative" of English adjectives; e.g., 'taller' when two are compared; 'tallest' when three or more are compared. k’as, bad.

22. 'tuuf ka 'y’sik le 'baals? ? Where do you get this? 'tuuf, where. k-a ḧ’a-ik, constr. k-IKAL. le ... -a?, this. 'baal, thing.

23. 'baahtuj kin bo:`tik teq? ? How much do I pay you? 'baahtuj, X-variant ba’huj, probably from Old Yuc. bay-hun-x, how much; in seventeenth century already slurred: behunx. k-in bo(1)-t-ik, constr. k-IKAL. teq?, you, to you; pron.
Class C.

24. maj tun ku 'kansa,al te:'lo? ? By whom is he taught there? maj, who; from Old Yuc. mak; Old Yuc. and Mod. Yuc. mak, person (cf. note on -J in 4.32). tun, then, so, therefore, etc. (cf. 4.25, Ex. 7). k-u ken-s-aal, passive k-IKAL. te-1-o?, there; te-1-a?, here (4.57).

4.32. *Usage B-4, Negative sentence with mis mak or mis 'baal.* Concerning the instances classed under this heading, all that remains to be said is that no exception has been found to the rule that in references to contemporary (4.4) occurrences, no other than the k-IKAL-constructions have been found with mis mak, nobody, no one, or with mis 'baal, nothing. In these negative expressions, mis comes from the obsolete phrase ma ij, Old Yucatec orthography, ma ix. The two other components, mak and 'baal, signify 'person' and 'thing', respectively. What ij formerly signified in these expressions cannot be inferred from Modern Yucatec usage. Etymologically, ij is the f- of fma, without; and the -J of 'baal, what; bij, how; maj, who; 'tuuj, where; 'baahuj, how much.

Examples of Usage B-4.

25. te:'ne?, k-u t'an, mis 'baal kin wo'klik. "As for me," said he, "I have not stolen anything." ten-e?, 1st. pers. pron. Class C with -e? at the end of a clause or equivalent (4.58). k-u t'an, said he; irregular k-IKAL;
idiomatic expression employed at the end of quoted discourse, or in the midst of it, as in the above instance; t'än, speak, word, language. k-in w-ok-(-0)1-ik, constr. k-IKAL; ok-ol, always with suffix -ol, 'steal'; stem ok unidentified with any other sense than 'enter'.

In case there is no delay, sir, you do not give anything. Context: Answer to the question "How much interest am I to pay you on this loan?" The text from which this sentence was taken is artificial to this extent: Lorenzo Kinil (93 years old) of Chemax, Yucatan spoke as the old folks of the town used to speak when he was young. He had the reputation of being able to do this to the satisfaction of others about as old as he. The only word that is obsolescent in the above sentence is ta:'ta instead of tat, father, sir (talking to one who is not the speaker's father). es-ak, since, it being the case that, in case that (4.37). ma? u jant-al, constr. ma + IKAL (4.24); jant, delay; cf. 4.20; -e? at end of clause (4.52). k-a b'a-ik, constr. k-IKAL.

27. 'jetel k'i:ne? mif mak ku ji'ilik. During the day he did not see anyone. j-et-el, with (4.52). k'in, day, sun; for -e? see 4.33. k-u j-il-ik, constr. k-IKAL.

28. mif 'baal ku 'juful to:'ne? 'jetel yu'koan tu'k'ul k'a'til. Nothing happened to us with the other drinks we ordered. k-u j-u'ul, constr. k-IKAL; u', happen. 'to'ın,
4.33. **Usage B-5, temporal clauses.** In temporal clauses, the k-IKAL-constructions can refer to past, or present, or future occurrences. Their usage is comparable with that of the English participles, as in 'Entering the room, (we saw a strange sight)' or 'Having climbed the hill, (I stopped to rest)'. What they have in common is that the construction, without the aid of such words as 'when' or 'after', indicates that the occurrence mentioned in the temporal clause took place before the occurrence of the one mentioned in the next clause. For example, ku k'u'ul can signify in various contexts 'He arrives (habitually)', or 'He arrived (on several occasions)'; but ku k'u'ul'le, as the first component of a sentence, signifies 'after he arrived (on that occasion)', 'after he arrives (habitually)', or 'after he arrives (at a certain future time)', depending on the rest of the sentence and its context. The temporal clause is in nearly all cases the first component of the sentence. This rule holds also when any construction other than k-IKAL is used in a temporal clause. In only 8 instances out of 1236 was a temporal clause found after another component of the sentence. The first position in the sentence is frequently occupied also by other words and expressions that
specify chronologic position, such as those which signify 'yesterday', 'tomorrow', 'at five o'clock', 'last Saturday', etc. The instances were not counted, but as a rough guess we would say that in at least 75% of the cases expressions of this sort are the first components of the sentence. The temporal clause and many of the other expressions just mentioned end with the suffix -e?, except when -a? or -o? are required by a preceding le, the first component of the demonstrative forms le ... -a? (or -o?, or -e?). It seems pertinent to note that the expression ku 's'o:ko;le?, signifying 'afterward', 'later', 'then', 'nevertheless', is but the verb s'o:k (4.15) in its intransitive k-IKAL-form k-PA V-(a)1 with the suffix -e? required in temporal clauses. Temporal clauses, as well as other time expressions requiring this suffix, have a characteristic intonation, ending with a high pitch (but not necessarily high stress) on the suffix -e?, followed by a brief pause.

Temporal clauses signifying 'As soon as (x occurred)' begin with the demonstrative le. Their construction may be thus indicated: le + k-IKAL + -e?. Likewise, with other than the k-IKAL-constructions, a temporal clause of the form le + (Verbal unit) + -e? asserts that a very brief interval is concerned in the sequence of the two or more occurrants spoken of.

Examples of Usage B-5.

29. ku no'hoq'tal u 'i:ho ma:'ke', ku 'k'atik ti? wa uš tu t'an u 's'o:kol u bel. After a man's son had grown
up, (the father) asked him whether he liked to get married. Context: Description of old customs. k-u noh-ošt-t-al, constr. k-IKAL; noh-ošt', of age, aged, important. u 'i:ho nak, the son of a person; Spanish hijo, son. k-u k'at-ik, constr. k-IKAL; k'at, ask. ti?, to (him). wa, if. us t-u t'añ, to like (otherwise than with respect to what is seen, heard, or tasted); us t-in ti?', I like (what I eat); literally: 'good to my mouth'; us t-a w-iñ, you like (what you see); 'good to your eye'; t'añ, word, speech, speak, etc. u 's'o;k-ol u bé, idiomatic expression for 'to marry'; literally: 'to close up one's affair or transaction'; for s'o:k see 4.15.

30. ku 's'o:k-ol, ku 'ho:p'-ol u han ti'ak't-ik 'jama:nal le nu'ñajo 'k'aJ:o:bo'. After that, they begin to cut (the brush) under the tall woods. Context: Description of agricultural practice. k-u s'o:k-ol, afterward (see explanation above). k-u ho:p'-ol u han ti'ak-t-ik, construction ho:p'+ IKAL (4.17) with ho:p' in its k-IKAL-form; han can be rendered in this context by 'right and left', 'all over', 'throughout'; for the use of such words see 4.50; ti'ak-t, to cut branches off trees, trim bushes, cut undergrowth; ti'ak, without formative -t, to cut by hitting with heavy cutting tool. jen-al, under. le ... -o, the. nuk-uñ, big. k'aJ:o:bo, woods; -o:bo, plural.

31. ku k'u'ul tik'nal u su:kuno:'be', ka ki iñ'kina'hi. After he arrived at his brothers', he bathed. k-u k'u'ul,
32. ku 'jak'a:ta,le? , ka 'naak we:'nel tu k'ab ñe".
When night came, he got on the branches of a tree to sleep.
Context: reference to a single occasion. k-u j-ak'a(b)-t'-al, constr. k-IKAL; 'for night to come'; 'ak'ab, night; probable etymologic analysis: ak'-ab, darkness, blackness, if ak' is cognate with ek', as it seems probable; for -ab with nouns see 3.38. ka, untranslatable in this context (4.42). 'naak, went up, climbed; intrans. AHAB-constr. (4.9). wen-el, sleep (3.50). t-u k'ab, to the branch of; fusion of ti and pron. u. ñe', tree.

33. ku pati'ke?, ka tu tak'an'kuntah. After he shaped it he baked it. Context: reference to a single occasion on which a shaman made an a'luø (a kind of sprite) out of clay. k-u pat-ik, constr. k-IKAL; 'shape clay with hands (as when making pottery)'. ka (4.62). t-u tak'-an-kun-t'-ah, trans. AHAB-constr.; tak', stick (as with glue); tak'-an, stuck (4.53);
tak'-en-kun-s (or -t); bake, ripen. For formatives -kun-t, see 3.33.

34. kin k'uťul'e?', ka tìn 'nombre'tah ka: tul 'kanabom, bao:b.
After I arrived, I appointed two rocket-guards (i.e., two men whose duty is to warn the workers of the approach of an enemy by firing a sky-rocket). k-in k'uť-ul, constr. k-IKAL.
ka (4.6). t-in nombre-t-ah, AHAB-constr. with Spanish verb nombrear; see 4.10, Exx. 28-31. ka:, two. tul, classifier for animate. kan-aq-bomba-o:b; kan, take care of; kan-an, guard; Spanish bomba, 'bomb', local Spanish for 'sky-rocket' instead of cohete; o:b, plural.

35. le ku k'uťul'e? ka t'an tu hol na. As soon as you arrive, knock at the door. le ... -e', in temporal clause; see above explanations; k-u k'uť-ul, constr. k-IKAL; 'arrive'.
ka (4.6). t'an, speak, call; now used like Spanish llamar a la puerta, knock at door. t-u for ti u; u hol na, the door of the house; hol, hole, opening.

36. le ku 'ts'okol u 'ts'utik le 'tsama,lo', ku ts'e:'bal le sa: u:'k'o'. As soon as they may have smoked the cigarettes, they will be given the atol to drink. le ... -o', in temporal clause for 'as soon as'; see above explanations. k-u ts'o:k-ol u ts'unb'-ik, constr. ts'o:k + IKAL (4.15) with ts'o:k in the k-IKAL-form. ts'andal, cigarette. k-u ts'a-ep-al, passive constr. k-IKAL; irregular passive of ts'a, give. le ... -o', the. na?, atol, corn gruel. uk', drink; NULLAK-constr. for service or aim (4.41).
4.34. **Usage B-6, relative clauses.** So far as our texts show, the construction of the Yucatec relative clause differs from that of any main clause or sentence only in three respects:

(a) after the antecedents maj, who, and 'baaj, what, that which, the pronouns of Class A of the IKAL and of other constructions are omitted (cf. 4.31); (b) the first component of the relative clause is always its verbal unit; (c) construction tan + IKAL (4.14) is not used as the verbal unit of the relative clause, except in its negative form: ma: tan + IKAL. The monochronic references that would be made by tan + IKAL, if it were used in relative clauses, are taken care of by the k-IKAL-constructions, in addition to their usual service in polychronic references (Usage A, 4.28). On the other hand, since k-IKAL is used in negations only after maj mak and maj 'baal (4.32), negative relative clauses make use of ma + IKAL (4.24) and ma: tan + IKAL (4.14) for polychronic and monochronic references, respectively.

It should be noted that the IKAL, and not the k-IKAL-constructions, are used in relative clauses with the verbs that do not take construction tan + IKAL. Some of these are mentioned in 4.25, instances of Kind B. Others are verbs signifying 'to belong', as 'ti'al (4.23); 'to have' or 'to be at a place', as jan; 'to be in a certain position', as buluk'bal, 'be seated'; 'laan,'lie'; 'to cease', as 'y'enel; 'to rest', as 'heelel. These are the most common, but not the only ones.
Examples of Usage B-6.

37. le 'tsimin ku 'ja:alal ti'o? hat$ 'tai,tak u 'kimil. The horse of which they spoke to him was about to die. le ... -o? the; the noun and the relative clause that delimits it are placed between the two components of this demonstrative form in all cases. 'tsimin or 'tsi:'min, 'horse', old word for 'tapir'. k-u j-al-al, constr. k-IKAL; al, say, tell, speak of. ti, to (him). hat$, very. 'tai,tak (of undetermined composition), 'nearly, almost'. u kim-il, IKAL (4.20); kim, die.

38. ti? jan ka: p'el tu:'nit$ ku 'he$t'ku,ba, ku 'weehel u k'a'k'il. There are there two stones that bump against each other and emit fire. ti? j-an, there is, there are, (at the place mentioned); for jan see 4.61. ka: p'el, numeral 'two' and classifier. tun-it$, stone; for it$ see 3.40. k-u he$'(i)k-u-ba, constr. k-IKAL; u-ba, himself, themselves, one another (2.6). k-u weh-el, passive k-IKAL; weh, spread; i.e., the fire is spread by the bumping. u k'ak'-il, the fire of, from the stones; for -il see 4.60.

39. hat$ nahr le 'baal kin 'wa:lik te:'fo? What I am telling you is quite true. hat$, very. hah, true, be true. le ... -o?, see note on Ex. 37. 'baal, thing. k-in v-al-ik, constr. k-IKAL. te'$', 2nd. pers. sing. pron. Class C.

40. 'kit$-pam le jif'up kin wili'ko?. The woman I am looking at is beautiful. kit$-pam, beautiful, be beautiful; said
of female; kitj-ko'lem, handsome (male); both expressions of undetermined composition. le ... -o', as in Exx. 37, 39. j-γ'up, woman. k-in w-il-ik, constr. k-IKAL; 'see'.

4.35. **Usage B-7, conditional sentences.** The k-IKAL-constructions occur in some protases and in some apodoses of conditional sentences. When a k-IKAL-construction occurs in the protasis, the following has been found to be true concerning the reference made therein: (a) An undetermined declarative value (4.7) is ascribed to the protasis. (b) The reference is polychronic or monochronic. (c) The occurrent can be past, present, or future. (d) If it is past, it is past-contemporary. For other than past-contemporary (4.4, Case 5), other constructions are required (4.44). (e) The protasis is not negative. As in other cases, an affirmative k-IKAL corresponds to a negative ma + IKAL (4.24) or ma: tan + IKAL (4.14). Protases satisfying those five conditions are roughly as follows:

If $x$ was true at that time (then $y$ was, is, or will be, true)
If $x$ is true now (then $y$ is, or will be, true)
If $x$ occurs in the future (then $y$ will occur after $x$ occurs)

In the apodosis of a conditional sentence whose protasis is as above specified, a k-IKAL-construction is used for any declarative modality other than improbability. This point and others pertaining to the structure of conditional sentences are dealt with more
specifically in 4.44. In conformity with the preceding specifications, some conditional sentences have a k-IKAL-construction both in the protasis and in the apodosis.

Examples of Usage B-7.

41. wa ku 'pak'a,le», ma: tan u bin ti kah. If he was planting, he will not go to town. wa, if. k-u pak'-al, constr. k-IKAL; -e" at end of clause (4.58). ma: tan u bin, irregular tan + IKAL (4.14) with bin, go (4.56). ti, to. kah, town, village.

42. wa ka be:'tik tu ka: te:'ne?, kin 'p'at,ke$' hun pu'li. If you do it again, I will leave you forever. k-a be:-t-ik, constr. k-IKAL. t-u ka: ten, for the second time; ka:, two. k-in p'at-(i)k-e$, constr. k-IKAL with 2nd. pers. sing. pron. -e$ of Class B. hun pul-i, completely, forever; literally: 'one throw'.

43. wa kin bin sa'ki? 'sa:ma,le?, kin ta'sik te$ ya'mal. If I go to Valladolid tomorrow, I'll bring you cigarettes. k-in bin, irregular k-IKAL; bin, go. sa'ki?, native name of the city of Valladolid, Yucatan. 'samal, tomorrow. k-in ta(l)-s-ik, constr. k-IKAL. te$, to you.

4.36. Usage B-8, imperative sentences. The k-IKAL-constructions occur in affirmative imperative sentences in at least four kinds of instances: (a) In compound imperative sentences, after the first of the clauses of which the sentence is composed; for example, as in the equivalent of this English sentence: '(Go
to his house), and tell him (I am waiting for him)'. (b) After
previous imperative sentences, as, for example, when giving
instructions for the performance of a task. (c) For topical
distinction of some constituent of the imperative sentence;
in which case, the reference to the dominant topic precedes
the k-IKAL-construction. These are frequently polite requests
or recommendations. (d) When offering help; e.g., 'If you need
me, call me'. In these four kinds of instances, and particu-
larly in the third, one finds now and then a simple IKAL
instead of a k-IKAL-construction. I have not discovered
what distinction is made, if any, by the choice of either
construction in these cases.

Examples of Usage B-8.
44. 'kaJite?, ka ta'sik ten. Look for it and bring it to
me. kaj-t-e?, look for it; NULLAK-constr., transitive im-
perative (4.37). k-a te(l)-s-ik, constr. k-IKAL. ten, to
me, I; pron. Class C.
45. ka 'ts'aiik ha? u 'jiifin-te?. (And) give him water
that he may bathe. Context: The preceding sentence ordered
'Take this soap to him'. k-a ts-aiik, constr. k-IKAL. ha?,
water. u j-iif-in-te?, NULLAK-constr. (4.41); 'bathe',
see Ex. 31.
46. ti? ka 'yun'kee,fi. There is where you must start (or
'There is where I am telling you to start'). ti?, there (at
the place just mentioned). k-a 'yun-(i)ke::fi, constr. k-IKAL;
'yun, begin, origin; a ... -e::fi, 2nd. pers. plur. For -i see 4.59.
47. ka ka:n'le? ka 't'ani,ken. When you get tired, call me. k-a kan-(a)l-e??, when you get tired; k-IKAL in temporal clause (4.33). k-a t'an-ik-en, constr. k-IKAL with 1st. pers. pron. -en, me, of Class B.

48. jaf ti le no'hoj ta:'ta a jfunke:'fo?. You must attend first to the venerable gentleman. jaf, first. ti, to. le ... -o?, the. noh-oj, aged, important. ta:'ta, sir (see note on Ex. 26). a jfun-(i)k-e:, IKAL-constr. instead of k-IKAL; see explanations above; jfun, begin (begin first with the venerable gentleman; serving the drinks in a ceremony in old times).

49. in ts'ul'il, te a k'op'tal. My master, just snuggle up in there. in ts'ul-il, my master; see note on Ex. 2; in this case a cat talks to his master. te, there. a k'op-t-al, IKAL-constr. instead of k-IKAL:
USES OF THE NULLAK-CONSTRUCTIONS

4.37. Before entering upon the discussion of the uses of these constructions, it may be helpful to summarize their structural characteristics. The constructions referred to by the label 'NULLAK' are as follows:

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<tr>
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<th>ka-Forms</th>
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<tr>
<td>TRANSITIVE</td>
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<tr>
<td>Null-Variants</td>
<td>ka PA V-(null)</td>
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<tr>
<td>e-Variants</td>
<td>ka PA V-e</td>
<td>PA V-e</td>
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<td>INTRANSITIVE</td>
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<td>ka V-(a)k-PB</td>
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<td>PASSIVE</td>
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<td>ka V-(aa)k-PB</td>
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The e-Variants are used whenever both of these statements are true: (a) No suffix other than -e is affixed to the verb stem; (b) the transitive NULLAK-construction is the last or only word of a clause or a sentence. In all other cases, the transitive NULLAK-construction has no distinctive affix. When the subject of the (No ka PA)-Form is a 2nd. pers. plur., the suffix -e:j of the pronominal form a ... -e:j is required, but the a of the pronominal form is omitted. Thus, the (No ka PA)-Forms of the verb t'a, to give, are: t'a, 't'a:e, 't'a:e:j. The distinctive suffix of the intransitive is -ak, -ek, -ik, -ok, -uk, or, with elided vowel, -k. The vowel of the suffix is frequently elided when another suffix follows, particularly in speech of Type B. When the verb stem is simple (3.1), the vowel of the distinctive suffix is the same as that of
the stem; e.g., naa'-ak, ascend; em-ek, descend; j(1)-ik, go, move on; hok'-ok, go out; lub-uk, fall. Composite stems
(3. | ) and some irregular verbs require -ak; e.g., iy'-ki-n-ak, bathe; bik-ba-n-ak, converse, chat; uk'-u(1)-n-ak, drink
(in intransitive usage); fol-ak, kneel; y'il-ak, lie down. These rules hold also for the passive, except that in the
passive construction, -aak is commonly used instead of -ak when the composite stem consists of only one syllable; e.g.,
ta(l)-s-aak, bring; bi(n)-s-aak, take from one place to another; hok'-s-aak or ho?-s-aak, take out, bring out. A
second difference between the passive and the intransitive forms is that in the former the vowel of a simple stem is
generally doubled if the main stress is on it, and the verbal unit consists only of the stem and the distinctive suf-
fix of the NULLAK-construction; e.g., the NULLAK passive of
man, 'buy', is 'maan-ak'; 'press liquid out by twisting'
gives 'j'eet'-ek; t'oh, 'pour out', gives 't'ooh-ok; k'ub,
'deliver', 'k'ub-uk. There are, however, many exceptional
formations of the passive construction. In some sentences,
the only indication of the passive use of a verb is the cir-
cumstance that the verb is used transitively whenever other
than a NULLAK-construction is required. For example, t'ab,
to light (a candle) to set on fire, was 't'abak in 6 instances
in which there was conclusive evidence that the construction
was passive. In these and in 43 other cases, the form for
the passive usage was exactly like that of an intransitive verb. The verbs found in these 49 instances occurred in all other cases with transitive construction. This lack of constructional differentiation between intransitive and passive NULLAK-forms seems to be due to changes which have taken place chiefly within the Modern Yucatec period. Formerly, the passive of some verbs required two suffixes: -ab (4.10) followed by -ak; e.g., the passive of han-t, 'to eat (that which is referred to)' was han-t-ab-ak. This form of han-t occurred twice in texts from British Honduras, and once in a text dictated by Lorenzo Kinil of Chemax, Yucatan, born in 1837. That way of forming the passive is still prevalent with stems ending in a. Thus, the passive of ts'a, 'give', 'put', is commonly ts'aabak; and that of ḥ'a, 'fetch', 'get', ḥ'aabak. But instead of the obsolete or obsolescent ḥantaabak, we find now ḥantaak. The fusion of ka with the pronouns of the transitive forms was commented upon in 4.27. It should be noted that, since there is no pronoun of Class B, for the 3rd. pers. sing., the intransitive and the passive 3rd. sing. NULLAK-form is simply the verb stem with one of the distinctive suffixes -ak, -ek, etc. Exceptional uses of -ak instead of -ek, -ik, etc. are dealt with in 4.47 and 4.48.

The uses of the NULLAK-constructions are not as diverse as those of the IKAL and k-IKAL constructions already dealt with; nevertheless, it is not feasible to formulate verifiable gene-
realizations without dividing their uses into several classes. Conforming to precedent, one could say, for example, that we are dealing here with the subjunctive mode of the Yucatec verb. If that is all that would be said about it, the vagueness of the statement would be roughly proportional to each reader's acquaintance with the variety of uses of the devices that have been classed as subjunctive modes in the grammars of the classical languages, and in those of the modern languages of literate and illiterate peoples. To reduce the vagueness of the statement, one would have to specify the rules that govern the use of the Yucatec subjunctive; which would obviously necessitate a division of the uses of the devices in question into classes, just as we have had to do in these pages. The number of divisions would naturally vary according to the preference of the investigator and the extent to which the description would be superficial or would deal with details; but it does not follow that calling the device by a familiar name, or not, would necessarily have something to do with the extent of this variation. By not using a familiar name, at least one advantage can be derived; namely, if a reader decides that this is obviously a subjunctive mode, he can simply substitute the expression 'subjunctive mode' for our expression 'NULLAK-constructions'. Another reader can make whatever other substitution he prefers, if he decides that this is not a subjunctive. This entails the inconvenience of
translating our expression in all the instances in which it occurs, but to a linguist that should be a matter of negligible concern. This inconvenience may be compensated by the freedom allowed to each expert in the use of the current grammatical terminology to apply grammatical terms as he deems proper.

In the majority of instances in which the NULLAK-constructions occurred in the texts, they served to refer to subsequent occurrences (4.3), especially to discrete-future and subsequent-past occurrences (4.4, Cases 3 and 6). This is true if we consider that all imperative sentences refer to future occurrences; for whenever an individual tells another to do something, he obviously commands or requests that he do so at a time subsequent to that occupied by his imperative communication, however immediate that time may be. The same holds for the use of the NULLAK-constructions in the references we have termed 'projective' (4.23); for the occurring aimed at must inevitably be subsequent to at least the beginning of that which is done in order to accomplish the aim. In the majority of the instances in which the NULLAK-constructions do not refer to subsequent occurrences, what is referred to is a non-particular referent. Thus, in temporal clauses, they occur in references to any one of the occasions on which something is said to take place; and in relative clauses the antecedent is whoever or whatever may be involved in the reference, and not this or that particular person or non-person. These generalizations are, of course, insufficient to delimit the uses of these con-
structions; especially since it is the case that references to subsequent occurments are made also by means of other constructions, some of which have already been dealt with (4.12, 4.14, 4.16, 4.18, 4.19, 4.21, 4.23, 4.24, 4.35, 4.36). In order to give less inadequate specifications, the uses of the NULLAK-constructions will be divided into classes and subclasses of instances treated under the following headings:

A. Affirmative imperative sentences.
B. Reported imperative utterances.
C. After verbs of wishing or needing.
D. Projective references.
E. Construction bin + NULLAK.
F. Negative imperative with bik or mik.
G. Conditional sentences.
H. References to non-particular referents.
I. Temporal clauses.
J. After certain verbs.
K. Intransitive V-(a)k in references to prior occurments.
L. Suffix -(a)k in references to contemporary occurments.

4.38. Usage A, affirmative imperative sentences. All the forms of the NULLAK-constructions are used in affirmative imperative sentences. The use of each of the forms depends on the circumstances indicated in the following tabulation:
SECOND PERSON

First or only component  Preceded component
Transitive  1. V-(null) (-e) (-e:\)
Intransitive  2. (None)

THIRD PERSON AND NON-PARTICULAR SECOND PERSON

First or only component  Preceded component
Transitive  3. ka u V-(null) (-e)
Intransitive  4. V-(a)k
Passive  5. ka V-(aa)k

The above headings are to be understood as follows: Under Second Person we class the instances in which the speaker tells the person or persons addressed to do what his imperative utterance specifies. Third Person: the speaker commands or requests that one or more of the persons other than the one or ones addressed do what his utterance specifies. Non-particular Second Person: the speaker commands or requests that one or more of the persons addressed do what he indicates, but he does not specify who among those addressed is to carry out his orders or comply with his request; e.g., 'One of you go and fetch some wood'. First or only component: the NULLAK-construction is not preceded by any component of the sentence, excepting the two specified below. Preceded component: some component other than the two specified below precedes the NULLAK-construction. The preceding component can be another imperative utterance in a compound imperative sentence; as in '(Go to his house) and tell him I am waiting for him'. The two exceptional components referred to above are the word yan and a vocative(e.g., 'Boys, come here'). The
word यान, which in other contexts signifies 'little', 'small', is used before the verbal unit in invitations, kind requests, and the like, with some vague sense perhaps similar to that of the word 'just' in English in such sentences as 'Just make yourself at home'. Position 2 in the above tabulation cannot be occupied by any NULLAK-construction. The intransitive imperative in that case requires construction V-en (4.57). The uses of the Null-Forms and the e-Forms of the transitive are governed by the rules stated above (4.37). In Position 2a, suffix -FB is either -ey (singular) or -ej (plural), since in this case -FB is always a 2nd. pers. pronoun. In 4, 4a, and 5, -FB is a null-sign. For the sake of simplicity, this null-sign was not indicated by writing '-FB'. If elucidation on this point is needed, see 1.5. By using a NULLAK-construction in Positions 1a and 2a instead of a k-IKAL-construction as specified in 4.36, a distinction seems to be made: in most of the cases, the imperative communications employing the NULLAK-constructions were not imperious orders, and were frequently petitions soliciting favors; whereas authoritative or imperious orders occurred frequently with the k-IKAL-constructions. This does not hold, or we have no evidence that it holds, in approximately 16% of the instances in which the NULLAK-constructions were preceded components, and in 27% of the instances in which the k-IKAL-constructions were so used.
There were exceptions to the rule that for the 3rd. pers. intransitive imperative (Position 4) the (No ka)-Forms are used. Instances with ka occurred mainly in speech of Type A. In this speech-type, the exceptions constitute 13% of the total number of instances pertaining to Position 4 in the above tabulation. Incidentally, the exceptions conform to the examples of third person imperative found in various grammars written in previous centuries, and also in Lopez Otero's grammar (1914).

In the explanations of the following examples, the classification of the construction and its usage will be indicated thus: 'Usage A(1)', 'Usage A(2a)', etc.; 'A' being the label for the use of the NULLAK-construction in affirmative imperative sentences, and the figures and small letters in parentheses refer to the positions in the above tabulation.

1. uk' hun p'it ha?. Drink a little water. uk', drink; Usage A(1). hun, one; not followed by a numerical classifier when a word designating quantity follows (perhaps such words should be placed in the class of numerical classifiers). p'it, a small quantity of. ha?, water.

2. 'b'ae:s' le 'ha:na;lo? 'jetel wa;hil. Give (him) the cooked food and some tortillas. b'a-es'; Usage A(1), plural; b'a, give. le ... -o?, the, that. han-al, cooked food; han, eat; for -al see 4.52. wah, tortilla, the native corn bread; for -il in non-particular reference see 4.62. j-et-el, with,
and (4.52).

3. ḥ’a hun kutf si’, ka a bis tu jo’totf. Fetch a load of firewood, and take it to her home. ḥ’a, fetch; Usage A(1). hun kutf, one load; cf. Ex. 1. si’, firewood. ka a bi(n)-s, Usage A(1a); bin, go; bis, take to or away from a place. t-u, fusion of ti, to, and pron. u. u j-o’t-o’y, her home; ot-o’y, the house one lives in and owns; for formative -o’y see 3.40.

4. ka u bu’kint u no’k’o:b. (I order that) they put on their clothes. ka u buk-in-t; Usage A(3); buk, formerly ‘clothing’ (Old Yuc. buc); now always with formatives -in-t (3.11 and 3.16), ‘put on (clothes)’. u nok’-o:b, their clothes; u ... -o:b, 3rd pers. plur. pron. Class A.

5. ka u tes kan t’it kib. (I recommend that) he bring four candles. ka u tes, Usage A(3); tal-s, bring; tal, come. kan, four. t’it, numerical classifier for candles, rods, poles, rifles, and similar objects. kib, candle.

6. ‘hok’ok hun tu’le:f, ka ‘jiik ‘taan-il. One of you come out and walk ahead. ‘hok’ok, Usage A(4); ‘hok’, come out, go out. tul-c:f, numerical classifier for animate referent, with 2nd pers. plur. suffix -e:f (4.68). ka ‘f(i)-ik, Usage A(4a); f or fi, irregular verb for ‘go’, ‘walk’, ‘move on’. taan-il, ahead; taan, in front.

7. ka ‘t’abak u ki’bil. Let the candles be lit. ka t’ab-sak, passive, Usage A(5); t’ab, light candles, cigarettes, torches, etc. u kib-il, the candles of (those who have brought one or
more a piece); for -il see 4.60.

8. keʃ ha? ka a wu'k'e. Drink at least (some) water.
keʃ, at least. ka a w-uk'-e, Usage A(1a); uk', drink.

9. ku man a su'ku,ne?, ka 'ʃiiketʃ tu paʃ. When your
brother will go by, follow him. k-u man, irregular k-IKAL-
construction; man, pass, go by a place. a su'kun, your el-
der brother; -e?, end of temporal clause (4.33). ka f(i)-ik-etʃ,
Usage A(2a); if this were not a preceded component, Jen would
be used instead of ka. 'ʃiiketʃ; e.g., Jen tu paʃ, go behind
him, follow him. t-u paʃ, to his back, behind him.

4.39. Usage B, ka-Forms, reported imperative utterances. It
may be obvious that the statement 'He told me to do it' is a
report of a communication which was made by means of an impera-
tive sentence or its equivalent. Every imperative communication
can be reported by means of a declarative sentence with a verb
of telling, ordering, requesting, begging etc.; the choice of
each of these verbs depends on the degree of imperiousness,
urge, or solicitude, indicated by the wording of the reported
imperative sentence or expression, and the way it was uttered;
provided, of course, that the report takes adequate account
of this phase of the imperative utterance. The verbs al, 'say',
tell', and t'an, 'speak', 'address' (and various other senses),
were the only ones used in the texts to signify that an impera-
tive utterance is reported. The ka-Forms of the NULLAK-con-
structions are required in the reported utterance. Examples:

10. ka tu 'ja:lah to:'ne? ka k uk' le 'ha,o'. And he told us to drink the water. t-u j-al-ah, AHAB-constr. (4.9), 'he told'. to:n, us; pron. Class C. -e at end of the clause (4.58). ka k uk', NULLAK-constr.; uk', drink. le ha(η)-o, the water.

11. ka 'a:lab ti* ka o'kok u 'heelsu,ba. And he was told to go in and rest. al-ab, passive AHAB (4.10); ti*, to him (literally: 'it was told to him'; see explanation in 4.10). ka ok-ok, NULLAK-constr.; ok, enter. u heel-s-u-ba, transitive (reflexive) NULLAK, Usage D, 4.41; heel-el, intransitive, and heel-s with reflexive suffixes, are both used for 'to rest'; for formative -s see 3.25; u-ba, himself (2.7).

12. 'jetel tu 'lakal in puk'siik'al kin 't'ankeyf ka 'nas'a,ba tin wik'nal. I am telling you in earnest to approach me. Literally: With all my heart I speak (telling you to ...). j-et-el, with (4.32). t-u lak-al (4.32), all. in puk'siik'al (or 'puksi,k'al), my heart; analysis of puk'siik'al uncertain. k-in t'an-(i)k-eyj, construction k-IKAL, Usage B-1, 4.29; with direct object -eyj, 2nd. pers. pron. Class B. ka(α) nats'-a-ba, constr. NULLAK; nats', near, approach; -a-ba, yourself; see Ex. 11: for fusion of ka and a see 4.27.

13. ka 'a:lab 'tio:,be' ka 'si:na,ko:b. And they were told to fetch firewood. al-ab, passive AHAB (4.10); al, tell.
ti-o:b, to them (2.6); -e? at end of clause (4.58). ka si(?)-n-ak-o:b, constr. NULLAK; si?, firewood; with formative -n (3.24) 'to fetch firewood'; -o:b, 3rd pers. plur. pron.

Class B.

14. ku k'u;si'ke?, ku 'ja:lik ka be:'taak u han'ilil. When he arrives with (what he brings), he orders that his meal be prepared. k-u k'u(?)-2-ik-e?, constr. k-IKAL in temporal clause (4.33); k'u?, arrive; with formative -2 'to arrive with that which is brought' (literally: to cause the thing to get to the place; like tal, come, ta(1)-s, to bring; bin, go, bi(n)-s, take from one place to another). k-u j-al-ik, constr. k-IKAL, Usage A, 4.38. ka be:-t-saak, passive NULLAK; be:-t, make, do; from Old Yuc. bel-t-ik, which accounts for the suffix having a instead of e like the stem, as explained in 4.37. u han-(a)1-il, his meal, cooked food; han, eat; for -al-il see 4.52.

4.40. Usage C, after verbs of wishing and needing. Usage C was observed in clauses subordinate to the following verbs: k'at and olt, both signifying 'to desire'; 's'ibolt, wish, would or should like to; k'a'bet and t[a'?], to be necessary, to be required. With the sense of 'to desire', k'at is a defective verb (3.56). For the constructions that are not permissible with k'at, and for the sense of 'to be willing', olt is used. Its components are: ol, mind, will, and
various vague senses of that sort; -t, formative (3.26).
The components of 't'sibolt are t'sib, to draw pictures, write;
ool and -t as above. k'a'bet has already been mentioned (4.20)
in connection with the IKAL-constructions. It is used with
the NULLAK-constructions mainly for needs whose satisfaction
is problematic, or unexpected. In clauses subordinate to these
verbs, one observes the use of all the ka-Forms, the transitive
(No ka)-Forms, and the intransitive V-(a)l construction (4.5.2).
The use of one or another of these constructions depends on
whether the verb is transitive or not, and upon whether the
subject of the main verb is the same as that of the subordinate
clause. Thus:

<table>
<thead>
<tr>
<th>SAME SUBJECT</th>
<th>DIFFERENT SUBJECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitive</td>
<td>Intransitive</td>
</tr>
<tr>
<td>(No ka)-Forms</td>
<td>V-(a)l</td>
</tr>
</tbody>
</table>

Examples with han, eat (intrans.) and han-t, eat (trans.)

1. in k'at in 'han,te, I want to eat it.
2. in k'at ha'nal, I want to eat.
3. in k'at ka u 'han,te, I want him to eat it.
   in k'at ka 'hanak, I want him to eat.
   in k'at ka han'taak, I want it to be eaten.

Since both k'a'bet and tsa? are used impersonally, the subjects of
their subordinate clauses are never the same as those of the main
verb; for what these verbs signify is that the occurrent to which
the subordinate clause refers is necessary; as in the English
'It is necessary that ...'. No instance of a passive with the
same subject as that of the main clause has occurred in the texts.
In notes out of context several instances were recorded, but
their reliability is unknown, since they are translations of
Spanish sentences.

There were two kinds of exceptions to the rule that the
(No ka)-Forms of the NULLAK-constructions are used for transi-
tive with the same subject: (a) in 6% of the instances, a ka-Form
was used; and (b) in 9%, a k-IKAL-construction (4.27) was used.
These exceptions have approximately the same distribution in
speech of Type A and Type B. The instances are too few to
draw any conclusion as to whether or not any communicational
distinction is made by the use of these less frequent construc-
tions.

Although construction V-(a)l is not a NULLAK-construction,
it seems desirable that its special use after verbs of wishing
be illustrated together with those of the NULLAK-constructions.
Pertinent examples with both kinds of constructions follow:
15. in k'at ka u tas wa: 'je? . I want him to bring it
here. ka u ta(l)-s, constr. NULLAK; ta(l)-s, bring. wai-e?,
here ( 4.51 ).
16. ma? u k'at ka in be:t be:'jo? . He does not want
me to do it that way. ka in be:-t, constr. NULLAK; be:-t,
do or make. bei-o?, thus; with demonstrative suffix -o?
( 4.51 ).
17.  haf' kin 'ts'ibol,tik 'hok',ol. I am very anxious to get out. haf', very, very much. k-in ts'ib-ol-t-ik, construction k-IKAL, Usage B-l (4.29). hok'-ol, construction V-(a)l; hok', go out, come out.

18. ma? in k'at 'naaka,li. I do not want to go up. 'naak-al-i, construction V-(a)l; naak, go up, come up; for the use of -i in negative sentences see 4.59.

19. ma tu 'joltsh 'oko,li. He did not wish to come in.

20. bei kin 'ts'ibol,tik in kan te:'no'. That is the way I wish I would learn. bei ... -o?, that way; for -o? as a component of this form and its separation from bei as in the forms le ... -a?, le ... -e?, see (4.59). k-in ts'ib-ol-t-ik, constr. k-IKAL, Usage B-l, 4.29. in kan, transitive NULLAK:

ten, 1st. pers. pron. Class C.

21. le:'ti:o: be', u k'at u be:t te:j lo:b. They want to do you harm. le-ti:o:-b-e', they; with -e' followed by a pause, 'as for them'; makes the reference to the persons a special topic in question. u k'at, he wants; since a preceding word indicates plurality, 'they want' in this context; for the conjugation of k'at with this sense see 3.56. u be:t, transitive NULLAK; be:-t, do, make. te:j, 2nd. pers. plur. Class C. lo:b, harm, evil.

22. ma 'sa? ke 'hok/en beh'la,e'. It is not necessary that
I go out now. ka hok'-en, intransitive NULLAK; hok', go out; en, 1st. pers. pron. Class B. beh'la?, now, today; possible etymologic analysis: bei-he-la*?; bei, thus; he (4.51); la?, Old Yuc. demonstrative; now, 'he:la?, here it is; more like French voici; for -e? in this case see 3.6.

23. a k'at ka in t's'a tef? Do you want me to give it to you? ka in t's'a, trans. NULLAK; t's'a, give. tef?, 2nd. pers. sing. pron. Class C.

24. ma? in k'at ka k'o'haan-tafke:;f'1?. I do not want you to get sick. ka k'o'haan-ya-h-(a)k-etí'-i', intransitive NULLAK; the analysis of k'o'haan, sick, be sick, may be k'oh-aan or k'o-h-aan; there is evidence that -aan is the suffix dealt with in 4.53, but there is no ground for the delimitation of the other component or components; for ya-h, signifying 'to become' see 3.27; -etí', 2nd. pers. pron. Class B; for -i or -i? at the end of a negative sentence see 4.57.

25. u k'at ka 'ja:na,ken te:ló?. He wants me to be there. ka j-an-ak-en, intransitive NULLAK; j-an, to be at a place, to exist, etc.; irregular use of prefix j- with this verb (4.61). te:ló?, there; etymologic analysis: te?... lo? where te? refers to a location and Old Yuc. demonstrative lo? specifies that the location is not near the speaker.

26. u k'at ka ta'saak wa'je?. He wants that it be brought here. ka ta(1)-s-aak, passive NULLAK; te(1)-s, bring. wai-e?, here (4.51).
27. 'toone? ma k k'at ka kin'aaake\,\,etf. We did not want you to be killed. to:n-e? we, as for ourselves, so far as we are concerned; see Ex. 21. ka kim-s-aa\-k-ey-i?, passive NULLAK; kim, die; kim-s, with change of m to n before formative -s (1.3), 'kill'; ey, 2nd. pers. sing. pron. Class B; for -i? at the end of a negative sentence see 4.59.

4.41. Usage D, projective references. The statements made in 4.23 concerning projective references are here supplemented by a few observations on the 817 instances in which the NULLAK-constructions were used in such references. It was said there that the NULLAK-constructions were used in projective references in three ways: (a) with tu 'joyal, (b) with u 'tial, and (c) without either of those two signs. When neither of those two signs are used, it was agreed to say that the sign of the projective reference is a constructional sign.

With respect to the forms of the NULLAK-constructions used in those references, it was observed that in the transitive both the ka-Forms and the (No ka)-Forms were used; but for the intransitive and the passive the ka-Forms were the only ones employed. As shown in 4.40, that was also the order found in the uses of those forms after verbs of wishing.

When we dealt with the uses of the IKAL-constructions in projective references (4.23), we mentioned the difficulties
met with in the attempt to discover what rules govern the use of tu 'jo'ral and u 'ti'val as signs of projective reference. We contend here with the same difficulties, and in addition we are confronted with the question of what determines the use of the constructional sign. The distribution of the 817 instances with respect to the use of those three signs of projective reference, and with respect to whether the form of the NULLAK-construction is transitive, intransitive, or passive, is as follows:

<table>
<thead>
<tr>
<th></th>
<th>Trans.</th>
<th>Intr.</th>
<th>Pass.</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>tu 'jo'ral</td>
<td>15</td>
<td>14</td>
<td>12</td>
<td>41</td>
</tr>
<tr>
<td>u 'ti'val</td>
<td>241</td>
<td>23</td>
<td>32</td>
<td>296</td>
</tr>
<tr>
<td>Constr. sign</td>
<td>420</td>
<td>60</td>
<td>0</td>
<td>480</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>676</td>
<td>97</td>
<td>44</td>
<td>817</td>
</tr>
</tbody>
</table>

It is seen that there was no instance of the passive with constructional sign. But, in view of the complexity of the whole question, it seems unwarranted to formulate a rule on the basis of only 44 instances. For reasons of the same sort, every generalization that could be made concerning the transitive and the intransitive passive would be of unknown validity, particularly since there were exceptions to every rule we attempted to formulate.

An inquiry into the 676 instances of transitive construction led to the observation that after verbs signifying locomotion or transference of tangible objects the projective reference was made most frequently by means of the constructional sign
with the (No ka)-Forms when the subjects of the two clauses referred to the same person or persons. The communication in this special group of instances is of this sort: 'I went to his house to notify him', 'They brought it here to show it to you'. Other constructions occurred when the subjects of the two clauses did not refer to the same persons or agencies, as in 'They brought it here so that you could take care of it'. In order to obtain a fairly precise delimitation of this group of instances, we dealt only with 13 verbs, and only with the instances in which these verbs signified motion from one place to another, or transference of tangible objects from one place to another. The 13 verbs are: bin, go; tal, come; ok, enter; hok', pass from the inside to the outside of; man, pass by a place, or walk about in unspecified direction; 'naak, climb, get on top of; em, move downward; and the transitive verbs formed by affixing the formative -s to some of the preceding with the required phonologic modification, as bis, take, carry away (transfer by going); tas, bring (transfer by coming); oks, transfer inward; hok's, transfer outward; 'naaks, transfer upward; em's, transfer downward. The total number of instances in which those 13 verbs preceded a projective reference made by means of a transitive NULLAK-construction was 501. Of these there were 371 in which the two clauses had the same subject, using this phrase in the sense above specified. There were 130 instances in which they had different subjects. The
following tabulation gives the distribution of those instances
with respect to the use of the ka-Forms and the (No ka)-Forms,
and with respect to the three kinds of signs of projective
reference:

<table>
<thead>
<tr>
<th>Label</th>
<th>Projective reference</th>
<th>Same Subj.</th>
<th>Diff. Subj.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-1</td>
<td>tu 'jo'ral ka PA V-(e)</td>
<td>0</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>A-2</td>
<td>tu 'jo'ral PA V-(e)</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>B-1</td>
<td>u 'ti'ral ka PA V-(e)</td>
<td>6</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>B-2</td>
<td>u 'ti'ral PA V-(e)</td>
<td>13</td>
<td>105</td>
<td>118</td>
</tr>
<tr>
<td>C-1</td>
<td>ka PA V-(e)</td>
<td>0</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>C-2</td>
<td>PA V-(e)</td>
<td>351</td>
<td>0</td>
<td>351</td>
</tr>
<tr>
<td></td>
<td></td>
<td>371</td>
<td>130</td>
<td>501</td>
</tr>
</tbody>
</table>

Rules for the use of constructions C-2 and B-2 could be inferred
from the above tabulation were it not for 20 exceptional instan-
tces in one case and 25 in the other. It may facilitate further
discussion if we let \( x \) and \( y \) stand, respectively, for whatever
'true of those 20 and 25 instances. Two rules may now be
conveniently worded thus:

Rule 1. Except when \( x \) is the case, construction C-2 is used
in projective references whenever the three following statements
are true:

(a) The verb of the clause preceding that of the projective
reference is one of the 13 above specified.
(b) The verb in the clause of the projective reference is
transitive.
(c) The two clauses have the same subject.

Rule 2. Except when \( y \) is the case, construction B-2 is used in projective references whenever statements \( a \) and \( b \) under Rule 1 are true, and statement \( c \) under the same rule is not true. Since three different constructions, A-2, B-1, and B-2, were used in the 20 instances of which \( x \) is true, it cannot be taken for granted that \( x \) stands for a single requirement. Further inquiry into those 20 instances can hardly be expected to yield reliable results. For whatever one would find would be of unknown validity, due to the circumstances that the largest number of instances with one of those constructions is only 13. For \( y \) the circumstances are even more unfavorable both with respect to the number of instances and the number of constructions. Still, the following may be worth noting: in 203 of the 351 instances in which construction C-2 was used, the projective reference followed immediately after the verb of the preceding clause; i.e., without any intervening words. With respect to the number of intervening words, the following was found upon comparing the 13 instances of B-2 with those having C-2:
We see that none of the 351 instances with construction C-2 had more than 3 intervening words, whereas 9 of the 13 instances with B-2 had 3 or more. It seems improbable that the number of intervening words be irrelevant to the use of construction C-2. On the other hand, the 4 instances at the bottom of the second column indicate that the number of intervening words is not the only determinant in the use of construction B-2. It so happens that those 4 instances occurred after the verb bin, go, and they constitute the only exceptions to what was observed concerning projective references after this verb. Constructions with bin deserve special attention, as we proceed to show.

Other uses of bin are discussed in 4.42 and 4.56. At this point we are concerned only with the constructions whereby the aim of going to or from a place is specified. The constructions
required in such cases are identical with those which most frequently serve to communicate predictions or resolutions, such as are communicated in English by 'to be going + infinitive'; e.g., 'It is going to rain', 'I am going to tell you right now what I think about it'. In many cases it could not be inferred from the context whether the Yucatec sentence signified that someone is going somewhere in order to do something, or simply that someone will do something. For this reason we do not know how many were the instances of projective reference after bin. We classed as such only those in which the place of destination was specified in the same or the previous sentence. The number of instances of this sort was 158. The rest of them together with the instances in which the same constructions served to communicate predictions or resolutions would probably amount to more than two thousand; for these constructions with bin are among the ones which occurred most frequently throughout the texts. In all but the 4 instances noted above, the NULLAK-construction found after bin is the transitive (No ka)-Form; that is, PA V-(e). For those 4 instances we can offer no explanation. No intransitive or passive NULLAK-constructions were used in projective references after bin, but they were used after tal, come; and after hok’, go out, come out. This lends support to the hypothesis that the verb preceding the projective reference is one of the determinants in the occurrence of some constructions in such references. For the intransitive and passive constructions used in projective
Examples with transitive constructions:

28. jan'hi u 'luk'sik tu 'lakal u nok' u ʦ'a tiʔ.
He had to take off all his clothes to give them to him.

j-an-h-i u luk'-s-ik, constr. jan + IKAL (4.18); luk', leave, depart; with formative -s, take away or off. t-u lak-al, all (4.52); u nok', his clothes. u ʦ'a, NULLAK-construction; ʦ'a, give. tiʔ, to him (2.6).

29. ka ʦ'a:b hun tul 'ulum u han'te. And he was given a
turkey to eat. ʦ'a-ab, passive AHAB-construction (4.10); ʦ'a,
give. hun, one. tul, classifier for animate. 'ulum, turkey. u han-t-e, NULLAK-constr., e-Variant at the end of a sentence.

30. ʧen ta t'ana'ho:n a haʦ'o:n. You called us just to
beat us. ʧen, just, only. t-a t'an-ah-o:n, AHAB-construction (4.9); t'an, call, speak; -o:n, us; pron. Class B. a haʦ'-o:n, NULLAK-construction with pron. -o:n.

31. ka bin te:'lo? u kaf'te. And he went there to look for
it. bin, intransitive AHAB (4.9). u kaf-t-e, NULLAK; kaf-t, to look for.

32. ka bi'n'en in ʧ'ak le 'jaanoʔ. And I went to cut the
thatch. bin-en, I went. in ʧ'ak, NULLAK-construction. le jaan-oʔ, the thatch.

33. ka bin u ʧ'ukte u 't'ital ka ji'le wa ku 'pahtal u ʦ'o'nik. And he went to lie in ambush to see whether it was
possible to shoot it. u ʧ'uk-t-e, NULLAK, e-Variant at end of
clause; tf'uk, lie in ambush, waylay. u 'ti'al ka j-il-e, in order to see; a second projective reference with NULLAK, ka-Form, e-Variant; u 'ti'al, sign of projective reference with NULLAK, ka-Form, e-Variant; u 'ti'al, sign of projective reference (4.23); for j-il instead of u j-il see 3.50; il, to see. wa, whether, if. k-u pah-t-al, construction k-IKAL, Usage B-7 (4.35); pah-t, be possible, be able. u ts'on-ik, constr. IKAL after pah (4.19); ts'on, shoot.

34. tu men bina'haan tu jik'nal in kik u 'ti'al u bis ha'nal ti?'. Because she has gone to my sister's to take food to her. t-u men, because (4.51). bin-ah-aan, constr. V-aan (4.53), 'has gone', 'is gone'. t-u j-ik-n-al, to the home of, near, etc. (4.11, Ex. 33). in kik, my sister. u 'ti'al u bis, in order to take; construction of projective reference as in Ex. 33, except that the (No ka)-Form is used here. han-al, cooked food other than tortillas, atol, and other corn preparations; han, eat. ti?, to her.

35. ka bi'no:bi ti hun p'el kah u 'ti'al u man'lant u 'nuukul. And they went to a town to buy what was needed. bin-o:bi, they went; AHAB (4.9). ti hun p'el kah, to a town. u man-lan-t, constr. NULLAK; man, buy; -lan, distributively; each was to buy what he contributed to the celebration (4.65); -t, formative required by composite verbal unit (3.16); the construction of the whole projective reference is as in Ex. 34 so far as NULLAK is concerned. u nuuk-ul, the necessary things; in other contexts, 'utensils',
'tools'; for the use of u see 2.27. 'nuuk, to do in the ordinary way.

36. tin ta'sah teŋ hun puk' k'e'jew u 'ti?]al a wu:'k'e. I brought you a portion of pozol for you to drink. 
t-in ta(l)-s-ah, constr. AHAB (4.9), 'I brought'. teŋ, to you; 2nd. pers. sing. pron. Class C. puk', the usual amount of corn dough dissolved to make pozol. puk', 'to dissolve', used instead of numerical classifier; see comment in 4.38, Ex. 1. k'e'i-em, pozol, corn dough dissolved in water. u 'ti?]al a w-uk'-e, that you may drink; construction of protective reference as preceding example; e-Variant at end of sentence; uk', drink.

37. tan u 'hahan kin'sik u 'k'e:k'e,no:b u 'ti?]al u han'to:b. They were killing their pigs in a hurry in order to eat them. tan u kim-s-ik, they were killing; constr. tan+ IKAL (4.14). ha-han, reduplication of han, do with violence, in a rush, disorderly; used here as a component of a verbal phrase (4.50). 'k'e:k'en, pig; no data available on the composition of this word; u ... -o:b, their. The use of the NULLAK-construction u han-t-o:b as in preceding examples; han-t, eat (transitive).

38. ka ho:p' a 'g'ukt'i,ken u 'ti?]al a s'on'en. And you began to waylay me in order to shoot me. ho:p' a 'g'ukt-t-ik-en, you began to waylay me; constr. ho:p' + IKAL (4.17); -en, lst. pers. sing. pron. Class B. a s'on-en, NULLAK-constr.; -en, me; as in preceding verb.

39. ent ten hun wu's' wah u 'ti?]al in bi'se. Make me a measure of tortillas to take (with me). men-t, to make,
to elaborate; transitive (Noka PA)-Form in imperative (4.38). ten, to me, for me; 1st. pers. sing. pron. Class C. wus',
a measure of volume. wah, tortilla, maize cake. in
bi(n)-s-e, that I may take; NULLAK-construction, e-Variant
at end of sentence.

40. k t'a'nik le hme:'no? u 'ti'kal u t'a ts'ak ti to:n.
We call the shaman so that he may give us medicine. Context:
'Whenever we get sick ...'. k-k t'an-ik, constr. k-IKAL,
Usage A (4.28); t'an, call; intrans., 'speak'. le h-men-o?',
the shaman; for h- see 3. 4 . u t'a, NULLAK, (No ka)-Form;
't'o, give. t's'ak, medicine, remedy. ti, to, for, etc.
to:n, us, to us; pron. Class C.

41. ka't le hun p'el ṭfan ba:'so te:'lo? ka k ṭfan uk'
hun p'it le tra:'go tu 'tuftah 'kumpele,a?. Look for a
little glass over there that we may drink a little of this
liquor that (my) compadre sent. ka'f-t, NULLAK, (No ka PA)-Form,
Usage A (4.38); ka'f-t, look for. le hun p'el ... te-l-o?',
the one over there; -o? is the terminal component of two demon-
strative forms; le ... -o? and te-l-o?; te or te?, 'there' for
place previously mentioned; with -l-o?, 'there' for place pointed
or for place not mentioned in the previous sentence; with
-l-a?, 'here' pointing to the place. ṭfan ba:'so, little glass;
Spanish vaso. ka k uk', that we may drink; NULLAK, ka-Form;
uk', drink; the ṭfan before uk' in contexts of this sort is of
difficult translation; approximately like saying 'let us treat
ourselves to a drink' instead of 'let us drink'. hun p'it, a small quantity of: le ...-a?, this. tra:'go, from Spanish *trago*, as in *Vamos a tomar un trago*, let us have a drink; adopted in Yucatec to refer to a specific quantity of liquor set aside for consumption on a given occasion, and in various other contexts. t-u tuf-t-eh, constr. AHAB (4.9); tuf-t, send, commission someone to do something. 'kumpe'le, from Spanish *compadre*; see 4.23, Ex. 1.

42. he bij ma tin sut 'hok'ol k'a:'jo', tas ten in $'on ka in $'ol u 'bu:t'ul. Since I am not going to the woods any more, bring me my gun that I may unload it. he bij ...-o? (or -e? or -a?), since, it being the case that ...; for he ... -o? see 4.51; bij, in other contexts 'how', 'in what manner', 'in the manner previously specified'. ma t-in hok'-ol, speech of Type B for ma: tan in hok'-ol, I am not going out; constr. tan + IKAL (4.14) with negative ma; sut, in other contexts 'return'; 'again', 'no more', when used as a component of a verbal phrase (4.50). k'aj, woods. ta(1)-s, bring; NULLAK, (No ka PA)-Form, Usage A (4.38). ten, to me; pron. Class C. in $'on, my gun. ka in $'ol, that I may release; NULLAK, ka-Form. u but'-ul, its plug; but', to plug; for this constr. see 4.52.

43. 'ha:li,be', puk' le k'e'jen ka in wu:'k'e. All right; dissolve the *pozol* that I may drink it. hal-ib-e? (etymological analysis), Old Yuc. *ha:li* or *halili*, that is all, no more than that; in Mod. Yuc. serves to indicate a transition to another topic in discourse, or a change in the circumstances,
or to attract attention to what the speaker is about to say; of frequent occurrence in narrative. *pu kok’, dissolve. ka in w-uk’e, that I may drink; NULLAK, ka-Form, e-Variant at end of sentence.

44. *wa ta’le’* a ‘y’a ei’ne’, le:’lo? he in man ‘ta ni i le’. If you came to fetch me, then I will walk ahead. *wa, if, tal-ej, you came; intrans. AHAB (4.31). a ‘y’a-en-e’, NULLAK, (No ka)-Form; -en, me; -e’ at end of clause, and particularly in conditional sentences. le-l-o’, that (on account of that), so. he in man ... -e’, irregular he + IKAL + -e? (4.16); man, pass, walk; formerly man-el in IKAL-construction. tan-il, before (space); for -il see 4.60.

45. ta’len in ‘wui ti’ a ‘u sik be:’nil wa ‘u fak a ‘u’ak ha’ tu pol le ‘yan pa:’la’. I came to hear from your grace whether you will kindly baptize this child. Context: description of old customs; asking the priest to baptize a child. tal-en, I came; intrans. AHAB (4.9). in w-ui, NULLAK, (No ka)-Form; ui, hear. ti’, from, to, etc. a ‘tik-ben-il, your grace; see 4.15, Ex. 4. wa, if, whether. u’fak, it may happen, perhaps; used in polite request (4.47). a ‘a-ik, IKAL-construction, after impersonal verbs (4.20); ‘a, put, give. ha’, water. t-u pol, to the head of. le ... -a’, this. ‘yan, small. pal, boy.

46. *ku ‘y’aik le ‘u:lu:mo’, ku bi’sik u k’ub ti’u ‘kumpa le. He takes the turkey and carries it to deliver it
to his compadre. Context: Description of custom. k-u y'a-ik
and k-u bi(n)-s-ik, Usage A of construction k-IKAL (4.28); y'a,
take hold of, get, fetch; bi(n)-s, carry away or to. le ul-um-o',
the turkey. u k'ub, NULLAK (No ka )-Form; k'ub, deliver. ti'
u 'kumpa,le, to his compadre.

47. wa tu men ta wi'lah ma seb 'ta:ke,ne?, ka han
paitik le y'an 'kampa,na jan ta be'lo' tu 'jo?lal ka
in wu'je ka ta:'ken. If you see that I have not come soon,
give a jerk to the little bell at your side, that I may hear
it and come. wa t-u men t-a w-il-ah, if you see; AHAB-con-
struction, Usage B (4.11). ma, not. seb, soon. ta(l)-ak-en-e',
I have come; special use of NULLAK-construction with some in-
transitive verbs (4.43); -en, 1st. pers. sing. pron. Class B;
-e', end of a clause (4.58). k-a pait-ik, constr. k-IKAL,
Usage B-8 (4.36). han, with violence, etc. (see Ex. 37).
le ... -o', the, that. y'an, little. 'kampa,na, Spanish
campana, bell. j-an, there is (4.41). t-a tel, to your
side; a, 2nd. pers. sing. pron. Class A. tu 'jo?lal (4.23)
ka in w-ui-e, so that I may hear it; e-variant of ka-Form
at the end of a clause. ka ta(l)-ak-en, second projective re-
ference with intransitive ka-Form; tal, come.

48. jan k, t'a'nik tu 'jo?lal ka u k'a'holto:b k
'kumpa,le. We have to call them, so that they may become acquaint-
ed with our compadre. j-an k tan-ik, we have to call (them);
constr. jan + IKAL (4.18). ka u k'ah-ol-t-o:b, that they may
become acquainted with; k'ah, remember; ol, mind; k'ah-ol, to recognize; with formative -t, become acquainted or recognize.

Examples with intransitive and passive constructions.

49. 'waalen te:'lo<, ka tikbana'ko:n. Stop there so that we may talk. waal-en, stop; constr. V-en, intransitive imperative (4.57). te-l-o<, there. ka tik-ba-n-ak-o:n, intrans. NULLAK, form ka V-(a)k-PE; tik-ba with formative -n (3.24), 'converse', 'talk'; with formative -t, 'explain', 'relate'; -o:n; you and I; pron. Class B.

50. sin le k'a:'no< ka yila'kef'. Hang that hammock, that you may lie (in it). sin, stretch, extend; (No ka PA)-Form, Usage A (4.38). le k'an-o<, that hammock. ka yil-ak-ef, that you may lie; intrans. form as in Ex. 49.

51. ku lon'lantik u 'be,k'ik' u 'hool le maj ku k'i:'nam u po:'lo< u 'tis'al ka 'hok'ok u k'i:'k'el. He punctures the veins of the head of the one whose head aches so that the blood may come out. k-u lon-lan-t-ik, construction k-IKAL, Usage A (4.28); lon,,pierce, stab, puncture; -lan, distributively: a puncture for each vein (4.45). u 'be,k'ik', the veins of; be, road, way; k'ik', blood. u 'hool, the head of. le ... -o<, the. maj, indefinite person; in other contexts, 'who'. k-u k'i:'nam, irregular k-IKAL in relative clause (4.34); composition of irregular verb k'i:'nam undetermined. u pol, his head; difference in usage, if any, between the two words for 'head' (pol and 'hool) undetermined.
ka hok'-ok, intransitive NULLAK; hok', go out, come out. u k'ik'-el, his blood; for -el instead of -il see 3.42.

52. tu 'hok'sa'ho:n u 'ti'el ka 'fiik'no:n he 'tuuf k 'k'ate?'. He brought us out so that we might go anywhere we wished. t-u hok'-s-ah-o:n, He brought us out; AHAB-construction (4.9); -o:n, us. ka fi-ik-o:n, intransitive NULLAK, 'that we might go'. he 'tuuf ... -e?', wherever: 'tuuf', where; for this use of he ... -e? see 4.45. k k'at, we wish, we wished (3.56).

53. ts'o:k u ki 'naakal tu k'ab hun kul y'e? tu 'jok'ol hun p'el hal'tun tu 'jo'olal ka ja'nak u jo'yel i'yil le 'ha,o?'. He had climbed conveniently on a branch of a tree over a pool so that his shadow would be in the water. ts'o:k u naak-al, construction ts'o:k + IKAL (4.15), 'he had climbed'; ki or ki?, nicely, conveniently. t-u k'ab, to the branch of. hun kul y'e?, a tree; kul, special numerical classifier for trees. t-u j-ok'-ol, over, above, on; cf. tu 'jo'olal (4.23). hun p'el hal-tun, a pool; strictly, a deposit of rain water in a depression in the limestone of Yucatan, sarteneja in the local Spanish. ka j-an-ak, intransitive NULLAK; j-an, to exist, be at a place, etc. (4.4). u j-o'y-el, his shadow (no distinction between shadow and image reflected in water); for the ending -el see 3.42. y'o-il, within, inside. le ha(?)-o?, the water; ha?, water.

54. ka ho:p' u k'a'antik le 'bec:bo? tu 'jo'olal ka 'pahtak u 'yuukul. And they began to block the roads so that
it might be possible to catch them. \( \text{ho:p'} \ u \ k'\text{al-(l)en-t-ik,} \)

\text{construct. ho:p'} + \text{IKAL (4.17); k'\text{al, close, lock, block; -lan,}}

\text{distributively: each group of men were to block one road.}

\( \text{le be-o:b-o?}, \text{the roads; -o:b, plural. ka pah-t-ak, that}

\text{it may or might be possible; intransitive NULLAK. u \text{\textasciitilde}fuk-ul,}

\text{passive IKAL after paht (4.19); for double vowel of the passive}

\text{form see 4.43.}

55. \( \text{ka ho:p' u 'ho^sa'al 'huhun 'tuli u 'ti\textasciitilde}al ka}

\text{'k'ata:k ti\textasciitilde} b\text{if u\textasciitilde}a:'nil le 'baalo\textasciitilde}. \text{And they began}

\text{to be brought out one by one to be asked how it had occurred.}

\( \text{ho:p' u ho(k')-s-aal, passive IKAL after ho:p' (4.17)}.

\text{hu-hun tul-i, one by one; reduplication of hun, one; tul,}

\text{numerical classifier for animate; for -i see 1.3. ka}

\text{k'at-sak, passive NULLAK; k'at, with regular conjugation,}

\text{'to ask'; with irregular conjugation, 'to wish' (3.56).}

\text{ti\textasciitilde}, to him or them. b\text{if, how. u\textasciitilde}a-an-il, had happened;}

\text{construction V-aan (4.53); u\textasciitilde}, happen; for -il see 4.60.}

\( \text{le 'baal-o\textasciitilde}, \text{the thing, the affair.}

56. \( \text{ka 'tu\textasciitilde}tab kan tul wi\textasciitilde}n\text{"ik tu ka'hal le no'ho\textasciitilde}

\text{ma:\'ko\textasciitilde} tu 'jo\textasciitilde}al ka ta:'ssak. \text{And four men were sent}

\text{to the village of the old gentleman, so that he would be}

\text{brought. tu\textasciitilde}t-\text{ab, passive AHAB (4.10); tu\textasciitilde}t, send. ka}

\text{tul win-ik, four men; kan, four; analysis of win-ik is etymo-

\text{logic; Quiche win-aq, man, people. t-u kah-al, to the village}

\text{of. le noh-o\textasciitilde} mak-o\textasciitilde}, \text{the old gentleman; noh-o\textasciitilde}, large,
great; respectfully, 'old'; person. ka ta(l)-s-aak, passive NULLAK; ta(l)-s, bring.

57. ka tu 'tu'jaah tu jik'nal le nu'kuj' hwe: 'soobe' u 'tiv'al ka b'a: 'baak 'kasti, go tu 'jok'o,lo:b, u 'tiv'al ka i'laak wa ku 'p'ati,ko:b le 'o:ko,lo'.

And he sent them to the high judges that they be penalized, to see whether they would stop stealing. t-u tu'f-t-ah, he sent; AHAB (4.9). t-u j-ik-n-al, to the domain of; in other contexts, 'to the home of'; cf. French chez. le nuk-u'f hwes-o:b-e', the high judges; le ... -e? instead of le ... -o? because the judges are not present, nor were they mentioned previously; nuk-u'f, big, great; used instead of noh-o'f in various contexts; cf. j-nuk, old woman (disrespectfully); hwes, Spanish juez, judge. ka b'a-ab-aak, passive NULLAK; for the passive form in -ab-ak, or -ab-aak with stems ending in a see 4.37 and 3.9; b'a, give, put. 'kasti, go, Spanish castigo, punishment. t-u j-ok'-ol-o:b, on them. ka il-aak, that it be seen, in order that all those concerned see; passive NULLAK. wa, whether, if. k-u p'at-ik-o:b, construction k-IKAL (4.28); p'at, with transitive conjugation, 'to leave behind', 'abandon'; with intransitive, 'remain'. le ok-ol-o', the stealing.

4.42. Usage E, construction bin + NULLAK. The constructions discussed under this heading are:
Transitive: bin PA V-(e)
Intransitive: bin V-(a)k-PB
Passive: bin V-(aa)k-PB

In these constructions, no suffix is added to bin, nor is this word preceded by a pronoun, as it is in various contexts in which bin signifies 'to go'. Here, bin is simply the distinctive sign of a construction. In this respect, and also with regard to the fact that the sign is invariable, bin is like tan in construction tan + IKAL (4.14). Writers on Old Yucatec, as well as later authors, have used the transitive and the intransitive forms of bin + NULLAK to exemplify "the future tense" of the Yucatec verb. In all but 9 instances the above constructions were used in our texts to refer to discrete-future occurrences (4.4, Case 3). Those 9 instances indicate that these constructions do not constitute an exception to the rule in Modern Yucatec that the forms which serve to refer to the present or to the future, can serve also to refer to the past. Throughout the preceding portion of Part IV it has been shown that with regard to chronologic specifications, the distinctions which determine by and large the uses of Yucatec constructions are those denoted in these pages by the terms 'prior', 'contemporary', and 'subsequent', in the senses specified in 4.3. In the 9 instances referred to, we find bin + NULLAK in references to subsequent-past occurrences (4.4, Case 6); as in 'He said
that he would do it regardless of) what might happen to him (he 'baaf bin 'um'uk 'ti'le'). Construction bin + NULLAK occurred approximately 5 times more frequently in references to events whose occurrence at a distant and unspecified time is predicted, and in generalizations concerning the future, than with reference to particular events expected to occur within a few days. No instance was observed in which the reference is to the same day in which the prediction is made. In many cases we were unable to account satisfactorily for the use of other bin-constructions (4.56) instead of the ones under consideration. It is possible that in speech of Type B and to a lesser extent in speech of Type A, bin + NULLAK is seldom used in references to practical everyday affairs. This applies particularly to the intransitive and the passive forms.

For negative predictions, construction bin + NULLAK has occurred only in generalizations with miš bi'k'in, 'never': viz.: 'So-and-so will never happen'. In all other instances, even in the various versions of a certain traditional account of how the world will end, a different construction was employed (4.14) after the common negative ma or maʔ.

The uses of the transitive NULLAK-forms in other bin-constructions which serve to refer to the future are dealt with in 4.56.

Miscellaneous examples:

58. ken haŋ 'nas'ak tu k'in u 'fu:lul 'jok'oka:beʔ, tu
'lakal 'baaj' ma teý u ji'laa,le? bin i'laak. When the time for the world to end may draw near, all sorts of things which have never been seen will be seen. ken nab'-ak, when it may approach; intransitive NULLAK in temporal clause with reference to future time (4.46); haq', very, very much; i.e., when the event will be very near. t-u k'in, to the day or time of; k'in, day, sun, and other senses. u jul-ul, the ending of; jul, end, or 'to end'. j-ok'-o(1)-kab, the world, the earth; ok', on, over; kab, in compounds: 'earth', 'ground', 'downward', etc. t-u lak-al 'baaj', all sorts of things; t-u lak-al 'baal, everything; t-u lak-al, all (4.52). ma teý, not at all, emphatic negative requiring construction IKAL (4.20). u j-il-aal, passive IKAL (4.13); il, to see; -e? at the end of a clause, as in the clause ending with 'jok'oka: ,be?'. bin il-sak, will be seen; passive form of bin + NULLAK: 59. he ken bij tu jü'nah k muki'lo: b 'utfia,ke?, mis bij k'in bin ju' luk. It being the case that our ancestors started it long ago, it will never end. Context: Preamble in the preparations for the kuuf-ceremony. he ken bij ... -e?, since (such-and-such is the case); the senses in which the words ken, when, and bij, how, are used in other contexts are irrelevant to the sense of this construction; for other uses of he ... -e? see 4.16, 4.30, 4.51. t-u j'un-ah, construction
AHAB (4.9); start, begin (transitive). k nuk-il-o:b, our ancestors; nuk-il, ancestor; nuk, old, big, great.

utf-i-ak, long time ago, ancient times; for less remote time utf-ben is used; also: utf, to happen; 'utfi, it happened; -ak affixed to certain words to distinguish prior from subsequent time; thus, the adapted Spanish word sábado, Saturday is used without suffix for 'next Saturday', but for 'last Saturday' we have 'sábado,ak; for similar uses of -ak see 4.48.

mif bi'k'in, never (4.20). bin ful-uk, will end; intransitive bin + NULLAK.

60. ken haŋ 'nab'ak tu k'i;i:ne? bin a wi'le:ʃ 'k'ewe'lel ta:'k'in. When the time will draw near, you will see leather money. Context: Prophecy concerning the end of the world; one of the signs that the end is near will be the introduction of leather money. ken ... -e?, as in Ex. 58. bin a w-il-e:ʃ, you will see; transitive form of bin + NULLAK a ... -e:ʃ, 2nd. pers. plur. pron. Class A. k'eu-el, leather, skin; k'eu-el-el, of leather (3.42). ta:'k'in, money; see comment on composition of this word in 4.16, Ex. 6.

61. wa kin bin in wi'le?, ka bin u be:t ten he bij tu be:'tah ten u su'kuune?. If I go to see him, he will do to me as his elder brother did to me. wa, if. k-in bin, irregular k-IKAL-construction, Usage B-7 (4.35); formerly, and still occasionally in speech of Type A, the k-IKAL-construction with bin would be kin bi'nel. in w-il, transitive NULLAK in projective reference (4.41); 1l, to see.
bin u be:-t, he will do; transitive bin + NULLAK; for the use of ka in the apodosis see 4.62. ten, to me; pron. Class C. he bi? ... -e?, as, like. t-u be:-t-ah, construction AHAB (4.9), '(he) did'. u su'kuun (or su'kun), his elder brother.

62. bin a wi'le. You will see. Common expression used to express assurance as to what is predicted. bin a w-il-e, transitive bin + NULLAK; e-variant at the end of a sentence or clause.

63. te:'ye?, tu:'sui, mis bi'k'in bin 'kimi,keg' tu men u'k'ah. As for you, tu:'sui, you will never die with thirst. teq'-e?, you; 2nd. pers. pron. Class C; with -e? at the end of a clause or its equivalent. 'sui:'sui, the name of a species of wild doves whose cooing resembles the name; su'z-ul, blocked, obstructed; the similarity of the cooing with the latter word seems to have given rise to the prevalent legend that the dove said tu:'sui be, 'the road is blocked' to protect Jesus against his pursuers. The rest of the sentence is the blessing pronounced on the dove. mis bi'k'in, never; as in previous examples. bin kim-ik-eq', intrans. form of bin + NULLAK; kim, die. t-u men, because of, for other senses see 4.10. uk'-ah, thirst; uk', drink.

64. he 'baaj k'in bin ti'hik le 'k'ewe,lo', le:ti? ken 'jiiko:n. Any day that the hide will be dry will be the one when we will go. he 'baaj ...(-e?), whatever, whichever;
the -e? is expected to occur at the end of the clause, but in this instance the last word of the clause requires -o?', because of the form le ... -o' (4.51). k'in, day, sun. bin tih-ik, intransitive form of bin + NULLAK; tih, get dry, be dry. k'eu-el hide, skin, leather. le:'ti?', that one, that is the one, etc. (2.6). ken, when (4.46). fi-ik-o:n, (when) we will go; NULLAK in relative or temporal clauses (4.46); fi(i)-, defective verb supplementing the defective verb bin, go.

4.43. Usage E, negative imperative with bik or mik. The negative imperative sentences in question serve to recommend caution, to give warning, or to ridicule by telling someone not to do what he cannot help doing, or is in need of doing. The negative sign is most frequently bik, a B-variant of which is mik. The verbal unit following either of these negative signs is a (No ka)-Form of the NULLAK-constructions. Examples:

65. e'ja, hwan, bik a t'ab le in kuʧ 'suuko?'. Hey, John, be careful not to set fire to my load of zacate. e'ja, interjection to attract attention. hwan, Spanish Juan, John. a t'ab, NULLAK-construction; t'ab, set fire to, light torch, cigarettes, etc. le ... -o', that, the; in, my; kuʧ, load, to carry; 'suuk, zacate, a kind of grass used for fodder.

66. ka wa:l ti a 'ʧu:ka'no:b bik 'kina:'koin wai i'ʧ'il le ko:'lo?'. And tell your companions to be careful lest he kill us here inside the cornfield. ka(a) w-a:l,
NULLAK, ka-Form with omission of pron. a; Usage A (4.38); al, say or tell. ti a ḥuk-an-o:b, to your companions; ḥuk-an or ḥuk-aan, companion, that which completes; complete. kin-s-aak-o:n, passive NULLAK; kim, die; kin-s, kill; m changes to n (1.3); -o:n, we; pron. Class B. wai, here. iyo-il, within. le kol-o', the cornfield, milpa.

67. bik 'lu:)b,ke:/'. Don't fall! lub-(u)k-o:, intransitive NULLAK. In both speech-types, but particularly in Type B, the vowel of the suffix -(a)k is elided when a suffix follows.

68. bik 'sa:ta:k a 'wo:le:/f ka 'wa:le:/f wa te:/f ta be:t'he:/f. Do not get confused and say that you did it. sat-ak, intransitive NULLAK; sat, to get lost; literally: 'let not your minds get lost'. a w-ol-e:/f, your minds; a ... -e:/f, 2nd. pers. plur. pron. Class A. ka (a) w-e:1-e:/f, and say; NULLAK with omission of a after ka; al, say, tell. wa, whether, if. te:/f, 2nd. pers. plur. pron. Class C. t-a be:t-(a)h-e:/f, you did it; AHAB-construction (4.9).

69. bik 'alkabna'ke:/f, u mehe'ne:/f ki'sin, he ku tal a 'jume:'fo'. Don't run, you seed of the devil; here come your masters! Context: What the people of Chemax yelled at the Quintana Roo Indians as they ran away at the Mexican soldiers who came to rescue the town. al-kab-n-ak-e:/f, intransitive NULLAK; al-kab, to run; always with formative -kab (3. 33); formative -n, required by intransitive composite stems (3.24); -e:/f, 2nd. pers. plur. pron. Class B. u me'hen-e:/f,
you (plur.) seed of; me'hen, formerly, 'children' of a man; now with reference to human male, 'semen'. ki'sin, devil.
he k-u tal... -o', here comes; k-u tal, irregular k-IKAL; formerly, tal-el, regular except for -el instead of -al after stem with a; for the whole construction he ... -o'? see 4.30. a ... -e:j, your master, or masters; a ... -e:j, 2nd. pers. plur. pron. Class A.

4.44. Usage G, conditional sentences. Both the ka-Forms and the (No ka)-Forms of the NULLAK-constructions occurred in the sentences in which Usage G was observed. The order found in the occurrence of each of these two kinds of forms can be indicated conveniently by dealing with constructional units thus composed: Conditional sign + NULLAK. The words and phrases classed as conditional signs are: wa, if; wa tu men, if, if perchance; 'esak tu men, in case that ...; 'haili, or 'jen ba:'le? or 'jen ba:'le? 'haili, provided, on condition that, only if. In other contexts, both 'jen and 'haili can be rendered by 'only', and ba:'le? by 'but', 'however'. 'Esak is the V-ak form (4.37 ) of es, to show, from Old Yuc. et-q-(ah), variant of et-eq, to show. In other contexts, the phrase tu men signifies 'because'; or 'by', as sign of the agent of the passive voice (4.10). The units consisting of conditional sign + NULLAK are as follows:
I. Affirmative with ka-Forms

1. wa ka-Form
2. (a) 'ha:li ka-Form
   (b) 'en ba:'le? ka-Form
   (c) 'en ba:'le? 'ha:li ka-Form

II. Affirmative with (No ka)-Forms

3. wa tu men (No ka)-Form
4. 'esak tu men (No ka)-Form

III. Negative with (No ka)-Form

5. wa ma, or wa tu men ma, or 'esak tu men ma, or 'ha:li ma, etc. followed by a (No ka)-Form.

The kinds of sentences in which the above constructional units (1, 2a, ..., 5) occurred, and the particular unit or units employed in each kind of sentence, are as follows:

Usage G-1. Conditional sentences contrary to fact; viz., 'If he had come, I would have seen him'. Unit 1 is used in the protasis.

Usage G-2. Suppositions concerning the future. It seems that by using Unit 1, or 3, or 4 in the protasis different declarative values (4.7) are ascribed to the suppositions, but the evidence on this point is not conclusive. In about 46% of the instances in which wa tu men was the sign of the conditional sentence there was an implication of improbability of this sort: 'It is not likely to happen, but if it
happens, ...'. 'esak tu men is the usual sign of condition in the expression 'esak tu men toh k o:'le?, 'if we happen to be in good health', which the old folk of some localities are in the habit of uttering when they make an appointment, or propose some plan or enterprise. In that expression an undetermined declarative value is probably ascribed to the condition; that is, the implication is 'we may be in good health and we may not, and we do not know which alternative will be true'. But with a NULLAK-construction, the implication seems to be rather of this sort: 'If x happens, as it probably will, ...'.

Usage G-3. Provisory promises; viz.: 'I will do x provided you do y'. The proviso requires Unit 2a, or 2b, or 2c. If any communicational distinction is made by using one rather than another of these three units, we failed to discover it.

Examples of these various uses are:

70. wa ka 'kinsa:ke', ma: tan 'ju$tul le 'baa$ ku 'ju$tul to:'na$. If he had been killed, what is happening to us would not have happened. wa ka kin-s-aak-e$, if he had been killed; Unit 1, Usage G-1; passive NULLAK with suffix -e$ required at the end of the protasis (4.59); kin, die; with change of m to n before formative -s; kin-s, kill. ma: tan j-uf-ul, negative tan + IKAL (4.14); omission of u in the expected IKAL-form u j-uf-ul, as is often the case with intransitive verbs requiring prefix j- (3.50). le
"bana ... -a", this thing, what (4.51); k-u j-ut'ul, is happening; construction k-IKAL, Usage B-6 (4.34); ut'ul, happen.

to:n, to us; we; pron. Class C.

71. wa ka a be:t ten le us kin 'wa:k'ik te:'yo', ha'y miş bi'k'in ku 'tuubul ten. If you do me the favor I speak of, I will never forget it. wa ka a be:t, if you do; Unit 1, Usage G-2. ten, to me, me, I; pron. Class C. le ... -o?, the, that; us, favor, good; k-in w-a:1-ik, that I say; k-IKAL, Usage B-6 (4.34); al, say, tell; te'y, to you, you; pron. Class C. ha'y, very, very much; in this context, it is a device for topical distinction (4.8), or for high declarative value (4.7), or both; the equivalent device in English would be to utter the word 'never' emphatically in such a construction as 'Never will I forget it'. miş bi'k'in, never. k-u tub-ul, passive k-IKAL, Usage B-1 (4.29); vowel of stem duplicated in passive (4.37); literally: 'become forgotten to me', the person that forgets is not the subject of tub. ten, to me, me, I; pron. Class C.

72. wa ka k'uy'-ke:ʃ te ka:'ho', he u ha'y us'tal ta wi'yejfe'. If you come to town you will like it (the town) very much. wa ka. k'uy'-(u)ke:ʃ, Unit 1, Usage G-2; omission of the vowel of -(a)k when a suffix follows (4.37); k'uy', arrive, come to; -e:ʃ, 2nd. pers. plur. pron. Class B, required by intransitive NULLAK. te, fusion of ti and le, 'to the'; le ... -o?, the, that. ka'h, town, village.
he u us-t-al ... -e?, constr. he + IKAL + -e? (4.16); literally: 'it would be good (to your eyes)'; idiom for 'to like' when the pleasure is produced by sight (see comment under 4.33, Ex.29). t-a w-iʃ-e:j, to your eyes; a ... -e:j, 2nd. pers. plur. pron. Class A; iʃ, eye, face. 73. he in t's'a-iik te:iʃe?, 'ha:li ka a 'wolte ka t's o:kok in bel ta 'we:te:le?. I will give it to you, provided you be willing to marry me. he in t's'a-iik ... -e?, constr. he + IKAL + -e? (4.16); t's'a, give, teʃ, to you; 2nd. pers. sing. pron. Class C. 'ha:li ka a w-ol-t-e, Unit 2a, Usage G-3; ol-t, wish, be willing (4.40). ka t's o:kok, intransitive NULLAK, ka-Form; t's o:k, to come to an end; the expression for 'to marry' may be translated literally thus: 'for one's affair (bel) to come to an end'; the affair is understood by the natives to be the various transactions and requirements which precede the consummation of the marriage; the expression, however, is used even before any such affair has begun, as is the case in the instance under consideration. in bel, my affair. t-a w-et-el, with you; et, with, together, in the company of; cf. j-et-el, signifying 'and', or 'with'; we find tin 'wetel, with me; ta 'wetel, with you (sing.); jeteł, with him; k 'etel, with us; k 'ete:le:j, with you (pl.) and me or us; ta 'wete:le:j, with you (pl.); jeteł:lo:b, with them; the 3rd. sing. is the one which serves for references equivalent to our conjunction
'and'; see also comment on a'tan, wife, 4.9, Ex. 15. For -e? at the end of this sentence see 4.58.

74. wa tu men 'lubk-e', ka 'kinsika,ba. If you fall, you kill yourself. wa tu men lub-(u)k-e?, Unit 3, Usage G-2; -e?, 2nd. pers. sing. pron. Class B, required by intransitive NULLAK; omission of the vowel of -(a)k before stressed suffix. -e?, required at the end of the protasis unless -o? or -a? be necessary because of the use of le ... -o?, etc. (4.51), as above in Exx. 71, 72; lub, fall. k-a kin-s-ik-a-ba, constr. k-IKAL, Usage B-7 (4.35); kin-s (kim-s), kill; see explanation under Ex. 70; a-ba, yourself (2.7).

4.45. Usage II, references to non-particular referents. These references can be of two kinds: (a) unrestricted; e.g., 'any object'; (b) restricted; e.g., 'any object which weighs at least two pounds'. The instances that concern us here are of the restricted kind. In such instances, the clause referring to a non-particular referent requires a ka-Form of the NULLAK-constructions. With the words maʃ (who), 'baaʃ' (what), and 'tuuʃ' (where), the construction of the clause is as follows:

he maʃ ( )-e?, whoever ..., anyone who ...
he 'baaʃ ( )-e?, whatever ..., anything that ...
he 'tuuʃ ( )-e?, wherever ..., anywhere ...

The parentheses indicate the position of the verbal unit
containing the NULLAK-construction. The clause ends with the suffix -e?, as in other uses of construction he ... -e? (4.16, 4.30). Examples:

75. he maʃ ka u ji'le?, bin 'kimik. Whoever sees it will die. ka u j-il, transitive NULLAK, ka-Form; il, see. bin kim-ik, construction bin + NULLAK (4.42); kim, die.

76. ku 'ts'o:ko,le?, kin 'wanti,keʃ' he 'baaʃ ka 'utf'uk te:'te'. After that, I will aid you in anything that may happen to you. k-u 'ts'o:k-ol-e?, temporal clause with construction k-IKAL (4.33); literally: 'when it ends', 'when that may be over', for 'afterward'. k-in w-an-t-ik, constr. k-IKAL, Usage A (4.28); an-t, aid, help; always with formative -t; -etʃ, 2nd. pers. sing. pron. Class B. he 'baaʃ ... -e?', whatever; see explanation above (4.45); ka utf-uk, constr. NULLAK, ka-Form; utf, happen. teʃ, to you; 2nd. pers. sing. pron. Class C.

77. Je'ne:j he 'tuuj' ka a 'wolte:j?e?'. Go wherever you wish. j(i)-en-e:j, construction V-en (4.57), intransitive imperative; -e:j, 2nd. pers. plur. he 'tuuj ... -e?', wherever; ka a w-ol-t-e:j, transitive NULLAK, ka-Form; 2nd. pers. plur.; ol-t, wish (4.40).

78. ta? ten he 'baaʃ 'si'min ka a kaf'te?'. Bring me any horse you may find. ta(1)-a, bring; (No ka PA)-Form of NULLAK in transitive imperative (4.38). ten, to me. he 'baaʃ ... -e?', any. 'si'min, horse; formerly, 'tapir'. ka a kaf'-t, NULLAK; kaf-t, find, look for.
4.46. **Usage of temporal clauses.** The temporal clauses requiring the NULLAK-constructions serve two kinds of references: (a) generalization; e.g., 'Whenever $x$ is the case, $y$ occurs'; (b) reference to particular or non-particular future time; e.g., 'When he comes, tell him to wait for me'. For both kinds of references the (No ka)-Forms of the Nullak-constructions are used, and the clause begins with one of these words or phrases: ken, kan, le ken, le kan, which may conveniently be said to signify 'when' or 'whenever', depending on the context. The clause ends with the suffix -e?, whether or not it begins with le, as in the temporal clauses previously dealt with (4.33).

No distinction was observed between the use of ken and le ken, or kan and le kan. One finds kan and le kan more frequently than ken and le ken in speech of Type A. In Old Yucatec we have observed only kan.

**Examples:**

79. ken k'u'ñuk tu hoi in na'il'e?, ku t'a'nik in su'kun. When he arrives at the door of my house, he calls my brother. k'uñuk, arrive. t-u hoi, to the door of. in na-il, my house; na or na'il, house. k-u t’an-ik, constr. k-IKAL in polychronic reference (4.23). in su’kun, my elder brother.

80. le kan a 'wui ku 'ja:lik a wa'tan ka 'sa:sa:k u 'siipí:le', ka 'wa:lik ti? 'heele'. When you will hear your wife saying that her sin be forgiven, tell her you are willing (to forgive). a w-ui, transitive NULLAK; ui, hear. k-u
j-a:l-ik, construction k-IKAL; a:l, say. a w-at-an, your wife (4.9, Ex. 15). ka 'sas-ak, intransitive NULLAK, reported imperative (4.39); sas, to become clear or transparent. u "siipil, her sin, offense; the term was used in this sentence with reference to confession in church; sip, to err. k-a w-a:l-ik constr. k-IKAL in imperative sentences (4.36). ti?, to her (2.6). 'heele?, I am willing, 'yes', 'it will be done', and similar expressions of assent; see 4.16.

81. le ken 'listo,ak u 'nuuku,le?, kin 'abisarti,kef.
When the necessary things may be ready, I will let you know.
listo-ak, the Spanish adjective listo, ready, used as an intransitive verb with the usual suffix -ak of the NULLAK-constructions. nuuk-ul, utensil, wherewithal. k-in abisar-t-ik-ef, construction k-IKAL (4.29); with pron. -ef, 2nd. pers. sing. Class B for the object of the verb (2.5); Spanish avisar, notify; for the use of formative -t with adopted Spanish words see 4.10.

4.47. **Usage I, after certain words.** The NULLAK-constructions were found after the following words: bi'nak, X-variant bi'na,ki, signifying 'maybe', 'possibly'; 'olak, to have been just about to (happen), barely to miss doing something; 'kakah, X-variant kak, to begin resolutely or energetically to do something, get busy doing something; olt, to attempt to; in other contexts 'desire' (4.40). In the first of these words we have a use of the verb
bin comparable to that explained in 4.42; for bi'nak(-i) has occurred only in references to future events. The difference between the two kinds of future reference is one of declarative value (4.7); for bi'nak(-i) is used for conjectures, whereas bin + NULLAK (4.42) has occurred even in such references as 'I shall die some day'. The use of bin to ascribe a low declarative value to a reference is observed also in the instances dealt with in 4.56. If bi'nak is classed as a NULLAK-construction, the vowel of the suffix -(a)k is exceptional. One would expect -ik, as in the NULLAK-form 'kimik of the verb kim, to die. A similar exceptional use of -ak is seen in the word 'uťjak, 'perhaps', and X-variant of which is 'umťjak. Assuming that in 'uťjak we have the verb uť, to happen, one has to conclude that there are two NULLAK-forms of uť; namely, 'uťfuk, as in ma in 'k'ati ka 'uťfuk, I don't want it to happen (4.40) and 'uťjak signifying a low declarative value approximately like that indicated by the English word 'perhaps' in some contexts. The latter form, however, is not used exclusively with the sense of 'perhaps'. In 4 instances 'uťjak occurred with the sense of 'to happen', 'to take place' in imperative sentences addressed to a third or unspecified person (4.38) e.g., 'uťjak le 'ok'o, to?, let the dancing take place! With the above word, 'olak, the circumstances are different. The stem ol signifying 'mind', 'will', 'imagination', 'desire',
etc., requires the formative -t in a verbal unit. That is the case also when olt signifies 'to attempt', as above indicated. With the formative -t we have a composite stem, and therefore (4.37) the suffix of its NULLAK-form is expected to be -ak. Thus, what is irregular in the word 'olak is both that the formative -t is omitted, and that the suffix -ak, instead of an expected -ok, is nevertheless used. If all these are classed as NULLAK-constructions, we have here a special usage of those constructions which, so far as our texts show, is exemplified only in the references made by these special words.

The clause following all these words, excepting 'utfak, requires the (No ka)-Forms of the NULLAK-constructions. The clause after 'utfak, 'perhaps'; requires an IKAL-construction, (see 4.20), although there is apparently only a slight difference of declarative value between a conjecture with 'utfak and one with bi'nak(-i). The latter seems to be a more hypothetic conjecture.

82. bi'na,ki ʦ'��:k in bel ʃjetel. Maybe I will marry him. ʦ'oco:k, NULLAK-construction; ʦ'oko:k, to end. in bel, my affair. ʃjetel, with (him); see explanation under Ex. 73.

83. bi'nak ʃajik'alʃ加紧ken. Maybe I'll get rich. The Spanish translation given for this sentence was: Quíen quíte que me ponga rico, which we may paraphrase thus: 'It is not out of the range of possibility that I should get rich'.

Quién quíte que me ponga rico,
ajik'al-ta-h-(a)k-en, 1st pers. (-en) of the intransitive NULLAK; ajik'al, unanalyzable on the basis of our data, 'rich', 'wealthy'; for formatives -ya-h see 3.27.

84. *'u* yak u ajik'al tal. Perhaps he will get rich. This example is given for comparison with Ex. 83. The implication in the context of Ex. 84 is of this sort: 'If he continues to make as much money as he is making now, he may get rich'; whereas the statement in Ex. 83 is made by one who is considering whether it would be advantageous for him to leave his native village in search of opportunities. The contrast is that of a possibility in 83 with a degree of probability in 84.

u ajik'al-t-al, construction IKAL subordinate to an impersonal verb (4.20); ajik'al, as in Ex. 83; notice the use of the formative -t in this case, but -ya-h in Ex. 83; see comment on formative in the introductory paragraph preceding 3.51.

85. *'olak* a kaf in *'a'*laatel. You came near breaking my ribs. a kaf, trans. NULLAK; kaf, to break something comparatively thin and long. *'a'*laat, rib; word of uncertain analysis; collective reference with suffix -el (3.42).

86. *'olak* u ki'mes. He nearly killed him. kim, die; with formative -s, 'kill'; the older form of this suffix, -es, still occurs when no other follows and the stress is not on the verb-stem.

87. ku *'joltik* u *'y'*ae?, tu *'kakah* u *'ko* ko*fat* te. When she tried to catch him, he began to kick her furiously. Example of the use of the NULLAK-constructions after olt, attempt, and
'kakah, start vigorously. k-u j-ol-t-ik ... -e', construction k-IKAL in temporal clause (4.33); u ʧ’a, constr. NULLAK; ʧ’a, catch, get. t-u kak-ah, constr. AHAAB (4.9). u ko-ko-ʧak’-t-e, transitive NULLAK, e-Variant; ko-ko-ʧak’, kick repeatedly; ko-ʧak’, kick; ko was found only in this compound stem; ʧak’ or ʧek’, to step on, is a component of a number of words denoting action with the foot.

4.48. **Usage K, construction V-(a)k in references to prior occurrences.** In Usage K, construction V-(a)k serves to assert that something has happened, or that it had happened prior to some past time referred to in the context. Since for those two chronologic specifications construction ʦ’o:k + IKAL has been used also (4.15), further delimitation is necessary. The following was observed: (1) V-(a)k is used only with intransitive verbs, but ʦ’o:k + IKAL serves the same usage with transitive, intransitive, and passive. (2) ʦ’o:k + IKAL can refer to a prior-past, a discrete-past, or a prior-future occurrence (4.4, Cases 1, 4, 7); whereas V-(a)k with Usage K has occurred only in references to prior-past and discrete-past. (3) Usage K of V-(a)k occurred in negative as well as in affirmative sentences; but ʦ’o:k + IKAL has been used only in affirmative assertions. Since in affirmative assertions with intransitive verbs both constructions are used to refer to discrete-past and prior-past occurrences, we have to ask further what determines the choice of either construction in such
cases. Perhaps we could answer this question satisfactorily if we were able to state in fairly precise terms what it is that the Spanish word ya signifies in affirmative sentences; for that was the word used by our bilingual informants in their translations to distinguish the sense of ƚ'0: dik + ikal from that of V-(a)k. Since in some contexts 'already' is the equivalent of ya, we may vaguely indicate what is approximately the distinction in question by asking what is the difference between saying 'I have already done it' and 'I have done it', or 'I did it'. That the distinction has nothing to do with chronologic specifications is clearly shown by such sentences as this: 'I have already done it, and I did it just to please you'. It seems that the difference in question must be sought in the discursive or circumstantial context, rather than in the temporal, or descriptive specifications of the occurrent referred to. But this conjecture has not been tested to an adequate extent. We have touched upon this question simply to indicate roughly what remains to be done to distinguish the uses of the two Yucatec constructions under consideration.

Irregularities in the vowel of the suffix -(a)k of the intransitive NULLAK-construction V-(a)k are found more frequently in Usage K than in the uses of this construction already dealt with. For example, in texts from different localities, we found lu'k'uk and lu'k'ak, both signifying 'he has left', 'he has departed'; and 'uf'uk, 'uf'ak, 'uf'ik, sig-
-nifying 'it has happened', or 'it had happened'. The irregular forms 'uyak and bi'nak were mentioned in 4.47. Various other irregularities with respect to the agreement of the vowel of -(a)k with that of a simple stem are pointed out in 4.49.

There is much in common between Usage K of construction V-(a)k and the use of the suffix -ak with the names of the days of the week. The days of the week are always referred to in Modern Yucatec by their Spanish names pronounced more or less in conformity with Yucatec speech-habits; e.g., 'domin',go, Sunday; bi'e:mes, Friday; 'saba,do, Saturday. When a day of a preceding week is referred to, the suffix -ak is affixed to the name of the day; e.g., 'sábado,ak, last Saturday (discrete-past), the previous Saturday (prior-past). Here, the occurrent is the passing of a day; or, worded in terms of our knowledge, a rotation of the earth. The so-called "names of the days of the week" are more like the words 'first', 'second', 'third', etc. than like 'John' or 'tree', or 'water'; for all that need be true of a day to be properly called Monday is expressible only in terms of chronologic order with respect to a calendar. To happen before, and to happen after, are occurrents in the sense in which the term 'occurrent' is used here (4.1). Thus, comparing, for example, 'sábado,ak, last Saturday, with ta'lak, he has come, we find that both expressions serve to refer to prior occurrents, and both consist of a stem and the suffix -ak. Yucatec structure offers no ground in this case for classing the stem of 'sábado,ak
otherwise than a verbal stem. But this difference is to be noted: 'sábado, ak and all other expressions referring to previous days of the week have occurred only in temporal clauses; and in temporal clauses the intransitive NULLAK-construction V-(a)k formed with other stems does not refer to prior occurrences (4.46).

Examples of Usage K with construction V-(r.)k.

88. ma? ta:'lak u 'jumilo:bi?. The owners have not come. tal-ak; intransitive NULLAK-construction; tal, come. u jum-il-o:b, the owners of (the horses previously referred to); u ... -o:b, 3rd. pers. plur. pron. Class A; jum-il, owner; jum, lord, master; in Old Yuc. 'father' and various other senses similar to those found in Mod. Yuc.; for -il see 4.6. ma? ... -i?, components of some constructions in negative sentences (4.57).

89. sis'talc le 'yokwi,lo?. The fever has subsided. Literally: 'the fever has cooled off. sis-t-ak, intransitive NULLAK; sis, cool; with formative -t, 'to become cool'. le ... -o?, the. yo'ko, hot, warm; yo'kwil, heat, fever; for -il see 4.6. It had gone right through the little egg without smashing it.

90. pit 'ma:nak ti le 'yan 'he,o?, pe:'ro ma? 'fi:jya,hi?. It had gone right through the little egg without smashing it. Literally: 'It had passed neatly through the little egg, but it (the egg) did not become smashed. Context: To prove his ability, the hero shoots at a bird's egg. Upon examining it, it is found that the egg is perforated, but not deformed. pit,
clean or smooth after removing dirt or roughness, skin a snake, scale fish; for this use of simple stems see 4.50. man-ak, intrans. NULLAK; man, pass. ti, through, by, at, from, to, etc. le ṭan he(?)-o?, the little egg; le ... -o?, the; ṭan, little; he?, egg. pe:'ro, Spanish pero, but. ma? ... -i?, negative, as in Ex. 88. jif-fa-h, for the use of -fa-h see 3.54; jif, corrugated, deformed, crumpled.

91. tak behla(e) ma 'ufik u 'pahtal u kaf'taal. To this day it has not been possible to find her. tak, till. be-h(e)l-a(?)-e?, now, today; see 4.28, Ex. 5. ma uf-ik u pah-t-al, literally: the accomplishment (of finding her) has not occurred; ma, negative; uf-ik, has happened; irregular NULLAK; suffix expected: -uk; for pah-t-al, be able, see 4.19; for the use of the IKAL-form of this verb in this context see 4.20. u kaf-t-aal, passive IKAL; literally: 'that she be found'; kaf-t, to find; with tan + IKAL, 'to look for'.

92. haş hah ma su'nak,e?. le be:ti'ke?, miʃ mak ṭen 'wikba,nak 'jo:k'ol. It is quite true that she has not returned. That is why nobody has even spoken of her. haş, very. hah, true. su(t)-n-ak, intrans. NULLAK; sut, return (transitive); also 'a turn'; for formative -n with intransitive verbs see 3.24; for -e? at the end of the sentence see 3.6. le be(l)-t-ik-e?, irregular construction with verb be(l)-t (to do, to make) signifying 'on that account', 'that
is the reason'; le ... -e°, that (referring to preceding context); the irregularity consists in the absence of a pronoun of Class A before the V-ik component of the IKAL-construction.

mj mak, nobody (4.32). *jen, just, simply, only. *bik-ba-n-ak, intrans. NULLAK; *bik-ba-t, transitive, 'to explain', 'give information upon a specified topic'; *bik-ba-n, intransitive, approximately: 'to raise a question', 'to express opinion'.

j-ok'-ol, upon; cf. 4.23.

4.49. Usage L, suffix -(a)k in references to contemporary occurrences. The suffix -(a)k of the intransitive NULLAK-construction is found in a number of verbal units, many of which can be translated into English by means of the verb 'to be' followed by an adjective or a participle. They serve to assert (a) that something or someone is or was in a certain position or posture; or (b) that something or someone has or had a certain shape, or (c) certain properties, or manner of behaving; or (d) that something or someone is or was in a certain condition; e.g., wet, frightened, swollen. In some cases the condition or posture is a consequence of an event of the sort that is referred to by the stem of the verb. For example, 'he:he tek, 'it is cracked in several places', asserts a condition or circumstance which is a consequence of events of the sort designated by het, 'to crack', 'to split'. Similarly, kul, 'to sit down', gives kul-uk-ba-l, he is (or was) seated;
tf'il-ik-ba-l, he is (was) lying, refers to a circumstance which
is a consequence of the act signified by tf'il, to lie down. Some
of the constructions are identical with regular intransitive
NULLAK-constructions, while others differ from them in one or
more of the following respects: (1) the vowel of the suffix
-(a)k is not the same as that of the simple stem. (2) Re-
duplication of the stem is required. (3) The suffix -(a)k is
preceded by another operative (3. ). (4) The suffix -(a)k
is followed by an operative other than a pronoun of Class B.
We proceed to illustrate the various types of constructions
observed. For convenience, only the 3rd. pers. sing. is given
and each example is translated as though it referred to a pre-
sent occurrent. But it should be understood that for the other
persons the pronouns of Class B are used as with any other in-
transitive NULLAK-construction, and that the chronologic speci-
fication can be contemporary-past (4.4, Case 5) as well as pre-
sent. Thus, corresponding to the 3rd. pers. sing., sub'ilak,
'he (she) is (was) bashful', we have sub'ilak'en for 1st. pers.;
sub'ilak,etf for 2nd. sing.; sub'ilak,e;j for 2nd. plur.; etc.
The range of application of some of the words used below to
illustrate the various forms may be wider than indicated by
the translations. They are all translated in conformity with
the particular context in which we have found them. The let-
ter S stands for a simple or a composite stem. For a redup-
licated stem we shall write SS.
FORM 1. S-(a)k with or without vocalic agreement between S and -(a)k.

sah-ak, he is afraid. (sah-ben, it is frightful, terrible).

pet-ek, it is flat and round.

f'il-ik, it is wrinkled.

wihih-ak, he is hungry continually for lack of food; Spanish hambriento.

p'ool-ak, it is full of blisters; (tortillas) are puffed up.

k'uuf-uk, it burns (describing pain).

ñum-uk, it is in the middle.

FORM 2. SS-(a)k and SS-n-ak. For intransitive formative -n see 3.24

hehet-ek, it is cracked in several places.

wowol-ek, it is spherical.

susut-ak, it revolves, or moves around something else.

lelem-n-ak, it is brilliant, it glitters.

mimis-n-ak, it is dragging on the ground.

mumul-n-ak, they are disorderly piled up.

FORM 3. S-(a)l-(a)k.

fjak-ak, he crawls on hands and knees. (fjak-aan, a quadruped).

p'uy'al-ak, it is shredded, it is ripped.

koot-ol-ak, (grains of corn) are withering.

p'oof-l-ak, (trees) are loaded (with fruit). (p'oof, a bunch).
hop-l-ak, it burns. (said of chile in mouth or eyes).
po(ŋ)-l-ok, he is obese. (poŋ, big abdomen).
kuf-l-ik, he is alive. (kuf-t-al, life).

**FORM 4.** S-ŋa (or -k’a, or -pa)-l-ak. For formatives -ŋa,
   -k’a, pa, see 3.27, 3.37.

ot-ŋa-l-ak, (overripe fruit) is dropping (from tree).
nol-ŋa-l-ak, (loose legs of table or bench) squeak.
lub-ŋa-l-ak, (drunkard) tumbles and gets up repeatedly.
t’ok-pa-l-ak, it is fragile.
kuk-ŋa-l-ak or kuk-k’a-žak, (restless person in hammock)
turns over and changes posture repeatedly.

man-k’a-l-ak, (shower, rain) is of the sort that is over
in a brief time.

**FORM 5.** S-ba-n-ak. In other constructions, -ba is a re-
flexive sign (2.7). Intransitive formative -n
as in Form 3.

sii-ba-n-ak, it is getting dry.
al-ba-n-ak, (candle) is soft (due to heat).
mus’-ba-n-ak, it is withering.
hus’-ba-n-ak, (tree that is being felled) is about to fall.

**FORM 6.** S-(a)k-n-ak.

jab-a-n-ak, (objects fallen from container) are scattered
(on ground).

ŋal-a-n-ak, (muddy water) is getting clear, or is now clear.
p’al-a-n-ak, (rope) is frayed due to wear.
ak’-a-n-ak, it is slimy.
tap-ak-n-ak, (odor) is pungent.
k'an-ak-n-ak, it is neither green nor ripe.
wek-ek-n-ak, (liquid) is spilt on ground.
miś-ik-n-ak, variant of mimis-n-ak (see under Form 2).

**FORM 7. S-(a)k-ba-l. Suffix -ba as in Form 5.**
kul-uk-ba-l, he is seated.
ți-il-ik-ba-l, he is lying (on ground or hammock).
waal-ek-ba-l, he is standing.
kah-ak-ba-l, he resides, he is a resident (of a village).
p'ok-ek-ba-l, she is seated with her legs folded under (Indian fashion).
lak-ak-ba-l, he is on his hands and knees (see 'ʃaka,lak under Form 3).
ți'eb-ek-ba-l, it slants (it is not vertical).
kop-ok-ba-l, (snake) is coiled.

**FORM 8. S-aan-ak and S-aan-t-ak. For -aan see 4.53. Formative -t (3.26).**
tak'-aan-ak, it is stuck (adhesively).
tos-luum-aan-ak, (face) is filthy from dust.
țiik-aan-ak, it is marked (a sign has been put on it).
k'ăl-aan-t-ak-o:b, they are locked up.
sin-aan-t-ak, (hammocks) are tied (i.e., are hanging ready for use).
țiuk-aan-t-ak-o:b, they are trapped.

So far as our texts and supplementary inquiries show, each of the 8 forms illustrated above is used with certain stems and not with others. This idiosyncratic restriction is not a recent development. In a considerable number of instances, the Motul
dictionary enters as special words many which are constructed as we have just indicated. All the words of the first 6 groups of examples are so entered, and they are defined as being equivalent to Spanish adjectives. Forms 7 and 8 may be later developments, or the words with those forms may have been excluded from the dictionary on the ground that they appeared to be inflexional forms of the Yucatec verb, more properly dealt with in a grammar than in a dictionary. Words with Forms 7 and 8 are found in Pío Pérez' dictionary. They are there translated by means of Spanish adjectives or past participles; but only those with construction V-aan (4.53) are said to be past participles (participios pasivos) of the Yucatec verb. Thus, with the stem ḍ'il, to lie down, we find chilaan (ḡ'i'laan) as past participle of chital, variant of chiltal, and also chilibal (ḡ'ilik'bal). The Spanish equivalent given for chilaan is simply acostado; but for chilibal the author resorts to an old way of defining adjectives in dictionaries: cosa acostada, tendida. This translation may or may not imply that the word is applicable to inanimate objects, and not to persons. If that is the implication, it contradicts our observations. In our texts, ḍ'ilik'bal was used only for persons and animals that were lying as a consequence of having laid down to sleep or rest. ḍ'i'laan was used for persons who lay dead, or unable to get up. For objects, pek-ek-ba-1 or pek-aan was used for singular reference, and pek-aan-t-ak or pek-aan-t-ak-o:b,
for plural. When two or more forms are permissible with a
given stem, it is probable that they are not interchangeable
in every context, but our texts do not provide sufficient
data to determine the range of application of the various
combinations of -(a)k with the other operatives shown
in the above 8 forms.

The affixation of -t-ak to construction V-aan (4.55)
as illustrated under Form 8 occurred only in references to
more than one person or non-person. Previous writers on
Yucatec class tac (-tak) as a sign of plurality used ex-
clusively with past participles ending in -aan or -an.
López Otero (Gramática, 1914, p. 64) notes that the common
sign of plurality ob (-o:b) may be affixed to tac. For
the plural of chilaan he lists these three forms: chilantac,
chilanob, chilantacob, which he gives apparently as equi-
valent variants. We did not discover any rule for the ad-
dition of -o:b to -t-ak, but an adequate study of this whole
topic requires a great deal more information than is now
available to us.

The following sentences illustrate common uses of
some of the 8 forms listed above:

93. wai ka'hakba, len. I live here. Note: wai, 'here',
refers to the village; and the implication is that the speaker
is a permanent resident, a regular member of the community.
kah-ak-ba-l, Form 7; kah, village, town, to inhabit. -en,
1st. pers. sing. pron. Class B, required by intransitive
verbs.
When I arrived you were lying in this hammock. ka k'uuf-en-e?, when I arrived; ka ... e?, temporal clause when using an
AHAB-construction; cf. 4.33; k'uuf-en, intransitive AHAB-con-
struction, 1st. pers. sing. (4.9). tfil-ik-ba-l-etj, you were
lying; Form 7, 2nd. pers. sing. ti, at, in, etc. le k'an-a?,
this hammock.

I am not afraid of him. For
ma? ... -i? in negative sentences see 4.59. sah-ak-en, Form
1, 1st. pers. sing. ti, to, of, to him, etc. (2.29).

There
was the little squirrel sitting up on the branch of the tree.
ti?, there, at that place (2.25). t'uuf-aan-ak, Form 8;
t'uuf, squat, roost, perch. le ... o?, the; tfjan, little;
kuuk, squirrel. t-u, fusion of ti, to, at, etc. and Class A
pron. u. u k'ab tfe?, branch of tree; k'ab, branch, arm,
hand.

The hat of the
poor fish peddler was crushed and ripped. n'uuf-al-ak, Form
3; n'uuf, to shell corn by mauling, shred by pounding, rip
clothes in a scuffle, etc. u p'ok, the hat of. o(l)-hil,
poor, worthy of sympathy; ol, mind, psychologic activity of
various sorts; for -hil see 4.71. kon, sell; ka'i, fish.

Their swords glittered.
lelem-n-ak, Form 2; lem, component of various words signifying
'to shine', 'be bright', 'lightning' (lem-ba). hats'-ab,
obsolescent word occurring in stories from two localities
(Calkini, Campeche; and Xaybe, British Honduras) understood now as signifying 'sword'; hate', to hit; -ab, phonologically identical with suffix of passive voice (3.38), found as component of names of some tools and utensils; also in jan-ab, sandal.
Adjunct Verbal Stems

4.50. These are simple stems employed jointly with the stems of the various verbal constructions to describe actions of various sorts. Take, for example, fot', which signifies 'a piece that has been cut off', or 'to cut off'; and ʃ'ak, used with the formative -t (ʃ'ak-t), signifying 'to cut by striking' (with an ax, a machete, or some other tool similarly used). Each of those two stems can be the V-component of the transitive AHAB-construction t-PA V-ah; e.g., tu fot'ah, 'He cut it off'; tu ʃ'ak'tah, 'He cut it by striking'. Or the two stems can be used jointly in a single AHAB-construction which we may formulate thus: t-PA V V-ah; e.g., tu fot' ʃ'ak'tah, approximately: 'He chopped it off with a single stroke', or 'He chopped them up'. We say that in this case fot' is used as an adjunct verbal stem.

We distinguish between adjunct verbal stems and composite verbal stems on these two grounds: (1) The phonologic rules governing the accent of verbal units apply both to simple and to composite stems, but not to combinations of adjunct verbal stems with other stems. (2) The combinations of the constituents of composite stems are lexicographically predetermined; but the combinations resulting from the use of adjunct verbal stems are circumstantially determined. That is to say,
whether two given items are or are not to be combined, depends in the case of the adjunct verbal stems on what one wishes to communicate; just as it depends on what one wishes to communicate whether one should say 'It is a horse', or 'It is a black horse'. In the case of the composite stems, the combination is as predetermined as that of 'under' and 'stand' in our word 'understand'.

Adjunct verbal stems have occurred in all the verbal constructions, and their position is always immediately before the V-component of the construction. Some stems have been found in no other constructions than those in which they were adjunct verbal stems. The most common of these is han, 'to do in a hurry', 'to proceed without further ado', 'to act without regard for the consequences', 'not to make much of what is done'. Examples contrasting verbal units with and without han: 1. ka sola'ko:b. 'And they knelt down'; ka han sola'ko:b, approximately: 'And right away they knelt down'. 2. ka tu k'a'lah le 'huuno'. 'And he sealed the letter'; ka tu han k'a'lah le 'huuno', ka lik' 'jalka, be.' 'He hurriedly sealed the letter, and darted away'. 3. ka tek'ta: 'bi. 'He was stepped on' (someone or ones stepped on his body); ka 'tek'ta: bi (reduplicated stem), 'He was stepped on repeatedly (on a single occasion)'; ka han
The words that are used as adjunct verbal stems are quite numerous. In fact, it is probable that any stem that designates action can be so used. This device enables the speaker to describe action in a brief and specific manner, a circumstance which bilingual individuals often point out when commenting on the inadequacy of Spanish words to report a happening as much in detail as in customary when speaking Yucatec. Take, for example, the action of throwing something with force, for which the stem ūk'in is used. By combining with it the stem ūk'i, 'to drive a pointed object into the ground (or some other substance into which driving by pressure is feasible)', the act of driving a pointed object by throwing it like a javelin is described: tu ūk'i ūk'in'tah 'luum. 'He threw it and drove it into the ground'. Replace ūk'i by hup, 'to insert into something that offers little resistance', and we get tu hup ūk'in'tah, which describes an act such as that of throwing a stick into the water tip first. If we replace hup by jīk, 'to rest on four props or
legs (like a table or an animal), we get tu ḫak ʧ'ın'tah, said of an instance in which a man was thrown out of the house, and landed on his hands and knees. Similarly, tu k'ah ʧ'ın'tah is said of the act of splitting something by dashing it against a stone, a tree, a wall, etc. (k'ah, to split by concussion). ḫik, to crumble, disintegrate; tu ḫik ʧ'ın'tah, 'He dashed it against (a hard object) and shattered it to pieces'. tu pik ʧ'ın'tah, 'He threw it in disgust (or with wrath, or just to get rid of it). tu lem ʧ'ın'tah, said of an act of throwing something into the foliage of a bush as to hide it (lem, to insert into piled objects, or as a stick into a load of firewood).

Occupying the same position as the adjunct verbal stems, we find the numeral ka:, 'two', signifying 'once more', 'again'; et, 'together with', 'in the company of', 'bringing along (some object)'; mul, 'in a group', 'all together'; e.g., 'kone:ʃ mul if'ìn'tik, 'Let us bathe together'. le ken ts:'ke?, jet tal hun ḥaʃ sip'ye?, 'When he comes, he brings along (comes with) a bunch of herbs.' tu ka: ḫikpa'tah tu pol, 'Once more he smashed it on his head.'

All adjunct verbal stems whose initial sound is a vowel require the prefixes w- (for 1st. and 2nd. pers.), and j- (for 3rd. pers.). Examples with op', 'to indent by pressure', 'to crack shells or nuts by pressing': kin wop' k'usti'keʃ, 'I will bite you (driving teeth in the flesh); ka tu jop'
k'u'uf'tah, 'And he bit him' (as in the preceding example).

Some stems which are generally used without the formative -t (3.26) are found with this suffix when certain adjunct verbal stems precede them. The above examples with t'fin, 'to throw', are of this sort. We were unable to find any rule for this use of -t. This was observed only in transitive constructions, and in no instance did this particular use of -t occur when the adjunct verbal stem was han, 'to do in a hurry', etc.

**AEO-Constructions**

4.51. The description of these constructions will be based on these two formulas:

**AEO-Units**

Form 1. $IC-TC$

Form 2. $IC-IU-TC$

The notation 'IC' stands for the **initial component** of an AEO-Unit. IC can be one of the following stems: bei, 'thus', 'just like', etc. he(l), (untranslatable apart from TC and IU-TC). le(l), a component of some demonstrative devices. te(l), 'here' or 'there'. wai, 'here', 'hereabout'. The notation 'TC' stands for the terminal component of an AEO-Unit. TC is always one of the following suffixes: -eære, -eør, -eør. In Form 2, 'IU' stands for an **included unit**. IU can be (a) a simple or a composite stem used as a Yucatec noun, or (b) two or more
words which are components of a phrase, or (c) a verbal unit consisting of two or more words, or (d) a unit which in other instances can be a sentence. TC is always suffixed to the last component of IU, regardless of what sort of component it may be. The whole AEO-Unit can be a phrase, or a clause, or a sentence, depending on its IC and IU components, and on its position in the sentence when the AEO-Unit is a component of a sentence.

Excepting some of the uses of he(1) with -e* as a terminal component, the AEO-constructions are devices of a sort that could be called contextual definitives (See Note 12). At least two kinds of references are made by means of contextual definitives: ostensive, and retrospective. In an ostensive reference, the speaker indicates what item he refers to by pointing or looking at it, or by taking advantage of some other contextual circumstance, such as the circumstance that he refers to the very time during which he speaks, as in some of the uses of the word 'now', or that he refers to the place where he is at the time he speaks, as in some of the uses of the word 'here'. An ostensive reference could be said to be prospective when the item referred to is demonstrated or exemplified after the reference; as when one says, 'Do it this way', and proceeds to specify what he proposes to say. In a retrospective reference, the speaker refers to that which occurred prior to his reference, or to what was previously mentioned or spoken of by him or by the one or ones to whom he speaks; e.g., 'That's what I told him'.
Although in order to specify adequately what an AEO-construction signifies, one must deal with its initial and terminal components concurrently, as constituting in each case a single device, some generalizations can be made concerning the referential uses of the terminal components. The terminal component -a? is used exclusively in ostensive references to items nearer to the speaker than to the listener, or to a time contemporary with that in which the reference is made; or in reference to what the speaker proceeds to demonstrate, exemplify, or speak of. -o? is used both in ostensive and in retrospective references. In ostensive references, the item is nearer to the listener than to the speaker, or roughly at about the same distance from both. For retrospective references, either -o? or -e? are used, depending mainly on topical distinction (4.8). -e? is used for ostensive references only with wai, 'hereabout'. It should be noted that -e? is used otherwise than as a component of AEO-constructions, as shown in 4.58. Specifications more definite than the preceding can be made by dealing with each initial component together with the terminal components that concur with it, as we proceed to do.

bei. Form 1 (bei-TC): be'ja?, 'in this manner', 'like this'; be'jo?, 'in that manner', 'like that', 'by so doing', 'that being the case'. In no instance was bei found in Form 1 with -e? for TC. Form 2 (bei IU-TC): bei IU-a?, ostensive reference to what is being demonstrated; e.g., bei ku
be:'taal'a?, 'This is the way it is done'. bei IU-o?, retrospective reference to what has just been demonstrated, or described; e.g., bei kan a be:'to?, 'That is the way you are going to do it'; (kan, fusion of ka and bin). bei IU-e?, retrospective reference to a procedure being discussed, but not demonstrated; e.g., bei tu:'ne? (ma: tan u 'pahtal in 'baatel), 'That being the case, (I cannot fight); tun, 'so', 'therefore'.

he(l). Form 1 (hel-TC). Ostensive references: *he:'la? or 'heela?, 'Here it (he, she) is!' 'Here they are!' *he:'lo? or 'heelo? 'There it (he, she) is!' 'There they are!' Both expressions serve to attract attention to the presence of the referent, rather than to specify its location. Their uses are very similar to those of French voici and voila. 'heele' or *hele', 'I will do so', 'It will certainly be done' (See 4.16). Form 2 (he(l) IU-TC): when TC is -a? or -o? the reference is ostensive, and differs from Form 1 only in that IU specifies what is referred to; e.g., he le p'ok tin mana'ha?, 'Here is the hat I bought' (he ... -a?). The pronouns of Class B are affixed to hel, as they are to any intransitive verb; for example: 2nd. sing., -e§ in 'he:le,yo?', 'There you are!' (said upon noticing the presence of the person referred to). The uses of he in ostensive references with the k-IKAL-constructions were discussed in 4.30, Usage
B-2. Two special uses of he IU-e? were dealt with in 4.16 and 4.45.

The stem hel as an X-variant of he seems to be mainly a Modern Yucatec development. Historically, the words 'he?la?, 'he?lo? are compounds of he and la?, lo?. Corresponding to Modern Yucatec le (initial component of AEO-Units) and -a?, -o?, -e?, we find in Old Yucatec lay la, lo, e. lay, like Mod. Yuc. le, was the first component of the construction that required it; la occurred both as an initial component and as a terminal component. Corresponding to Mod. Yuc. le ... -a?, we find in Old Yuc. le ... le; as in this example under le in the Motul dictionary: le bin e cha la, 'This is what you will take'. Old Yuc. lo, like Mod. Yuc. -o?, occurred as a terminal component, and also affixed to lay; thus, lailo corresponds to le:'lo?, 'that', 'that one'. Adhering to purely descriptive procedures, as we endeavor to do in these pages, there is some ground for analyzing 'he?lo?' into a variable stem he(l) and a suffix -o?, and none for saying that a variable -(l)o? is affixed to he. For in the speech of some localities, hel without any affix has occurred, though inconsistently. On the other hand, there is no more reason for analyzing le:'lo? and te:'lo? into the variable stems le(l), te(l), and a suffix -o? (as we have done) than for assuming a variable suffix -(l)o?. Historically, of course, the l is a component of -lo?. With
regard to he(l), Old Yucatec presents the same sort of difficulty. For although e was the form of the terminal component at the end of a phrase or a sentence, when affixed to he we find hele; as in laac hele laac qanak laac, 'Be it today, or tomorrow, or some other day' (Motul dictionary, Art. laac).

le(l). Form 1 (lel-TC): le:'la', 'this", 'this one'; le:'lo', 'that', 'that one'. For the intervening consonant -l- see the preceding paragraph. le:'la' is used only in ostensive references. le:'lo' is used both in ostensive and retrospective references. Form 1 with -e? has not been found. Form 2 (le IU-TC): the only difference between a reference with Form 2 and one with Form 1 is that in the former IU specifies explicitly what is referred to; e.g., le pe:'k'a', 'this dog'; le pe:'k'o', 'that dog' or 'the dog'; le pek' a ma:jma:o', 'That dog you are holding'. The form le IU-e? is used in retrospective references and in vague references to what may be present or occur in a non-immediate future time. In retrospective references, le IU-e? is not used when the identity of the item specified by IU is the dominant topic. Aside from such instances, it is difficult to disclose what governs the choice of le IU-e? or le IU-o? in retrospective references. For the special use of le IU-e? in temporal clauses, see 4.33. Sentences which illustrate the most common uses of le IU-TC are found in 4.14, Exx. 1, 5, 6, 7;
4.15, Exx. 5, 7, 8, 9; 4.18, Ex. 5; 4.20, Exx. 9, 10; 4.34, Exx. 37, 39, 40.

te(l). Form 1 (tel-TC): te:'la?, 'here', ostensive reference to a particular locus generally indicated by a gesture. te:'lo?, 'there', ostensive or retrospective reference. Form 1 with -e? for TC has not occurred. The uses of Form 2 (te IU-TC) differ from those of Form 1 only in that IU specifies the place referred to. Form te IU-TC is not used when IU contains one of the constructions that require ti? IU-i(?) as shown in 4.59. In 4.59 we compare the most common uses of -i(?) with those of the terminal components of the AEO-constructions. It should be noted that te, as a fusion of ti? and le, and te, signifying 'there', as in form te IU-TC, are homophonic devices governed by different rules. It is observed that ti? and le fuse into te more frequently when a phrase of the form ti(?) le IU-TC specifies a location; e.g., te ka:'ho? (ti le ka:'ho?) 'in the village'; kah, village, town.

wai. Form 1 (wai-TC). wa'je?, 'here', ostensive reference to the locality or region in which the speaker is when he refers to it; or ostensive reference to the immediate surroundings; or to motion toward the speaker, as in ko'ten wa'je?, 'Come here'. wa'ja?, 'this way', 'in this direction', ostensive reference generally supplemented by a gesture. This reference differs from one with te:'la? in that the latter is
generally applicable to location, and not to direction of motion. *wa'je* differs from *te:'la* in that when the former is used the circumstance that the speaker is within or near the place referred to is sufficient to delimit the scope of the reference; whereas *te:'la* depends on some other contextual circumstance for such delimitation. The gesture accompanying *wa'je* in references to space near the speaker is similar to a gesture indicating direction of motion; and *wa'je* signifies in such cases 'hereabout' rather than 'right here'. For 'right here' with a pointing gesture, *te:'la* is the expression commonly used. The foregoing applies as well to Form 2 (*wai IU-TC*). This form has occurred most frequently with the name of a locality for IU; e.g., *wai 'yu'ma:'le*, 'here in Chemax'; *wai 'jukata,ne*, 'here in Yucatan'; or with *wai* followed by construction *ti le ... -a*, or *te ... -a*; e.g., *wai ti le ka:'ha*, 'here, in this town'. In answer to the question 'tuufet', 'Where are you?', we have observed *wai* used as an intransitive verb with the 1st. pers. pron. -en; thus: *'waje,na*', 'Here I am'.

*behe'la*, or *beh'la*, signifying 'now', is etymologically analyzable into these three components: *bei-he-la*; where *bei* and *he* are the initial components above spoken of, and *la* corresponds to Old Yuc. *le*, from which the terminal component -a seems to have developed. The first component, *be* (from Old Yuc. *bay*), is found also in the hybrid words
,beo:'ra and ,beo:irita'e?, signifying 'presently', 'right away'. The Spanish components are evidently ahora, 'now', and the colloquial diminutive ahorita, 'right now', common in the speech of some peoples of Spanish America. In the localities in which these hybrid words are prevalent, they are not equivalent to the non-hybrid ,behe'la?, beh'la?. The difference is that the hybrid words are used in reference to an immediate future time; whereas the non-hybrid expression refers exclusively to contemporary time. Example of Speech-type B. from Piste, Yucatan: ,beo:ritae', bin in 'gikbaite' bis u mo:do'il u be:'ta: kol wai ban,da'e?, 'Now, I am going to describe the way in which milpas are made in this region'; adopted Spanish words: ahorita (mentioned above), modo, 'way', 'manner'; banda, colloquial for 'region', 'side'; be:'ta:, B-variant of be:'taal, passive IKAL 4.13; 'the way of doing', 'the way it is done'.

The terminal component -a? is frequently omitted when the word to which it would be affixed in conformity with the general rules ends in a. Example: hel in maf'ma, 'Look, I am holding it'; construction he(1) IU-a?; -a? omitted after maf-ma (construction V-ma, 4.66). Still, with ha'o, 'water', le 'ha,a?, 'this water', occurred twice. Omissions of -o? in Form 2 (IC IU-o?) were observed in instances in which IU was a rather long and complex unit.
By the notation '-(a)l' we refer to the following five suffixes: -al, affixed to a simple stem whose vowel is a, or to a composite stem, whatever its vocalic components may be; and -el, -il, -ol, or -ul, affixed to a simple stem whose vowel is like that of the suffix. Thus, the discussion of the uses of -(a)l excludes the special uses of the suffix -il (4.60) affixed to simple or composite stems regardless of their vocalic constituents.

The uses of -(a)l as a distinctive component of the intransitive IKAL and k-IKAL constructions were discussed in 4.13 and 4.27. In those constructions, the uses of two other suffixes, -ik, for transitive, and -(aa)l, for passive, correspond to those of -(a)l. That is to say, in 4.13 and 4.27, it was feasible to formulate generalizations which hold for various uses of -ik and -(aa)l as well as for -(a)l. We will now take up some uses of -(a)l which do not correspond in the same manner to any uses of -ik or -(aa)l. For convenience of reference, those uses will be said to be the X-uses of -(a)l. Any word of which -(a)l is a component and serves an X-use will be represented by the notation 'X-(a)l'.

In different instances, X-(a)l can be equivalent to an English infinitive, or to a noun, or an adjective, an adverb, a preposition, or a conjunction. Thus, from the standpoint of the grammatical taxonomy we have all been taught, the X-uses of -(a)l appear to be quite diverse. In 4.13, it
was suggested that construction PA V-(a)l, as well as each of the other two IKAL-constructions, is comparable to an English infinitive clause specifying an action and the agent, as 'me to go' in 'He wants me to go'. Now, in such a sentence as 'I want to go' it is asserted that the speaker wants x. It is obvious that x is an act of going, but not any act of going whatever: it is an act of going performed by the speaker himself. Thus, both in 'He wants me to go' and in 'I want to go' the agent of the action of going is specified, though by different devices. One may say more or less figuratively that English avoids the repetition of the specification of the agent when the same individual or non-individual is the agent of the two actions specified in sentences constructed as the second of the above examples. The same sort of economy of device is observed in Yucatec with intransitive, but not with transitive verbs. Thus, we find the pronoun in repeated in in k'at in be'te, 'I wish to do it' (4.40); but not in in k'at 'hok'ol, 'I wish to go out'.

In view of such uses of X-(a)l, writers on Yucatec had no difficulty in finding what was the "infinitive" of many intransitive verbs. What is the "infinitive" of transitive verbs was apparently a question they could not so easily answer. Particularly in view of the fact that the tran-
sitive forms whose uses resemble those of the Spanish infinitive require the specification of the agent by means of the pronouns of Class A, as the above example, in k'at in be:t'e, illustrates. In dictionaries the difficulty was variously disposed of by entering the stem of the transitive verb without affixes, or with formative affixes, or with the suffix -ah (see form PA V-ah of the AHAB-constructions). So far as I know, Lopez Otero (Gramatica, 1914) is the only writer who classes the form V-ik as the "infinitive" of regular transitive verbs; that is, the transitive form whose uses correspond to those of the intransitive V-(a)l in the IKAL-constructions (4.13). The suffix -(a)l is purely a constructional device with no more referential value than that of 'to' in 'I wish to go'; that is, with no referential value at all. Hence, when no pronoun or other device specifies the agent, a word of the form X-(a)l renders no other referential service than that of designating a kind of action, just as many names of actions do in English; viz., 'attraction', 'repulsion', 'impulse', 'vibration', and numerous others. With such referential value we find many words of the form X-(a)l used as Yucatec nouns. In most cases the stems we represent by 'X' in 'X-(a)l' are found in other constructions serving as stems of intransitive verbal units; e.g., ha'nal, 'cooked food' (excluding such as consists entirely or principally of maize); and tan in ha'nal, 'I am eating' (in verbal construc-
tions, han is now applicable without restriction to the action of eating any food whatever). In other cases, X occurs at present only as the stem of a special noun; e.g., `afa'nal, 'cigarette'. This does not imply, however, that the V-(a)l form of any intransitive verb can be used as a Yucatec noun. Etymology and particular habits of speech seem to be the only determinants in the choice of the intransitive verbs whose V-(a)l forms can be used as nouns, and those which require the suffix -il (4.60) when used in nominal constructions. Similarly erratic is the formation of nouns by affixing both -(a)l and -il, with the frequent elision of the vowel of -(a)l. A few stems occur both in construction X-(a)l and X-(a)l-il; the former being used in reference to a particular item, and the latter in vague references to any item whatever, or to an unspecified number of them. E.g., ha'nal is used in reference to the particular non-maize food delimited by the context; whereas han'ilil or hana'ilil is used in such a non-particular reference as ku 's'orko'le", ku be:taal u han'ilil, 'After that the non-maize food is prepared' (literally: 'is made'), said in reference to what is done habitually on certain occasions. To indicate what sort of Yucatec nouns are composed of a simple or composite stem and the suffix -(a)l, we list below those which occurred in the texts, or which appear in our lists of names of various plants, insects, and other items, recorded merely as lexicographic data.
The document provides a list of Yucatec words with their English equivalents. It also mentions that some Yucatec words that conform to the above specifications of form X-(a)l are equivalent to English prepositions and conjunctions. The words are categorically listed with their meanings, including:

- **a'bal, plum**
- **hā'nal, non-maize food**
- **kā'hal, hamlet**
- **'kimil, death**
- **ki'nil, wound, sore**
- **ki'p'il, slippery place**
- **ki'ts'il, filth**
- **kol'nal, milpa tiller**
- **ko'y'ol, species of cricket**
- **ku'ulul, species of cactus**
- **'leet'el, furrow, partition**
- **mank'i'nal, holiday**
- **met'nal, Hell**
- **me'k'el, armful**
- **'naahal, wages**
- **na'p'al, leech**
- **niijil or niñ, slope**
- **no'hol or no'hil, south**
- **kuf'tal, life, living**
- **o'kol, thief**
- **sak pa'kal, kind of wild dove**
- **pa'k'al, orange**
- **po'k'ol, species of plant bugs**
- **'siip'il, sin, guilt**
- **to'hol, price**
- **'p'oookol, knot (in wood)**
- **t'u'jul, species of termite**
- **ts'apal, pile of small objects**
- **jak'nal, quadruped**
- **ji't'il, tendon, cord**
- **ju'kul, purslane**
- **tja'mal, cigarette**
- **tʃi'kil or tʃikul, sign, indication**
- **tʃu'ulul, name or a tree**
- **k'o'ʃol, mosquito**

Some Yucatec words that conform to the above specifications of form X-(a)l are equivalent to English prepositions and conjunctions. Definitely of this sort are the following:

- **'ka'bal, down, below**
- **'kaanal, up, above**
- **i'ʃ'il or iʃ, within, in, among**
- **'janal, under**
- **'jetel, with, and**
- **jok'ol or jok', on.**

From the standpoint of Yucatec construction,
these are irregular verbs. The irregularity consists in the omission of the pronouns of Class A, which are distinctive components of the IKAL-constructions (4.13). They are verbs also from the standpoint of Yucatec usage; for Yucatec verbs serve to assert what they specify. Take for example, 'jetel, which is equivalent to 'with' in some cases, and to 'and' in others. It serves to assert that something is together with something else, or that something is added to something else, or that two or more items are similarly involved in what is asserted. Its stem is et, and it has occurred in the following combinations: tin 'wetel, with me; ta 'wetel, with you (sing.); 'jel, with him, her, it; k 'etel, with us; k 'ete,le:, with you (plur.) and me; ta wete',le:, with you (plur.); 'jete,lo:b, with them. Without the suffix -el, we find it in et 's'o'no1, hunting partner, one of the members of a hunting party; i.e., one who is hunting together with someone else; in wet 'jibil, my companion; hun tul et 'u'pil, a female friend (of another woman). Examples with the stem k of 'jok'ol, on, are: tin 'wok'ol, on me; ta wok'o'le:, on you (plur.). In 'jok'ol and 'jetel there is a remnant of Old Yucatec construction. For the prefix j- (written y) was the 3rd. pers. pronoun prefixed to verbs or nouns with initial vowel. Thus instead of Mod. Yuc. u 'o'hel,
'he knows', we find simply yohel; and instead of u ja'tan, 'his wife', we find yatan. Similarly, for tin 'wetel, 'with me', Old Yucatec had uetel, and for in 'waitan, 'my wife', one finds uatan. The stem of 'kaanal, 'above', is identical with the word 'kaan, 'sky'; and that of the word for 'down', 'below', is found in composite stems signifying motion downward, as well as in references to soil, earth, as in sas kab, 'white earth'; and in the phrase 'jok'ol kab, 'the earth', 'this world', 'in this world'. It is possible that 'janal, 'under' is a Modern Yucatec development. In some localities we found 'jalan, instead of 'janal. The Motul dictionary gives alan with these two inflexions: ualan, 'under me'; a ualan, 'under you (sing.)'. The stem of it'fil, 'within', 'among', is phonologically identical with that of the verb for 'to bathe', as in the imperative it'f-in (4.57); transitive, it'f-in-s(-e) (4.38). In the texts we found it'filon, 'among us'; it'fil'e;j, 'among you'; it'fil:o:b, 'among them'. Different from the above, but containing the suffix -(a)l, and used more definitely as verbal units, are the following: tu 'jok'olal (less frequently: tu 'jok'nal or 'jok'olal), 'on account of', 'in order to', 'so that'; tu me'nal (most frequently: tu men), 'because', 'due to', 'by' (agent of passive); tu 'lakal, 'all', 'every'; u 'ti'nal, 'for', 'in order to', 'it belongs to him'; 'it is for him'. The uses and inflexions of the first expressions were discussed in 4.23. tu men with the suffix -el has been
used mainly to assert or deny that someone was to be blamed,
or to be given credit, for a certain happening; e.g., tu me'nel 'kimi, 'He is to be blamed for her death'; literally: 'on account of him she died'. With the 1st. pers. pron. in instead of the 3rd. pers. u, we found ma tin me'nel 'lubi, 'it is not my fault that it fell'. The stem men occurs at present frequently with the sense of 'to make', 'to fashion'; etymologically, men is the stem of me'jah (me(n)-j(a)-ah), to work. For the identification of the suffix -(a)l in tu 'lakal, we find only etymological evidence. The Motul dictionary defines lah, lacach, and tulacal as signifying 'all'. Incidentally, the example given to illustrate the use of lacach is lacach binob tulacal, 'they all went'. This use of two expressions signifying 'all', one before the verb and the other after, is common in Modern Yucatec; but the first of the two, so far as our texts show, is now lah; e.g., lah bi'no:b tu 'lakal, 'they all went'. The uses of lah are discussed in 4.64. The identification of the pronoun u in tu 'lakal rests on the occurrence of t 'laklo:n, 'every one of us'; and ta 'lakle:f, 'every one of you'. Previous writers may have been influenced by their own languages in writing the phrase tu 'lakal as a single word (tulacal). Those who wrote, for example, tu yotoch (tu jo'tot), 'to his house', as two words, are doubtless inconsistent in writing tulacal as a single word. It is possible that it did not occur to them that the equivalent of their word for 'all' could be in another language a phrase containing a pronoun, or even a verb in some "tense" and "mood".
It is pointed out in 4.53 that construction V-aan-PB serves in many cases to refer to a circumstance which is a consequence of an event of the sort denoted by the V-component of the construction; e.g., lik', 'to get up', lik'aan, 'He is up'. As stated in 4.53, at least three constructions are employed in such references. One of them is V-(a)l-PB. This is used with certain simple stems (3.1). Some of them can be used indifferently with construction V-(a)l-PB or V-aan-PB; others are at present more frequently used with the former than with the latter. We were unable to disclose any rules governing the choice of either construction. In the 3rd. pers. sing. and plur. of construction V-(a)l-PB, which is simply the stem with the suffix -(a)l (2.5), the vowel of the stem is doubled or not, depending of whether the verbal unit is emphatically uttered, or is the only or last word of the sentence; e.g., 'luubul, 'It is fallen'; also, though less prevalently used, lu'baan, 'It is fallen'. 'aahal, 'He is awake'; ah, 'to wake up'. 'kaafj'al, 'It is broken'; kaafj, 'to break' (intransitive), applicable to sticks and other brittle objects classed as comparatively long and thin. In subordinate assertions equivalent to English adjectives or relative clauses, construction V-(a)l sometimes precedes and sometimes follows the noun that specifies what or who is in the condition or circumstance referred to by V-(a)l; e.g., hun n'el 'luubul le?', 'a fallen leaf'; hun n'el u le? Ñe? 'luubul,le?', 'a leaf that had fallen from a tree'; literally: 'a leaf of a tree fallen'; le?, 'leaf'.
4.53. In 4.49 we dealt with the use of the suffix -aan in construction S-aan-ak and S-aan-t-ak (Form 8). We are to consider now the most common uses of -aan and its variant -an.

The difference between -an and -aan is purely phonologic. The single a is found in most cases when the main stress of the word or the phrase, or sentence, is on some component other than this suffix. Ordinarily, and particularly when the verbal unit which contains the suffix in question is the main verb of the sentence, the main stress falls upon this suffix. In the instances which will be said to be regular due to their frequency, the constructions conform to this formula: V-aan-PB.

It may not be superfluous to note that, since the pronoun of Class B for the 3rd. pers. sing. is a null sign, the actual form for the 3rd. sing. is V-aan.

Construction V-aan-PB specifies a contemporary (4.3) circumstance which is a consequence of a prior event of the sort referred to by the V-component of this construction. For example, let the V-component be k'al, signifying 'to look up'; and let PB be -en, 'I', 'me'. We obtain this sentence: k'a'laanen, 'I am locked up', or, in reference to a contemporary-past occurrent (4.4, Case 5), 'I was locked up', i.e., the individual had been locked up and was still locked up at that time. Here, the prior event is an act of locking up, and its consequence is the contemporary (4.3) circumstance of being in confinement. Should the distinction between a prior event and its consequence seem arbitrary in reference to the past, account should be taken of the fact that the English translation 'I was
locked up' is ambiguous out of context. The Spanish translation of Ka'laanen, _estaba encerrado_, would unambiguously indicate that what is asserted is that the individual was in confinement. Many specifications of conditions or circumstances that are made in English by the verb 'to be', and in Spanish by _estar_ (not _ser_), are made in Yucatec by means of construction V-aan-PB. For example: li'k'aanen, 'I am up' (on my feet); lik', 'to get up'. ka'la:n, 'He is drunk'; kal-\-tja-h-i, 'He got drunk'. k?o'haanen, 'I am sick'. ma 'laanane\-ti', 'You are not tired'; kaan-an-\-et\-i?, \-et\-, 2nd. pers. sing.; for \-i? see 4.59.

Three other constructions are used like the one under consideration. They are: V-(a)k (4.48), V-(a)x-ba-\-l (4.49, Form 7), and V-(a)l (4.52). These three have been found only with verbs that are generally used intransitively; whereas V-aan-PB has occurred with stems that are generally used transitively, as well as with a few which are always used intransitively. So far as our texts and supplementary inquiry show, some intransitive verbs are used only with one of those three constructions, or only with V-aan-PB, while others admit of the use of two of them. Thus, the verb tal, 'to come', has been found only with construction V-(a)k for 'he has come'; e.g., ta'lak; or, as some of the older folk say, ta'lik; or with the B-variant tak instead of ta'lak. But construction V-(a)k with bin, 'to go', signifies 'perhaps' (4.47). For 'he has gone', the irregular construction bina'haan was the only one found. According to various informants, it is permissible to say
lu'baan, for 'it is fallen', but 'luubul (4.52) is at present preferred, and that is, in fact, the one which occurred in the texts.

The plural forms V-aan-o:b, V-aan-t-ak, and V-aan-t-ak-o:b have already been discussed (4.49). The differences and similarities between the uses of V-aan-PB and PA V-ma are pointed out in 4.66.

With the verb kirn, 'to die', the suffix is -en instead of -aan. Several writers on Old Yucatec point out this irregularity. In our texts kiim'en has occurred signifying 'He is dead' and 'He was dead'.

Construction V-aan-PB, like any other Yucatec verbal construction, is used without alteration in Yucatec relative clauses. This is pointed out simply to mention one of the devices which render the same service as those which are said to be, or to serve as, adjectives in English and in other languages. There are no devices in Yucatec that can be classified as relative pronouns. The construction is like the English paratactical relative clause in 'the man I saw'; e.g., tin w'ilah, 'I saw'; le ... -o?, 'the' (4.51), mak, 'man', 'person'; hence: le mak tin wila'ho?, 'the man I saw'. Similarly, k'o'haan, 'He is sick'; k'o'haan le ma:'ko?, 'the man is sick' or 'that man is sick'; le mak k'o'haano?', 'the man who is sick' or 'the sick man'. Rationally, of course, there is no difference between a sick man and a man who is sick. Lack of distinction between an adjective and a verb may seem odd only to those who are
victims of the irrational grammatical taxonomy we have all been taught.

Construction V-asn-PB is exemplified in the very useful and common word mi'naan, 'there isn’t any', 'there is no more', 'he (she, it) is not (at a specified place)', 'not to have', 'not to exist'. It serves to negate all that can be asserted by jan (4.31). The common negative ma(?) is not permissible with jan, 'there is', 'to have', etc. Thus, ja'nen te:'loʔ, 'I was there'; mi'naanen te:'loʔ, 'I was not there'. jan ta:'k' in ten, 'I have money'; mi'naan ta:'k' in ten, 'I have no money'. The stem of mi'naan seems to have resulted from a phonetic change in Old Yucatec manaan, which was used as Mod. Yuc. mi'naan.
4.54. This suffix or combination of suffixes has occurred in our texts predominantly in verbal units of this form: tan PA V-ankil. The V-component was reduplicated in some cases, and not in others; e.g., tan u pekan'kil, He was wriggling', 'He was squirming about'; tan u kikilan'kil, 'He was trembling'. It is seen that this construction is similar in form to the common intransitive construction tan PA V-(a)l discussed in 4.14, and that both are used to refer to contemporaneous occurrences (4.3). Classing it as a tan+IKAL-construct (4.14), one would expect its final component to be -al; for that is the suffix required by composite stems in that construction. In analyzing -ankil one can assume either of these alternatives: (1) The final component is -il used irregularly instead of -al. (2) The final component is -1 affixed to -anki, the vowel of the suffix -(a)l being elided. If the second alternative is assumed, one could assume further either that -anki is an unanalyzable suffix (the only one thus far observed with two syllables), or that we have here a combination of the suffix -an of construction V-aan (4.53), and -ki, the suffix used in intransitive verbal units with reduplicated stems (4.63). But as a matter of fact, we are not sure that -ki is not itself a combination of two suffixes: -k-i, as implied by our remarks in 4.63. What -an and -ki may be said to signify in other constructions is of no aid in the analysis of -ankil. Since we are trying to describe
Modern Yucatec, and not to write its history, we take no account of what was the case in Old Yucatec. But even in Old Yucatec, the analysis of the two variants -ancil, -ancal is not easy. In the dictionaries, both combinations, -anc- al and -anc-il, are listed, and it is indicated in some instances that either combination can be used with some stems. Thus, the Motul dictionary gives tzayancal and tzayancil for 'to quarrel' (hablar con desgracia a otro, o reñirle alborotando); also: mutancal and mutancil, for 'to be defamed'; tixancal and tixancil, 'to be full to the brim'; and several other pairs of equivalent words with -ancal and -ancil. According to our informants, -ankal is not used at present.

The kinds of action referred to by the verbs that are used at present with -ankil are too diverse to permit any generalization as to what this ending signifies; and the same was true of the apparently more extensive use of -ancal and -ancil in Old Yucatec. In some instances what is referred to is some sort of oscillatory or vibratory motion; as in 'lolokan', kil, 'bubbling'; 'xikilan', kil, 'trembling'; 'sojan'kil, 'undulating'; 'tiikilan'kil, said of excited activity of ants in an ant hill. In others there is only a remote analogy to such kinds of motion; as in 't'iban'kil, said of water that spills over the border of a container as one carries it; 'human'kil, 'making rumbling sound'; 'oman'kil, 'foaming'. The fol-
lowing are of a quite different sort: ıne:lan'kil, 'laying eggs'; ıko:an'kil, 'acting like a maniac'; ık'u:an'kil, '(birds) are making nest'; k'e'lukan'kil, 'perspiring'; ıalan'kil, 'giving birth'.

In all cases the verbs with -ankil were intransitive.
4.55. Corresponding to Modern Yucatec -bil, we find as late as the nineteenth century this combination of suffixes: -ab-il. Pio Perez (Dictionary, about 1850) gives as equivalent words hoohochabil and hoohochbil, defined as signifying "it has been, or should be, scraped frequently, or repeatedly"; aalabil and aalbil, 'it has been said, or should be said'. The variant -abil did not occur in our texts, nor was it known to any of our informants. Due to its special uses, it seems desirable to deal with -bil separately, whether we class it as a suffix or as a combination of suffixes. The reason is that what -bil signifies at present cannot be inferred from the separate uses of -ab (4.10) and -il (4.60).

In our texts, -bil occurred in these four constructions:
(1) V-bil-PB, (2) V-bil, (3) V-bil-ak, (4) V-an-bil-PB. The fourth construction was found only with the stem kaj, 'to look for' or 'to find', in Speech-type A. kaj is generally used with the formative -t (3.16); tan in kaj'tik, 'I am looking for it'; tin kaj'tah, 'I found it'. In the fourth construction, the formative -t after kaj was replaced by -an (4.55) in some cases; e.g., kaj'anbil, 'It should be looked for'. But kaj'bil, and even kaj'tbil were more commonly found in both Speech-types. So far as usage is concerned, this fourth construction is a variant of V-bil-PB, the first of the constructions listed above. They are all classed here as passive constructions,
having the following in common with the passive AHAB-con-
struction (4.10): (a) their V-components are stems pre-
valently used in transitive constructions; (b) the agent
of the action signified by the stem is not specified,
or its specification is preceded by the expression tu men,
the sign of the agent (4.10); (c) the pronouns of Class B
stand for persons or non-persons involved in the action
in the same manner as the objects of transitive verbs;
that is, there is no inversion of subject and object.

Usage A. Construction V-bil-PB, used as the only or
main verbal unit of a sentence, serves to communicate
that something should be done. Thus hat'bil, 'He should
be flogged', was said in answer to a question as to what
should be done with a thief who had just been caught; and
pul'bil, 'It should be thrown away', was said in reply to
'Of what use is this to us?'..

Usage B. As a component of a bin-construction (4.55),
V-bil-PB specifies what has been planned or what had been
planned. Depending on the rules governing the uses of the
bin-constructions, the form of the component containing
-bil is V-bil for all persons, or form V-bil-PB is em-
ployed as usual with different PB-components for the
different persons. When the bin-construction contains
a pronoun of Class A, V-bil is used; and when it does
not, V-bil-PB is used. For the use of pronouns of Class A in bin-constructions see 4.56. The bin-constructions in which V-bil or V-bil-PB occurred are:

1. bin PA kah V-bil
2. PA bin V-bil
3. k-PA bin V-bil
4. bin V-bil-PB

Construction 1 conforms to the rules of usage of bin PA kah (4.56). Constructions 2 and 3 occur in subordinate clauses, and conform to the rules governing the uses of the IKAL (4.13) and k-IKAL (4.27) constructions, respectively. The use of construction 4 is in conformity with that of construction bin+ NULLAK (4.42). Thus, these bin-constructions differ from other bin-constructions only with respect to the fact that these contain a passive verbal unit (V-bil or V-bil-PB), whereas the others contain either transitive or intransitive verbal units occupying the same position as V-bil or V-bil-PB. For example, instead of bin u kah u be:'te, 'He is going to do it', we have bin u kah be't'bil, 'It is going to be done'.

Usage C. V-bil-PB is the passive construction employed in projective references (4.57) under these conditions: (a) The reference is monochronic (4.8); that is to say, a particular aim is to be accomplished on a subsequent occasion (4.3). (b) The one who is to accomplish the-
the aim is not specified. (c) The main verb preceding the projective reference designates motion, or implies motion, as, for example, tuX-t, 'to send'. (d) The sign of projective reference is constructional (4.23); that is, neither tu 'to' nor u 'that' is employed to signify 'in order to', 'so that', etc. Examples: tin 'tuXah -§'abi,ley, 'I sent for you'; -§a, 'fetch'. 'jiik ad'bil ti'e? ka u ,lik'su'ba, 'Let someone go and tell him to get ready'; lik'-s-u-ba, literally: 'to lift himself'. Here, as in many other cases, a Yucatec passive construction cannot be rendered idiomatically by the English passive voice. To use the passive voice in the translation of the first of the preceding examples one would have to say 'I sent (someone) in order that you would be fetched (by him)'; and for the second example, 'Go (someone) in order that it be told to him (by the one who may go) that he get ready'. In both instances, and in many others, the Yucatec passive is a special device employed when the subject of a transitive verb is not specified.

Usage D. The construction serving this usage is V-bil N; where 'N' stands for a Yucatec noun. For example, if V is the stem -ts'am, 'to soak', and N is 'bal¿le? (the name of a tree, its bark, and an alcoholic drink made from the bark), we get -ts'amobil 'cal¿le?, 'soaked balche'; that is, balche bark that is soaked by whomever may make the
drink called balche. In the name t'am'bil 'bal'che' the passive with -bil is still a device for referring to an action without specifying who performs it. In construction V-bil N, used as a nominal unit, V-bil serves to differentiate some items of the class denoted by N from others denoted also by N. This device is obviously comparable with that of using an English past participle adjectivally. In a few instances, -ak (4.49) was affixed to V-bil, and the construction was then either V-bil-ak N, or N V-bil-ak. In one text, 'k'uumbil, 'softened by boiling' was used in a general reference to maize softened by boiling; and 'k'uumbi, lak was used in the same text in reference to a particular quantity of maize which had been softened by boiling. It may well be the case that -ak serves to distinguish references to particulars from references to non-particulars, but the number of instances with -ak were too few to justify generalization. Furthermore, the uses of -ak to signify that something has occurred or has been done are subject to so many restrictions, as indicated in 4.49, that nothing can be confidently inferred in this case from the way -ak is employed in others.

Miscellaneous examples.

1. ka 'a:la'be' tan ji'laal; ku bin ka'fan,bil 'tuuj i'la:bi. And it was said that he was being seen (here and there); that he would be looked for (at the places) where he had been seen. a1l-ab, it was said; passive AHAB (4.10).
tan j-il-aal, was being seen; passive tan+IKAL (4.14).
k-u bin kaf-an-bil, was going to be looked for; see construction 3 above under Usage B. 'tuuj, where, il-ab, was seen; passive AHAB (4.10). For final -i see 4.59.

2. 'jìik bis'bil ti* a 'kumaa,le tu na'il. Have someone go to your compadre's house and take it to him. (Literally: let someone go in order to take it to your compadre to his house). 'j(i)-ik, let someone go; intransitive NULLAK, Usage A (4.38). bi(n)-s-bil, in order that it be taken; see Usage C above. 'kumaa,le, Spanish compadre; see 4.23, Ex. 1. t-u na-il, to his house; for -il affixed to na, 'house', see 4.60.

3. ka tu 'ia:lah ti'e?, kinsbi'lo:b. And he said to him, "They should be killed." t-u j-al-ah, he said; transitive AHAB (4.9). ti(?), to him (2.6); for -e? see 4.58. kir-s-bil-o:b, they should be killed; kim, die; kin-s, kill; m changes to n before non-labial; see Usage A of construction V-bil-PB above.

4. ka tu 'tuftah t'an'bil le of tul ]'q'upalalo:o:b?. And he sent (someone) to call the three girls. tu tuf-t-ah, he sent; transitive AHAB (4.9). t'an-bil, in order to call; see Usage C above. ]'q'up-(p)al-al-o:b, girls; ]-, see 3.3; tf'un, female; pal, youngster, youth; -al, old generic plural retained with the noun pal; at present, the regular plural -o:b is added to -al.
5. ka tu ṭs'ah hun ṭp'el ment'bil ṭf'iy' ṭjok'ol u ṭk'ab ṭjeʔ. And he put an artificial bird on the branch of the tree. ṭ-u ṭs'a-(a)h, he put. hun ṭp'el, one (inanimate); see 4.68. ment'-bil, artificial; that had been made; men-t, to fashion, to make; see Usage D above. ṭf'iy', bird. ṭjok'-ol, on; see 4.52. u ṭk'ab ṭjeʔ, the branch of the tree; ṭjeʔ, tree.
4.56. The following prevalent uses of the verb bin were observed: (A) signifying 'to go away' or 'to go to a specified place'; e.g., bi'nen tin wo'totj, 'I went home'. (B) Prediction of imminent happening, or of favorable happening close at hand, and resolution or project; e.g., bin in kah in be:'te?, 'I am going to do it' (without implying that the speaker is going to any place). (C) As a component of construction bin+NULLAK in predictions of the sort dealt with in 4.42. (D) In its NULLAK-form, bi'nak, signifying 'perhaps', 'maybe' (4.47). (E) As a sign of undetermined declarative value (4.7) ascribed by the speaker to what he quotes or infers. Before discussing these referential uses of bin, it seems desirable to take account of some constructional data.

In Old Yucatec, bin, 'go', tal, 'come' and man, 'pass by a place', 'wander', required the suffix -el in constructions corresponding to the form V-(a)l (4.52) of Modern Yucatec. By the first half of the eighteenth century, as Beltran's grammar shows, the simple stems bin, tal, man were used in various constructions in which binel, talel, manel were previously required. On page 85 (2nd. edition), Beltran gives as equivalent constructions binel in cah and bin in cah, 'I am going'. In Modern Yucatec, -el is affixed to bin, tal, man only in certain obsolescent expressions, as he tu'n bi'nel'e?, approximately: 'if that happens to be the case'; and sporadically in the speech of the old folk of some localities. The result is that in IKAL and -IKAL constructions (4.13, 4.27)
the prevalent form for bin, tal, and man is now PA V and k-PA V, instead of PA V-(a)l and k-PA V-(a)l. Save for the lack of a suffix of the type -(a)l, the verb bin has retained an Old Yucatec construction which seldom occurs at present with any other verb. This Old Yucatec construction may be formulated thus: V-(vowel)l PA oah;

where 'V-(vowel)l' stands for a verb stem used intransitively with a suffix consisting of a vowel and the consonant l. For some verbs the vowel of the suffix was the same as that of the stem; for others, the vowel was e. 'PA' stands for a pronoun corresponding etymologically to the Mod. Yuc. pronouns of Class A. cah, corresponding to Mod. Yuc. kah in Speech-type A, and to ka: and kaa in Type B, was a defective verb signifying approximately 'to be engaged in doing something', 'for something to be happening' (Motul dictionary: "pospuesto al cuerpo de todos verbos en presente de indicativo significa estar actualmente haciendo lo que los tales verbos significan". Beltran, Grammar, 2nd. ed. p. 90: "hacer, esto es, entender en algo que se está haciendo"). In Coronel's grammar (1820), the conjugation of intransitive verbs in the "present indicative" is exemplified by means of this paradigm with the stem nac, 'go up' or 'come up' (Spanish subir):

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>nacal in cah</td>
<td>nacal ca cah</td>
</tr>
<tr>
<td>nacal a cah</td>
<td>nacal a cahex</td>
</tr>
<tr>
<td>nacal u cah</td>
<td>nacal u cahob</td>
</tr>
</tbody>
</table>
This construction with any intransitive verb other than bin was understood by some of our oldest informants, but not as referring to a single occurrence of going up. Three informants, each in a different locality, said that the equivalent of the antiquated 'narkal u kah, for example, is now -țen 'narkal ku be:'tik, 'He does nothing but go up', 'He is all the time going up', implying an unusual or excessive recurrence. None understood it as the equivalent of tan u 'narkal, 'He is going up' or 'He was going up', said now in monochronic reference (4.6) to a contemporary occurrent (4.3), using construction tan+IKAL (4.14). On the other hand, with bin, 'go', the old construction is understood in an entirely different way, as shown below. To refer to this construction as it actually occurs with bin, we shall write bin PA kah. The complete paradigm of bin PA kah, signifying 'to be going', 'to propose to do something', is as follows:

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>bin in kah</td>
<td>bin k kah, bin k ka'he:j</td>
</tr>
<tr>
<td>bin a kah</td>
<td>bin a ka'he:j</td>
</tr>
<tr>
<td>bin u kah</td>
<td>bin u ka'ho:b</td>
</tr>
</tbody>
</table>

We revert now to the uses of bin labeled above 'A, ..., E'. Usage A requires no special comment. It must be taken into account simply because in some of the other uses no action of going from one place to another is referred to by the stem bin. Usage C was discussed in 4.42, and Usage
D was discussed in 4.47. Usages B and E remain to be considered.

Usage B. The constructions whose uses are grouped under this heading are: (1) bin PA kah, the modified Old Yucatec construction mentioned above. (2) PA bin and k-PA bin, each followed by one of the verbal units specified below. The last two are irregular IKAL and k-IKAL constructions so far as bin is concerned, but they occur in conformity with the rules governing the uses of those constructions (4.13, 4.27). The irregularity consists in that the suffix -(a)l is not affixed to bin (cf. above remarks on disuse of -el). The usage labeled 'Usage B' is distinguished from others on the ground that here the bin-construction does not stand exclusively, or does not stand at all, for the action of going away from or to a place. For example, in the sentence 'samal in bin te:lo?', which may be adequately rendered by 'I am going there tomorrow', an action of going to a place is referred to, but in addition to this a plan or resolution is communicated; that is, the sentence is equivalent to 'I plan to go there tomorrow', or 'I have decided to go there tomorrow'. For 'I am going', signifying that one is on his way to a place, construction tan+IKAL (4.14) is required; viz., tan in bin. Plan or resolution, or immediate action other than going to a place, can be communicated by sentences such as bin in kah in 'waal tet', 'I am going to tell you'. When the PA component of the construction is a 2nd. pers., as in bin a kah a be:te (bin PA kah PA V-(e)), 'You are going to do it', the communication is occasionally imperative with a high
degree of imperiousness (4.39). The same sentence, uttered with an interrogative intonation, is often equivalent to 'Do you intend to do it?' Any of these senses, including even the imperative, is possible when PA is a 3rd. person. When PA refers to an inanimate referent, the bin-construction can be simply a sign of immediate future occurrence; e.g., bin u kah 'lubul, 'It is going to fall', 'It is about to fall'. For the sake of simplicity, all the preceding examples have been translated as referring to future occurrences, but it should be understood that the same construction can refer to subsequent-past (4.4, Case 6). When a resolution is communicated, the resolution itself is contemporary (4.5), but even then the execution of the resolution or plan is subsequent: it is said that something will be done, or it was said that something would be done.

As is frequently the case in Modern Yucatec, the construction that is used in affirmation is not permissible in negation. ma: tan + IKAL (4.14) is the construction for the negation of what is asserted by bin PA kah; e.g., ma: tan in bin te:'lo?, 'I am not going there', 'I do not intend to go there', 'I refuse to go there'.

When the subsequent occurrent referred to is other than the action of going, the construction of the transitive or intransitive verbal unit specifying the subsequent occurrent is the same as that required after verbs of wishing or needing (4.40); namely, PA V-(e) for the transitive, and
and \( V-(a)l \) for the intransitive. For the passive, construction \( V-bil \) (4.55) is required in monochronic references (4.6), and \( V-(a)a1 \) (4.13) in polychronic references. Examples:

\[ \text{bin in kah in han'te, 'I am (was) going to eat it.'} \]
\[ \text{bin u kah 'lubul, 'It is (was) going to fall.'} \]
\[ \text{bin u kah u taːse, 'He is (was) going to bring it.'} \]
\[ \text{bin a kah 'kivil, 'You are (were) going to die'.} \]

Comparing the above constructions with \( \text{bin+NULLAK (4.42)} \), it is seen that for the transitive, the difference is only that the latter lacks the components \( PA \ kah \); while for the intransitive, the only characteristic component common to the two constructions is \( \text{bin} \). The difference in usage is mainly that the above constructions with \( \text{bin \ PA \ kah} \) are not used for a remote future, and are preferred in references to ordinary affairs. They also serve to communicate resolution or project; whereas \( \text{bin+NULLAK} \), so far as our observations go, indicate simply that a subsequent occurrent\(^+ \) is referred to. On the whole, the determinants in the choice of one or the other of these two sets of constructions seem to be similar to those which govern the use of comparable English constructions referring to future occurrences with and without 'go'; e.g., 'It will happen', 'It is going to happen'.

Usage E. For this usage the stem \( \text{bin} \), without any affix, occurs after words or constructions which serve to assert.
The office of bin when so used is to modify the usual assertive sense of the construction of which it forms a part. It is then a sign of undetermined declarative value (4.7). For example, tu ma’nah hun tul ti’min would serve to communicate this assertion: 'He bought a horse'. But if the speaker says: tu ma’nah bi’bin hun tul ti’min, he does not hold himself responsible for the truth of the statement. Depending on the context, that sentence can be equivalent to 'It is said that he bought a horse', or 'He claims to have bought a horse', or 'He may have bought a horse'. In the Motul dictionary we find bin rendered by the Spanish phrase diz que, which was used to introduce hearsay; while duplicated bin, that is, bin bin, is translated as signifying uncertainty. In our texts, bin without duplication was used for both senses. When the declarative value signified by bin is ascribed to the whole statement, bin occurs immediately after the main verbal unit, or immediately after such components of the verbal unit as tan (4.14), t’o:k (4.15), he (4.16), ho:p’ (4.17), jan (4.18), if the verbal unit contains one of these components. If the bin declarative value is ascribed only to a part of the statement, bin occurs immediately after the word denoting the assertion whose validity is in question. Take, for example, the statement tu ju’k’ah hun n’it bin le ’a:ni’eso’. If we disregard the declarative value ascribed by the speaker to the included assertion hun n’it, 'a little', this sentence would be equivalent
to 'He drank a little rum'. By the position of the word bin, the speaker indicates that he vouches for the truth of this portion of the statement: 'He drank rum'; but not for the assertion that the quantity of rum was small. Had he said tu ju'k'ah bin hun n'it le 'a:ni,so?', placing bin after the main verbal unit, tu ju'k'ah, 'he drank', he would have indicated that he does not vouch for the truth of any item communicated by that sentence. When reciting a story, we observe that in most cases bin occurs in the first sentence, and is omitted thereafter, except sporadically when using direct quotation. With direct quotation, bin comes most frequently after the phrase ku t'an, 'says he'; e.g., "ma: tan in k'u'bi:k," ku t'an bin, "I refuse to deliver it", he said (but I am not reporting as an actual fact that he said it). Some informants used bin, not only in the first, but in the second and third sentences of the story.

In addition to the foregoing, there are a few uses of bin which may conveniently be classed as idioms. Among these is the use of bin in the expression hun n'it u bin, signifying approximately 'it is almost done', 'it lacks just a little to be completed'; literally: 'a little to go'; also in an apparently superfluous usage comparable with the colloquial American expression 'went to work' where no going and no work is spoken of, as, 'He went to work and told all
his neighbors what he had seen'. Similarly, ka bin tu ji'lah ke' u:'lo? tan u t'je:'he?, ka tu ko'lah tu sel. Leaving bin out of consideration, this sentence signifies 'And the t'ul (an urban white gentleman) saw that she was giggling, and he pulled her close to him'.

Examples of Usage B.
1. wai bin a kah 'mdat, u 't'fal ka in we:s teq me:ja'he?. You are going to stay here, that I may show you how to work. wai ... -e?, 'here'; AEO-construction (4.51). bin a kah p'at-al, you are going to stay; bin-construction, Usage B. u ti?-al ka in w-e(t)-s, in order that I show (4.41). teq, you, sing. pron. Class C. me:-j-ah, work, to work; for -j see 3.32.
2. bin k ka'he:"] mul u:'k'ul. We (you plur. and I) are going to drink together. mul, together. uk'-ul, drink.
3. bin in kah in wa:l 'baaj in wil'ma. I am going to tell what I have seen. bin in kah in w-a:l, I am going to tell. in w-il-ma, I have seen; construction PA V-ma (4.32).
4. be o:'rita k bin 'hok'1a'? We are going to get out right now. be o:'rita ... -a?, right now; adopted colloquial Spanish ahorita; AEO-construction (4.51). k bin, we are going; irregular IKAL-construction mentioned above. hok'-ol, go out, come out.
5. ti? kin bin we:'nel, te 'be:o)?. There is where I am going to sleep, by the road. ti?, there; (4.51).
k-in bin, I am going; k-IKAL, mentioned above. wen-el, sleep. te, fusion of ti(?) and le; see 4.51; ti(?), by, at, to, etc. (2.29). be, road.

Examples of Usage E:

6. le ka hok' bin le 'baebal,lo?, u ki? t'uiima
bin hun tul le 'nalo:,bo?. When the demon came out (so they say), one of the young fellows was dangling from his mouth (so they say). Comment: This passage was taken from an account of how demons of the sort called 'baebal attacked two young men and were about to devour one of them. In this text there is an unusual number of sentences containing bin in Usage E. In some of them, it occurs in every clause, as in the passage under consideration. An attempt to disclose why bin had been used so profusely in this instance is described in Note 13.

le ka ... -oi?, temporal clause; the construction usually found is le ka ... -e'(4.32; cf. 4.33); when an AEO-construction (4.51) requires -oi? at the end of the clause, as in this instance, -oi? is retained in some instances; much more frequently, -e? replaces -oi?. le 'baebal-oi?; le ... -oi?, 'the' (4.51). hok', come out; intransitive AHAB (4.3). ki?, nicely, at ease, done without effort. u t'ui-ma, construction PA V-ma (4.36); t'ui refers to the action of seizing something as a bird does with its bill, or a person with his forefinger and thumb, the thing
seized being like a filthy rag, an earthworm, or something flexible that dangles as it is carried thus seized. hun tul le me t-

7. tu 'lakal bin u joj wah tu han' tah. It is said that he ate his whole ration of tortillas. The bin declarative value is here ascribed to the assertion specified by tu 'lakal, 'all' (4.64). u joj, 'his ration', the portion of food given to a person, or the amount he carries with him on a journey. t-u han-t-ah, he ate; transitive use of han, eat; AHAB-construction (4.9).

8. bu'kaas bin 'wiihil. How hungry he must be! Exclaimed by a woman upon hearing that a neighbor who got lost in the woods had not eaten in four days. bu'kaas 'wiihil, literally: What hunger! is an inference from what she has been told. She does not know whether the neighbor is hungry or not; nor has anyone said that he is hungry. By the insertion of bin she ascribes a declarative value to bu'kaas, 'very much', which is either a degree of probability, or simply undetermined (4.7). Her behavior after the exclamation seems to indicate that she does not doubt the veracity of the report that the person had not eaten in four days; for she hurries to the neighbor's house with a gourd full of food.
4.57. The most common use of this suffix is seen in the intransitive imperative form V-en for 2nd. pers. sing., and V-en-e:ʃ for 2nd. plur.; e.g., with the stem hok’, 'to go (come) out', we find ho’k’en, 'come out', addressing one person; hok’e’ne:ʃ, addressing two or more. As usual, -n is the formative employed in these intransitive constructions when the stem is composite (3.24).

Examples with simple stems:
- o’ken, oke’ne:ʃ, enter (sing. and plur.), 'come in' or 'go in'
- lik’en, ‘lik’e,ne:ʃ, stand up
- ku’len, kuле’ne:ʃ, sit down
- ’emen, ’eme,ne:ʃ, come down, go down
- tjilen, tjile’ne:ʃ, lie down
- ahen, ‘ahe,ne:ʃ, wake up
- manen, ’mane,ne:ʃ, pass, walk ahead
- hanen, ‘hane,ne:ʃ, eat
- penen, ’pene,ne:ʃ, hurry up

Examples with composite stems:
- ’geh-n-en, laugh
- ’sit’-n-en, jump
- k’a’i-n-en, sign
- ’baʃ-n-en, play (on an instrument)
- ’uk’-ul-n-en-ʃ, keep on drinking (plur.)
- ’baʃ-al-n-en-ʃ, keep on gambling (plur.)
- ’nik-ba-n-en-ʃ, chat with one another
The verbs tāl, 'to come', and bīn, 'to go', do not occur in the imperative. For the imperative 'come', kō'ten, singular, and kō'tene:j, plural, are used. For 'go' we find ğen, singular; ğene:j, plural. The suffix -en of kō'ten conforms to the rule governing the intransitive imperative, but neither ko- nor kōt- is found with any sense approximating 'to go' in any other construction. The stem of ğen may be ğ- or ği. In NULLAK-constructions we find 'jīik, 'let him go' (4.3c), 'that he may go'.

The irregular use of -en with the verb kūm, to die, for other than imperative utterances was noted in 4.53.

On the basis of the data available to us, it cannot be decided whether or not we have two suffixes, -b and -en, in -ben as a component of such words as 'utbjen, ancient, of old; 'tunben, new, modern; 'kōben, the stones of the native hearth, or 'kitchen'; and a number of others in which -ben may be said to signify 'worthy of', or implies possibility much as our endings -able, -ible (e.g., detachable, visible) do. E.g., 'sikben, worthy of respect; a 'sikbennil, a 'sikbennile:j, your grace, your graces (respectful form of address); tja'ben, acceptable (tj'a, take, fetch); tja'hben, that can leak, that can drip; bah'ben, that can be nailed. It is possible that at least in some words -ben is etymologically composed of -b and -en; the former may be cognate with -ab, the sign of the passive in AHAB-constructions (4.10); cf. -bil, 4.55.
4.58. The uses of this suffix as a terminal component in the AEO-constructions were discussed in 4.51. It was feasible there to specify what devices concur with -e?. To make a similar specification for the instances we are now to speak of, one would have to take account of hundreds of possibilities. The task would be comparable to that of enumerating the kinds of words and constructions which can precede a comma in written English. For in many cases, -e? is used or not at the end of a given phrase, a clause, or a single word, depending on what may be termed the elocution of the utterance; i.e., manner of delivery. Quite frequently an informant objected to the use of -e? when a text he dictated was read to him. The reason in most cases was that the discourse was not read with the intonation and pauses of his original delivery. In other instances, the unaccustomed procedure of dictating a part of a sentence and waiting till that much was written before proceeding with the rest of it had led him to use -e? at the end of the dictated portion, contrary to his habits in uninterrupted discourse. It seemed advisable, therefore, to base our observation exclusively on the texts which were recorded phonographically. Unfortunately, it is too costly at present to deal with intonation, pauses, and peaks of intensity with the aid of reliable instruments, such as the oscillograph. Our aural
observations are to the effect that the intonation of the units of discourse which end with the suffix -e? are divisible into a number of classes. In nearly all instances, it seems that -e? has the highest pitch, or the second highest pitch, of the unit that ends with this suffix. A pause, very brief in some instances, and longer in others, follows -e?.

There are at least 4 classes of instances in which the use of -e? is predictable with a high degree of probability:

(1) At the end of a temporal clause or its equivalent, when such a unit is the first component of the sentence, as is generally the case. For the construction of such units see 4.33 and 4.62. (2) At the end of the first clause of a conditional sentence (4.35). (3) At the end of the first component of an NP-construction (4.67). (4) Affixed to a pronoun of Class 0 which is the first component of a sentence; e.g., te:'ne?', 'as for me', 'so far as I am concerned', etc. There are at least two kinds of exceptions to the use of -e? at the end of a temporal clause: (1) -e? is not used when a single word that is the equivalent of a temporal clause is one of those which require the suffix -i(?)(4.59). The exclusion of -e? when a unit ends with the suffix -i(?) applies in all instances; just as -i(?) is excluded in all instances in which the suffixes -a?, -e?, -o? are required by the AEO-constructions (4.51). (2) When the temporal clause contains an AEO-construction requiring
-o? at the end of the clause, either -o? replaces -e?, or
the latter replaces the former. The replacement of -o?
is much more frequent. For example, the regular construction
le ka ... -e? of a temporal clause containing an AHAB-con-
struction is seen in le ka k'u'tje?, 'When he arrived'.
To say 'When the child arrived', the -e? of the temporal
clause is generally retained, and the -o? of le tjan pa:'lo?',
'the child', is omitted; viz., le ka k'u'tj le tjan pa:'le?.
But some individuals omit -e?, saying le ka k'u'tj le tjan
pa:'lo?.

Examples of the various uses of -e' spoken of above will
be found in the sections mentioned and in many illustrations
under other headings.
4.59. By the notation '-i(?)' we refer to the suffix -i and its X-variant -i?. From a study of our phonographic records we conclude that the difference between -i and -i? is to a considerable extent of an elocutionary sort. At the end of a clause followed by a pause indicative of hesitation, we hear -i without glottal stop and partially devoiced at the end of its articulation; whereas in emphatic utterance, particularly in negative sentences, -i? occurs with an unusually short vowel, and glottal stop. In utterances which are of neither of those two sorts, we observed only regional and individual habits of employing one more frequently than the other in comparable constructions. Disregarding these various circumstances, and considering only frequency of occurrence both in phonographic and in dictated texts, we find that -i? occurs more frequently than -i in negative utterances; while the latter occurs about twice as frequently as the former in non-negative utterances.

It may be useful to compare the uses of the suffix -i(?) with those of the suffixes -a?, -e?, -o? of the AEO-constructions (4.51). In the AEO-constructions we have two special sets of items: (1) bei, he(?), le(1), wai, etc.; and (2)
the suffixes -a, -e, -o. To facilitate generalization, let us refer by the letter 'A' to an item of the first set; and by 'B', to one of the second set. From what was said in 4.51, it can be inferred that these four statements are true: (1) Whenever A occurs, B occurs. (2) B is affixed to A or to some other word that occurs after A. (3) B is not affixed to A when any other component of the constructional unit to which A belongs occurs after A. (4) B is always the last component of such a constructional unit. The extent to which the uses of the suffix -i are like those of -a, -e, -o may now be roughly indicated as follows: If in the above statements we substitute 'B' for 'A', and 'X' for 'A', the four statements will hold for certain values of 'X'. For certain other values of 'X', Statements 2, 3, 4 hold, and Statement 1 does not. For certain other values of 'X', Statements 2, 3, 4 hold, and Statement 1 does not. For a third group of values of 'X', all that we have observed is that when X occurs in sentences which are of a certain sort, -i is affixed to X, but in other sentences X occurs and -i does not.

Further discussion of the uses of -i may be facilitated by these two formulas:

Form 1. (...) X-i

Form 2. (...) X IU-i
We let '(...)' stand for the circumstance that in some cases one or more words may precede X and be components of the discoursive unit containing X and -i(?); while in other cases, X is the first component. In Form 2, 'IU' stands for an intervening unit; that is, a word, a phrase, or a clause that occurs after X. In Form 1, -i(?) is affixed to X. In Form 2 -i(?) is affixed to the last component, or to the only component, of the intervening unit. In all cases, -i(?) is the last component of a discoursive unit to which one of those two formulas apply. In the preceding statements, the phrase discoursive unit is to be understood as referring to a Yucatec sentence, or to a clause constructed as a Yucatec sentence. It is to be noted that we class as a Yucatec sentence any word which in a given discourse satisfies these two conditions: (a) it is not a component of a Yucatec sentence; and (b) it serves to assert that something occurred, or is occurring, or will or may occur. For example, 'k'ini, 'He died'; k'o'h'annen, 'I am sick'; ja't'bi'ley, 'You are to be flogged'.

It will now be our task to specify what values can be assigned to 'X' and 'IU' in Forms 1 and 2. It will be seen that in most cases one or the other of those two formulas is applicable if we let 'X' stand for one of the verbal constructions whose conjugation requires the suffixation of the pronouns of Class B. Those verbal constructions are:
V-PB and V-ab-PB, the intransitive and passive AHAB (4.9)
V-ak-PB and V-aak-PB, the intrans. and passive NULLAK (4.37)
V-an-PB, intrans. or passive (4.53)
NP-PB, intransitive (4.67)

That much is true by and large, but the uses of -i(?) cannot be adequately delimited by broad generalizations. The various cases in which the above formulas are applicable must be dealt with separately.

Case 1. Formula: (...) X-i(?) Specifications: (1) X-i(?) is a sentence, or the last word of a sentence. (2) 'X' stands for the 3rd. pers. sing. or plur. of the intransitive or passive AHAB-constructions. Thus, if we replace 'X' by the formulas for the 3rd. pers. sing. and plur. of those constructions the possibilities in Case 1 can be formulated as follows:

<table>
<thead>
<tr>
<th>Intransitive</th>
<th>Passive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sing.</td>
<td>(...) V-i(?)</td>
</tr>
<tr>
<td>Plur.</td>
<td>(...) V-o:b-i(?)</td>
</tr>
</tbody>
</table>

Examples ka lu'k'i, 'And he left', (...) V-i (?). 'luk'o:b-i, 'They left', V-o:b-i. ka 'kinsa:b-i, 'and she was killed', V-ab-i. No exception has been found to the rule that when one of the above AHAB-constructions is a sentence, or occurs at the end of a sentence, -i(?) is affixed to it.

The assertion ka bi'ri, 'And he went (away, or to a previously specified place)' occurred in conformity with the above specifications more than 100 times; and in about as
many times we found bin without -i(?) used in the same sense, and otherwise than at the end of a sentence; as in, ka bin tu jo'totf, 'and he went to his home'. The conclusions under Case 1 are supported by more than 1,000 instances.

Case 2. Formulas: X-i(?) and X IU-i(?). Specifications: (1) Each of these two formulas stands for a sentence, of which -i(?) is the last component. (2) 'X' stands for the negative sign ma(?) followed either by (a) one of the intransitive or passive constructions listed above as requiring the affixation of the pronouns of Class B; or (b) a transitive AHAB-construction to which a pronoun of Class B has been affixed; that is, t-PA V-ah-PB (2.5'). (3) 'IU' stands for a component which does not contain an AEO-consturction (4.51). Examples: 1. ma bi'netf, ,i?, 'You did not go'; bin-e?i? (V-PB-i?). 2. ma? i'la:be,ni, 'I was not seen'; il-ab-en-i (V-ab-PB-i). 3. ma ka'laane;ni?, 'I am not drunk'; kal-aan-en-i?; V-aan-PB-i. 4. ma ta ha'ts'ahe;ni, 'You did not hit me'; t-PA V-ah-PB-i. 5. ma 'pol-tf e?e;Hfi?, 'You are not a carpenter'; pol-tf (carpenter)-stf-i?; NP-PB-i?. 6. ma 'ja:bo;ni, 'We are not many'; ja:b-o:n-i; V-PB-i. 7. ma t's'a:b te:'ni?, 'It was not given to me'; t's'a-(a)b ten-i?; V-ab IU-i?; ten, 'to me'; pron. Class 0. 8. ma bin tu jo'totf, ,i?, 'He did not go to his home';
bin- (null sign) t-u j-o-t-o-t-î?; V-(FB) IU-î?; t-u (ti-u), 'to his'; o'toť', home. 9. ma tin ta'sah mij 'bāšlî?', 'I did not bring anything'; t-in ta(1)-s-ah, 'I brought'; mij bāšlî?, 'nothing' (4.32); t-PA V-an IU-î?. To generalize upon the uses of -i(?) in Case 2, one would have to say that -i(?) is required in negative sentences whose main verbs have certain constructions, and such that either no component other than -i(?) follows the main verb, or the component which follows the main verb does not contain an AEO-construction (4.51). The restriction concerning the AEO-construction applies in all the uses of -i(?). Thus, regardless of what construction precedes, for example, the AEO construction le ... -ô?, 'that', 'the', and regardless of whether a noun or a clause comes between le and -ô?, if le ... -ô? follows the verb, -î? is not used. For instance, -i(?) is required above in Example 9, but not in ma tin ta'sah le 'timi-nô?', 'I did not bring the horse'; nor in ma tin ta'sah le 'timin tin mana’hô?', 'I did not bring the horse I bought'; although in the unit le ... tin mana-n-ô? we have a verb with the same AHAB-construction as that of the main verb tin ta'sah. Case 2 shows more clearly than Case 1 that a description of the instances in which -i(?) occurs has to be a description of the constructions of certain kinds of sentences, and not exclusively of certain kinds of words. It cannot be said that -i(?) occurs when this or that item occurs; but rather that it occurs when certain items concur.
Strictly, it should be said that those items and -i(?) concur in certain discoursive units which serve to communicate negation and specify what is denied.

In the preceding description of the instances which fall under Case 2, it was not necessary to say that -i(?) is not used when the negative sign is not simply ma(?) but ma teq, the sign of emphatic denial. The reason is that when ma teq is used, the following verb takes the IKAL-construction, as shown in 4.20; and that is not one of the constructions which concur with ma(?) and other items in the sentences in which -i(?) occurs. Thus, we find -i(?) in ma tu b'ain te:'ni?, 'He did not give it to me'; but not in ma teq u b'aik ten, 'He certainly did not give it to me' (emphasis on 'give').

It may be obvious that the foregoing is not sufficient to delimit the use of -i(?) under consideration. The information given by means of formulas X-i(?) and X IU-i(?) is that for the specified values of 'X' and 'X IU' there are instances such that when -i(?) occurs, either X or X IU occurs. We need to know now whether it can be asserted that whenever X of X IU occurs -i(?) occurs. So far as our observations go, whenever X occurs formula 'X-i(?)' applies. That is to say, we found no exception to the rule that negative sentences with ma(?) followed
by a verb with one of the constructions above specified require the affixation of -i(?), as indicated by formula 'X-i(?)', when the verb is the last word of the sentence. But the rule that X IU requires -i(?) has exceptions. Evidently the restriction that IU must not contain an AEO-construction is not sufficient. We shall not attempt to specify what other restriction or restrictions should be taken into account, because the exceptional instances are too few (27), and too different from one another to justify generalization.

Case 3. Formulas: (...) X-i(?) and (...) X IU-i(?). Specifications: (1) '(...) ' indicates that X may or may not be preceded by one or more words which are components of the sentence to which one or the other of the two formulas apply. (2) 'X' stands for a unit consisting of the negative sign ma(?) followed by a form of one of these three verbs: k'at, 'to wish', 'to want'; o'heî, 'to know' (French savoir, not connaître; or Spanish saber, not conocer); k'a'bet, 'to need', 'be necessary'. (3) 'IU' stands for a component which does not contain an AEO-construction (as in Case 2), nor a clause introduced by wa signifying 'whether'. This last restriction applies to clauses subordinate to o'heî; as in ma? u jo:h'îc? wa jan ti kah, 'He does not know whether she is in town'. It should be noted that
in Case 3 the verbs to which -i(?) is affixed are not, as in Cases 1 and 2, of the sort that require the use of the pronouns of Class B in their conjugation. As already shown (3.56), k'at and o'hel require pronouns of Class A; and k'a'bet requires none (4.40). Thus, 'X' may be said to stand in the above formulas for one of these three constructions: ma(?) PA k'at, ma(?) PA (prefix)-o'hel, ma(?) k'a'bet. Examples to which formula (...) X-i(?) applies: 1. ma? in 'k'ati, 'I don't want it' or 'I don't want to'. 2. ma? in woh'li, 'I don't know' (as in answer to a question); the e of -el is omitted in conformity to the prevalent phonologic tendency (1.4). 3. ma k'a'bet,i, 'It is not necessary', 'There is no need of it'. Examples to which formula (...) X IU-i(?) applies: 4. ma? in k'at 'hok'o;li, 'I don't want to go out'; hok'-ol, 'go out'; V-(a)1; for clauses subordinate to k'at and k'a'bet see 4.40. 5. ma? u k'at ka 'jiike,ni, 'He does not want me to go'; (i)-ik-en; intransitive NULLAK-construction V-(a)k-PB, ka-Form (4.57). 6. ma? u jo:hel 'tuuf ja'nen,i?, 'He did not know where I was'; 'tuuf, 'where', ja-en (V-PB), 'I was'; see 4.61. 7. ma? in k'at in woks tin wo:'li?, 'I can't believe it'; literally: 'I don't want to introduce it (ok-s) into my mind (t-in w-ol). 8. ma k'a'bet ka 'jiike;j tu 'jototy,?, 'It is not necessary that you (plur.) go to his home'; o'toty, 'one's dwelling'. 
If in view of the foregoing we formulate the rule that, for the specified values of 'X' and 'IU', whenever (...) X IU occurs, -i(?) occurs as indicated by the formula (...) X IU-i(?), it would be found that the rule holds for 91% of the instances in our texts. Evidently there are more restrictions for IU than those above specified. All that we found that is common to nearly all the exceptional instances is that IU is more complex than in the 91% of the non-exceptional instances. Those which cannot be said to be more complex, for they consist of a single clause, end with proper names. The instances with proper names, however, are too few to justify generalization. The instances to which the other formula, (...) X-i(?), is concerned involve no exception; that is, the negation of what k3at, o'hel, and k3a'bet signify requires -i(?) whenever one of these verbs is the last word of the sentence.

Case 4. Formula: (...) X IU-i(?). Specifications: (1) '(...) as in any of the previous cases. (2) 'X' stands for the word ti? signifying 'there', or 'right there'. 'IU' is a sentence construction which does not contain an AEO-construction. In the instances of Case 4, the specification of the location referred to by ti? is the dominant topic (4.8). The location has been mentioned in the part of the sentence preceding ti?, or in the preceding sentence, and ti? introduces the assertion 'there is
where x occurred (or was, or is, or will be, or will occur). Examples: 1. ti? ku 'heeli?', 'There is where he was resting'. 2. ma hah wa ti? tu 's'ona'hi? 'Is it not true that there is where he shot him?' 3. te 'k'ewe,lo?', ti? ku bin u ha'ji?, 'On the leather, there is where he is going to twist it'. 4. ti? ku 'enkantar'tal 'mak,i?', 'There is where people are enchanted'; Spanish encantar, with formative -t; passive k-IKAL, Usage A (4.28). No exception was found to the rule that under the specified conditions, whenever ti? is used, -i(?) occurs as indicated above.

Case 5. The use of -i(?) at the end of an affirmative sentence. In Case 5, Usage A of the NULLAK-constructions is involved. It is convenient, therefore, to base our explanations on the tabulation used in 4.3c. We take up first the transitive constructions employed when a 2nd. person is ordered or asked to do something. We notice that when the verbal unit is the first or only verbal component of the imperative sentence, the constructions are:

2nd. sing. 2nd. plur.
(1) V-e (3) V-e:?
(2) V-(null)

Construction 1 is used when the whole imperative sentence, or the first imperative component of a compound imperative sentence, consists entirely of the verbal unit; e.g., 'ŋa,e, 'Turn it loose', 'Let it go'. If the suffix -e occurred
in no other constructions, it could be said that it is a 3rd. pers. object pronoun that is used only with the NULLAK-constructions. In fact, there is no valid objection to saying that, whatever else it may be in other instances, it is such a pronoun in imperative sentences. The fact that it is omitted whenever the verb is followed by another component of the imperative unit, regardless of whether the additional component be an object of the verb or not, could be dismissed as a peculiarity of this language.

We find now that when a pronoun of Class B referring to the object is necessary the suffix -i(?) is required, and the above form (1) becomes V-PB-i(?). Thus, with the stem տիա, to turn loose, we have:

(addressing 2nd. sing.)


Similarly, form 3 becomes V-PB-ej-i(?). Thus, addressing 2nd. pers. plur. we have:


We see that a single formula for 2nd. sing. and 2nd. plur. for instances requiring -i(?) as just indicated could be V-PB(-eːʃ)-i(?). But it should be specified that in the instances to which that formula applies, the imperative unit consists entirely of a single word, except when the word tjan, the sign of a sort of persuasive imperative, or a vocative precedes the verbal unit, as indicated in 4.38.

Let us consider now the affirmative imperative sentences in which one or more words follow V-(null) or V-eːʃ. In some of those instances the formula for the construction is V(-eːʃ) IU-i(?)

Here, 'V(-eːʃ)' stands for the 2nd. pers. sing. form V-(null) and for the 2nd. plur. V-eːʃ. 'IU' stands for an intervening unit the last component of which is one of these items: (1) a pronoun of Class C; (2) the word tun, 'therefore', 'so', etc.; (3) a phrase referring to the object of the verb, and such that it does not contain any of the AEO-constructions. When IU is a pronoun of Class C, the pronoun may perform the same office as that of an indirect object pronoun in various languages, or the pronoun may refer to the person or persons addressed; e.g., English 'you' in the imperative sentence 'You take it'. Examples in which IU is, or contains, a pronoun of Class C, or the word tun:

1. tsa teːːni, 'Give it to me' (V PC-i)
2. 'tšaeːʃ toːːni?, '(You plur.) give it to us' (V-eːʃ PC -i?).
3. ts'a tun te:'ni?, 'So, give it to me' (V tun PC-i?). 4. uk' tu:'ni, 'So, drink it'. 5. uk' te:'fi?, 'Drink (some) yourself' (V PC-i?). Examples in which IU is other than tun or PC: 6. ts'a ti a su'kuuni, 'Give (some) to your elder brother'; su'kuun, 'elder brother'. 7. ts'a u lak' k'ak' i?, 'Give it some more fire'; u lak', 'another', 'its other', 'some more'; k'ak', 'fire'.

In the imperative sentences ordering or requesting that a 3rd. pers., or a non-particular 2nd. pers. (4.38) act, the rules for the use of -i(?) are similar to those just dealt with. Specifically, when the sentence consists of a single word containing a pronoun of Class B, the construction is V-(a)k-PB-i(?). For sentences consisting of the verbal unit followed by one or more words (IU), the form is V-(a)k IU-i(?), and the specifications for IU are the same as those given above for the 2nd. pers. imperative. Examples: 1. 'hok'ok hun 'tul,i, 'Let one (of you or of them) come out' (V-ok IU-i); hun, 'one'; tul, classifier for animate (4.68). 2. 'hok'ok hun tul 'waatal 'ja:lan 'ma:ka,ni, 'Let some one come out and stand under the shed'; 'makan, 'shed', a sort of canopy made of poles, vines, and leaves (Spanish enramada). 3. ts'a:bak tu k'ab jum 'bata,bi, 'Let it be placed on the hand of the honorable 'batab (in this context,
Case 6. The suffix -i(?) is affixed to any interrogative substitute (4.31) when the word thus formed is the sole component of an interrogative sentence. Examples: 1. 'baa¡i ? 'What?' 2. ma¡i ? 'Who?' 3. bi¡i ? 'How?' When the interrogative sentence consists of the interrogative substitute and the word tun, 'so', 'therefore', 'then', -i(?) is affixed to the last component of the sentence, which in such cases is always tun. Examples: 4. 'baaj tu:n¡ ? 'What, then ?' 5. ma¡ tu:n¡ ? 'Who, then ?'.

Case 7. Certain expressions are found with and without the suffix -i(?) depending on the sense in which they are used, or on the manner of uttering the sentence that contains them. The following are the most common: 1. 'jiike¡ni, 'I am going'; and 'jiiko¡ni, 'We are going', when either is uttered upon leaving a house, or in similar circumstances. Sometimes the expression to announce that one is leaving is 'jiiken tu:n¡, 'Well, I am going'; 'jiiko:n tu:n¡, 'Well, we are going'. 2. The Spanish word adica 'goodby', is used with the pronoun -et when addressed to a single person, and with -et when addressing more than one. In circumstances which we are unable to specify, the
the suffix -i(?) is affixed to those constructions. Thus, for 'goodby' the expression is sometimes adjo'setj,i? and adjo'se:§,i?, and sometimes simply adjo'setj, adjo'se:§, or with tun, 'so', 'well', adjo'setj tu:'ni, adjo'se:§ tu:'ni.

3. The expression for 'Thank you' is djos bo:'tik tetj (God reward you). If the interlocutor replies 'Thank you', the pronoun tetj, 'to you' is uttered in a certain manner, and the expression is djos bo:'tik te:'yi?. 4. -i(?) is found constantly in the expressions hun w'li and hun pu'lak,i, both signifying 'at once', 'altogether', 'definitely'; and in 'tani,i? (tan-il-i?), 'first', as the first component of a sentence; e.g., 'tani,i?, fen a 'q'ae, 'First, go and get it'.

The verbal constructions for which 'X' stands in Cases 1, 2, and 3, and also the imperative constructions of Case 5, occur in various instances in which -i(?) is not the last component of the sentence. It is probable that such exceptional instances are due to the manner of uttering the sentence when the verbal unit or some other component to which -i(?) is affixed refers to an item which is the dominant topic of the sentence. This inference rests on our observations on the texts that were recorded phonographically. We find in the exceptional instances in question that the sentence is uttered with a certain intonation, and there is a pause between -i(?) and
the rest of the sentence (cf. 4.58). In the sentence ka 'kina:bi le o:ko'lo', 'And the thief was (finally) killed', we find -i(?) affixed otherwise than at the end of the sentence. In other sentences with the same construction -i(?) is not used at all; for the last portion of the sentence contains one of the AEO-constructions, le ... -o?. As we hear this sentence in the phonographic record, the portion of the sentence ending with -i is uttered almost as if it were the end of the whole sentence, and the last phrase, le o:ko'lo', is uttered in a Yucatec manner characteristic of instances in which a reference is made by way of elucidation, or as it is said, as an afterthought. Even in those cases, -i(?) could be said to signify something, only in the special sense in which one could say that a certain facial expression signifies displeasure. The suffix -i(?) is doubtless one of the linguistic devices which, like the augment in some tenses of the Greek verb, are untranslatable.

Certain words which contain the suffix -il (4.60) in polychronic references (4.8), and in references to contemporaneous occurrents (4.2), require the affixation of -i(?) when they occur in monochronic references to past or future occurrents. Of that sort are the following: tani'il'i, 'at once'; o'ki'il'i, 'beforehand'; mar'il'i, before; lei'il'i, 'even so', 'once again', 'as before'; hun 'naki'il'i, 'without further delay', 'without hesitation', 'without regard for consequences'. The following contained -i in all the
instances in which they occurred in our texts: 'ha:li, 'only', 'except that ...', 'however'; suki'li, 'it is customary'; hun puli'li, 'finally', 'absolutely', 'resolutely'. Both suffixes -il and -i(?) are affixed to the component he(l) of construction he + IKAL + -e? (4.16) in emphatic promises; e.g., 'heli\li k tal \okk\i:'ne\?, 'We will surely come this evening'.
4.60. If the phrase 'the suffix -il' is understood as referring to any Modern Yucatec suffix phonologically describable by the phonetic notation 'il', we have to say that some of the uses of the suffix -il have already been dealt with. For, thus understood, the suffix -il is one of the members of the class of suffixes we have conveniently referred to by the notation '-(a)l' (4.52). The -(a)l-class of suffixes may be said to be a constructional class in attention to the fact that it is definable in terms of certain rules of construction: to put it briefly, we have found that a set of rules can be formulated which applies to various uses of suffixes phonologically describable by five combinations of phonetic notations: al, el, il, ol, ul. If each of these phonologic units had been dealt with separately, the same set of rules would have been given five times. It has been considered preferable to say that there is a class of suffixes whose uses conform to the given set of rules; that those suffixes consist of a vowel followed by the consonant l; and that the vowel is in each instance a, e, i, o, or u, depending on certain specifiable circumstances (4.52). The members of this constructional class (the -(a)l-class) are not homophonic, since their vocalic constituents differ. We are now to deal with another constructional class: the -il-class. The members of the -il-class
are homophonic, for each one of them is phonologically describable by this combination of phonetic notations: il. Consequently, in the present description, the phonologic unit il can in a given instance be a member of the constructional -(a)l-class; and in another instance, a member of the constructional -il-class. This is a convenient way of saying that in one instance the occurrence of the phonologic unit il conforms to one set of rules, while in the other instance its occurrence conforms to another set of rules. Let us agree now to understand the phrase 'the suffix -il' as referring to a member of the constructional -il-class.

The suffix -il occurs in nominal constructions of various sorts. In some cases, it may be said to be a constant component of certain Yucatec nouns; in others, it should be said that it is required by the nominal construction of which the noun is a component. It does not seem feasible to formulate a single set of rules that can apply to all its uses. As in other cases, one must resort to grouping analogous instances.

1. The suffix -il serves to convert verbal constructions into nominal constructions, and to form Yucatec nouns with stems which are also used otherwise than in nominal constructions. Thus, corresponding to the verbal construction
k'o'haan, which in some contexts can signify 'He is sick', we find k'o'haenil, 'sickness'. Similarly, sa'ha, 'He is afraid', and sah'kil (elision of unstressed vowel) 'fear'; tj'ak, 'to chop', 'to cut by hitting with cutting tool', and tj'a'kil, 'action of chopping'; tj'ui, 'to hang' (transitive); and tj'u'jil, 'the action, manner, or effect of hanging something'. hat', 'make groove or scratch with pointed tool', and ha'nil, a noun designating collectively scratches or grooves. The number of nouns thus formed is considerable.

2. Let 'N' stand for a given simple or composite stem used as a Yucatec noun; and let 'N-il' stand for the same stem with the suffix -il. There are numerous pairs of nouns in Yucatec which correspond structurally as N and N-il; and such that for each pair, what N designates differs from that which is designated by N-il. The difference, however, is not of the same sort for all pairs; as shown in the following examples: 1. k'in, day, sun; k'i'nil, time, occasion. 2. jum, sir, honorable (before person's name or word referring to office), Old Yuc., 'father'; ju'wil, owner. 3. na, house (without specifying who lives in it); na'wil, one's dwelling, home. 4. 'luum, ground; 'luumil, region, country, soil, removed earth. 5. jib, male, man; j'ib'il, manhood. 6. we'ka', cow, cattle; wak'jil, cow-like, having the pro-
erties or appearance of a cow. 7. 'kuuk, squirrel; 'kuukil, name of a game in which the participants imitate squirrels. It is convenient, though by no means elucidating, to say that in each case, the stem N is used in a "derived sense" when -il is affixed to it. But no useful generalization can be made as to what sort of sense is the derived sense in all instances. One sort of derived sense which is subject to rule is as follows: By affixing -il to the name of a village, town, or region, a noun referring to its inhabitants can be formed; e.g., jok'-bo'noti'lo:bo?, inhabitants of Yok Dzonot; le san-an'tonjoilo:'bo?, those from San Antonio; hun tul le no'ililo:'bo?, one of the Southerners (people of Quintana Roo).

The word k'i'in'il, signifying 'time' or 'occasion', is always preceded by the 3rd. pers. pron., u, even in such expressions as t'en hun p'el u k'in'i'le', 'once upon a time', 'on a certain occasion'. On the other hand, the adopted Spanish words hora, time, hour, and mes, month, are used without u or -il when preceded by a numeral, but -il is affixed to them when the reference requires the use of u; as in u jo:ra'il in wet'nel, my sleeping time (the time of my sleeping); tu me:'sil 'abri'le', in the month of April. The distinction between na, house, a building, and na'il, one's dwelling, is made
in some localities by means of the words na, house, and o'tot', one's dwelling. Thus, for such a statement as 'I see a house', na seems to be used throughout the Yucatec speech-area, but for 'I went to his house' bi'nen tu na'il or bi'nen tu jo'tot' would be used, depending on the locality. In some localities, tu na'il, 'to his dwelling', is sometimes replaced by tu ta'na. The expression ta'na seems to contain the word na, 'house', but we are unable to identify the component ta in any other combination. Furthermore, various tests indicated that ta'na may be used only in reference to a 3rd. person's dwelling, and only in the expression tu ta'na, 'to his dwelling', 'to his home'.

3. Construction u N-il. The components of this construction are u, 3rd. pers. sing. pron. of Class A; N, a simple or composite stem commonly used as a noun. The objects, persons, or other items referred to by construction u N-il are of the same sort as those referred to by N. Take, for example, the stem kaj*, signifying 'chicken'. In many contexts, the two phrases u kaji'lo:b and le ka'jo:po?, signifying 'the chickens', are interchangeable. Evidence of their equivalence comes not only from the reactions of the native speaker to our tests, but from
the many instances in which the same items are referred to by both constructions in the same discourse. It is observed, however, that a given item is referred to by construction u N-il only after it has been mentioned in a previous reference, and only if the particularity of the item is not the dominant topic (4.8). Thus, in a description of a ceremony, it is first stated that chickens have to be procured. In describing further what is done with the chickens, construction u N-il is frequently employed, but not exclusively. In contrast with this, we observe that when an item is the dominant topic of the discourse, construction u N-il is not employed. In the cases just spoken of, if we try to understand the pronoun u as signifying that the item spoken of belongs to someone, we frequently fail to find a possessor, in the grammatical or in the strict sense of the term 'possessor'; and the native speaker is perplexed if he is asked whose item he refers to. In those cases the pronoun u cannot be said in any useful sense to operate as a possessive pronoun. In other instances its use is like that of the genitive case in various European languages. That is the case in references to a part of a whole, or origin, or material of which something is made, or an accessory of a contrivance, or the various
articles or other items habitually utilized or in some way involved in the performance of a common activity, i.e., items pertaining to that activity. Examples: u ji’til ef, the seat of the pants. u ’su:mil le ’kampana:o?, the cord of the church bell. u pa’t’il u kal, the back of the neck. u ta’nil u ’hool, the forehead (the front of the head). u mi’sil u k’ab, the muscles of the arm; u han’lil le ’go?o?, the turkey dinner; literally: the food (han-æl-il) (made) with the turkey. u ’taanil le ’na:o?, the ashes of the house (after the house was burned down). u wa:'hil le ’mæhano:'bo?, the tortillas for the helpers (the ones usually furnished for those who help without remuneration). u ’t’o:pt’fe’il u wa’k’al ’buul, the stick for planting beans. u ’tjukwa’il le ’t’o:ko:k’ol be:'lo?, the chocolate for the wedding (that usually prepared for the celebration). ku ’t’a:bal u ki’bil, the candles are (then) lighted (the candles that are habitually used in the ceremony).

With respect to the parts of the body, it is observed that construction u N-il is used for parts of parts, but not for the whole part. Thus, for 'his foot' we find u jok; but for 'the skin of the foot', we find u 'k’ewe’lil jok in some localities and u 'k’ewe’lil jok or u 'k’ewe’lil u jok in others.
Some references which require construction u N-il are comparable with those that are made in other languages by means of the so-called "collective nouns", and by various devices termed "partitive genitive", or "the use of a noun in a partitive sense". Such a use of the construction, however, is permissible only with certain nouns. The restrictions appear to be as arbitrary as that which forbids us to use the plural ending in such English nouns as 'sheep', 'deer', etc. The Yucatec nouns are for the most part those which designate aggregates of particles, as ash, earth, dust. Others are of a different sort, and are subject to very special rules. Among the latter we find the names of such common items as wah, tortilla (corn cake), and q'a' mal, cigarette. lut', 'gourd' (of a certain kind and size used as plates) falls in the same class, but only when it is referred to as being a container, or to specify quantity, i.e., as much as a gourd of that kind generally contains, similar to 'spoonful' in English. The plural suffix -o:b is sometimes used with wah, but it must follow -il; e.g., kan p'el u lut' q'il 'jetel u wahi'lo:b, 'four gourds with (containing) tortillas'. The use of i'jim, or i'pi' m, or ji' m, 'maize', is governed by special rules, which differ from one locality to another. For 'one grain of maize' we found in
some localities hun .Deserialize \textit{iši} mil; and in others hun  Deserialize \textit{iši} mil. Since the initial sound of the word \textit{išim} is a vowel, it would be expected (3.2) that \textit{j-} be prefixed to it when the pronoun \textit{u} precedes. This is avoided in some localities by not using the pronoun, and in others by dropping the initial vowel. On the whole, it seems that an adequate treatment of the nouns which require construction \textit{u N-il} in partitive or collective references would necessitate dealing separately at least with each of the names of the most common items of food.

The foregoing is not a complete account of the instances in which the suffix \textit{-il} occurred. We estimate that it excludes about 20\% of the total number of its occurrences in our texts. It seems to be true of many of the instances excluded that the suffix \textit{-il} is used as a sign of unknown delimitation or identity; as in he  Deserialize \textit{baaʃ meja'nil tu be:ta'he?}, 'whatever be the work he did'. But the evidence is equivocal in many cases, and there is the further difficulty that \textit{-il} did not occur in many references which were definitely of that sort. Many more samplings would be necessary to warrant generalization upon those doubtful cases, and upon the rest which were excluded from this description for similar reasons.
4.61. The documentary data on Old Yucatec clearly show that *jan* (*yan* in previous writings) consists etymologically of a stem *an*, and the prefix *j-* (which was in Old Yucatec a 3rd. person pronoun required in some constructions before words with initial vowel or the consonant which some writers called "weak h"). In Modern Yucatec there are only sporadic indications that this word was formerly analyzable into two components. In texts from individuals whose speech was predominantly of Type A, *an* has occurred without the prefix *j-* in the form *an*hi, 'it came to be', 'it came to pass', and in *a*nil, 'being (in a specified condition)'; see 4.60. But in both speech-types *jan*hi and *ja*nil are the usual forms. At present, *jan* is the stem for all persons; e.g., *ti? ja:*nen te:*lo?*, I was there; *ti? ja:*neg te:*lo?*, you (sing.) were there; *wai ja:no:*ne?*, here we are. In a description of Modern Yucatec, therefore, the omission of the *j-* of *jan* has to be classed as an irregularity. At present, *jan* is conjugated in conformity with formula V-PB of intransitive verbs in the AHAB-constructions (4.9). But *jan* is exceptional in that its V-PB form is used for all chronologic specifications. For example, *ja:*nen occurs in these three chronologic specifications. For example, *ja:*nen occurs in these three references: *ti? ja:*ne*ni* (for final -i see 4.59), 'I was
there'; wai ja:ne'ne? (for final -e? with wai see 4.51), 'Here I am', in reply to the question 'tuufjet? 'Where are you?'; ti? ja:'nen 'samal te:'lo?, 'I'll be there tomorrow'. With the irregular AHAB-construction, jan'hi or janta'a'hi (3.58), signifying 'it came to be', 'it came to pass', 'it so happened that ...', jan is used in references to discrete-past occurrences' (4.4, Case 1), as the AHAB-constructions are most frequently used.

The uses of jan are here grouped under six headings. Usage A was dealt with in 4.16, where it was shown that construction jan+IKAL is commonly equivalent to the English construction 'to have to (infinitive)', signifying need or obligation of some sort, as in 'I have to do it'.

Usage B. jan serves to specify location. In such specifications, jan is preceded by ti? (variants: ti, te), signifying 'there' or 'at'; or the whole sentence is a component of the AEO-construction wai .. -e?, 'here'; or he ... -a?, approximately: 'here, look at it'; or he ... -a?, 'look, there it is' (4.51). When ti?, or one of its variants, precedes jan, the location must again be referred to after jan, except when it has been specified in the preceding sentence; e.g., ti? jan tu jo'totj'i, 'It is (was) in his house'; ti? jan te:'lo?, 'It is there' (pointing to the place); ti? ja'nii, 'It is (was) there' (referring to a place previously mentioned; ti? jan te:'le?, 'It is here'
(pointing to the place); wai ja'ne?, 'it is (was) here'
(said without pointing, and in reference to the spot or
locality, or region, where the speaker is). For a better
understanding of these expressions, the discussion of the
AEO-constructions (4.51) should be taken into account.

With wai ... -e? and the first person pronoun -en two
equivalent constructions have occurred: wai ja:ne'ne?
and wa'jen ja:'ne?, both signifying 'Here I am' in
answer to the question 'tuufe-tf, 'Where are you?'.

Usage C. This usage may be adequately specified by
saying that the English equivalents of the verbal unit
with jan are: 'there is', 'there was', 'there will be',
'there are', 'there were'. In such references, jan is
seldom preceded by ti?, or any of its variants, ti, te,
as in Usage B; and it has not occurred as a component of
wai ... -e?. If wai is used in the sentence, it occurs
after jan and its subject; e.g., jan nun tul wi'nik
wa'ie?, ku ..., 'There is (was) a man here who ...'. The
simple word jan serves both for present and contemporary-past.
In reference to future time we find bin 'janak, 'there will
be'(4.42).

Usage D. The phrases ka jan'hi and ka jan'ta'hi are
frequently used to introduce a new episode or incident in
a narrative. They are rhetorical devices of a sort comparable to 'And it came to pass that ...'. It is observed that ka jantja'hi is used more frequently than ka jan'hi when it is evident that the incident thus introduced is detrimental or highly beneficial to the hero of the story. For the suffixes see 3.31 (-h), 4.58 (-i), 3.27 (-ŋa).

**Usage E.** Followed by a pronoun of Class 0, or by ti(?) and a noun, jan is equivalent to 'to have', denoting what is commonly referred to in grammars by the vague word 'possession'; as in 'He has two sons', or 'He has a job', or 'It has four legs'. That is to say, in Usage E, jan serves to assert all that is asserted subordinately by the pronouns of Class A when they are equivalent to the English possessive pronouns. Examples: jan ten hun tul 'tšimin, 'I have a horse', or 'I had a horse'. jan hun tul 'tšimin 'tio: b, 'They have (had) a horse'; jan hun tul 'tšimin ti hwan, 'John has(had) a horse'. Occasionally the possessor is referred to before jan; e.g., le 'ji:va,lo? jan hun tul 'tšimin, 'The young man had a horse'.

**Usage F.** Before a verbal unit, jan can be equivalent to 'some' in the sense of 'more than one', or 'a certain quantity'. Thus, jan tin bo:'tah holni'ak, 'I bought
some yesterday'; without jan, this sentence would be equivalent to 'I bought it (or them) yesterday'.

It should be noted that in order to negate what can be asserted by jan in Usages B, C, E, the special verb mi'naan, 'not to be at a place', 'not to exist', 'not to have', is required. But for Usages A and D, the common negative ma(?) is used before jan. Thus, the negative of ti? jan te:'lo?, 'He is (was) there', is mi'naan te:'lo?. Similarly, corresponding to jan ten ta:'k'in, 'I have money', or 'I had money', we find mi'naan ten ta:'k'in, 'I have no money', or 'I had no money'. Other data concerning mi'naan are given in 4.53.
4.62. There are three homophonic devices whose phonologic constituents are as represented by this phonetic notation: ka. One of them consists of the component k- of the k-{{\text{IKAL}}} constructions (4.27) and the 2nd. pers. pron. a. A second device is a fusion of a non-composite ka and the pronoun a, a fusion that occurs, though not prevalently, when non-composite ka precedes the 2nd. pers. of the transitive NULLAK-construction (4.37). We are concerned at this point with the uses of the non-composite ka, referred to in this discussion simply as ka. This word is in some cases equivalent to the English conjunction 'and'; in others, it can be rendered by the conjunction 'that'; and in a third group of instances it is untranslatable into English. Translating English into Yucatec, the conjunction 'and' would be rendered in some cases by 'jetel, 'with', 'in the company of'; by ka, in others; and in a third group of instances, what is indicated by 'and' would be indicated by the circumstance that a certain Yucatec sentence occurs after a certain other, or by such expressions as fan, 'also'; bei jan ... -e? (4.51), 'in like manner'; lei'li or lai'li, 'still' (in other contexts: 'even so', 'once again'). Our conjunction 'and' can be rendered by the subordinate verbal unit 'jetel only between two Yucatec nouns or nominal constructions; e.g., hwan 'jetel u ja'tan, 'John and his wife'. Between two constructions, each of which can be a non-elliptical Yucatec sentence, ka indicates, as 'and' does in English in compound sentences, that the
assertion that follows has some bearing on the preceding assertion, or simply that the declarative value which the speaker assigns to the first assertion is assigned also to the second. This holds for most of the uses of ka even when it cannot be rendered by English 'and'. Ka, however, differs from the conjunctions which signify 'and' in many other languages in that ka is used only before certain constructions, and never before a negative sentence. The instances in which ka was found in our texts may be classified as follows:

(1) Affirmative sentence; ka immediately followed by an AHAB-construction (4.9).
(2) Affirmative sentence; ka immediately followed by construction ho:p'+IKAL (4.17).
(3) ka as a component of a NULLAK-construction (4.37).

It is unnecessary to specify that the NULLAK-construction stands for an affirmative assertion, because those constructions are never used otherwise. With regard to the first two classes of instances specified above, it would be justifiable to say that ka is a component of the AHAB and ho:p' + IKAL constructions, were it not for the fact that ka does not precede them when either of those constructions is used as the first component of the first statement of a discourse, or of the first sentence uttered in answer to a question. Thus, in answer to a question, or to
announce an occurrence, one can say simply, 'kimi, 'He died'. But ka 'kimi would be used when any other item of information concerning the occurrence precedes; e.g., ku k'u'ñul tu nai'le?, ka 'kimi. 'Upon arriving at his house, he died'. Consequently, after the first statement of a narrative, we find ka before every AHAB and ho:p' + IKAL construction that is not the main verb of a negative sentence. In some instances, ka is the first component of five or more consecutive clauses or sentences, as in this passage: ka tu ju:'bah le ta; tati'lo?, ka tu ts'ah ta:'k'in ti t'up. ka tu ma'yah le ta:'k'in t'u:'po?, ka bi'ni. ka k'uñj ti hun n'el no'hoñ' kah, ka 'heeli?. 'The father heard it, and he gave some money to the youngest son. (And) the youngest son took the money and went away. (And) he arrived at a city, and he tarried.'

In such cases, as in many others, a basis for deciding whether two given units of discourse constitute a compound sentence, or two simple sentences, has to be sought in the elocutionary manner in which they are uttered. If such a basis can be found, it is doubtful that the matter will turn out to be as simple as orthographic conventions in written languages assume it to be.

To facilitate generalization upon the uses of ka with the verbal units of the NULLAK-constructions, we found it convenient to speak of the ka-Forms and the (No ka)-Forms of the NULLAK-constructions, as shown in 4.37. Those are the constructions in which ka can frequently be
In 4.33 it was said that temporal clauses of the form le+(verbal unit)+ -e? assert that a very brief interval is concerned in the sequence of the two or more occurrents spoken of. That is to say, an interval between x and y such as would be asserted in English by saving 'As soon as x occurred, y occurred', or 'No sooner x occurred than y occurred'. That interval is evaluated as being still briefer by using an AHAB-construction in the temporal clause; in which case, ka precedes the AHAB-construction. The construction of the temporal clause has in such cases this form: le ka AHAB (...)–e?; e.g., le ka tu jila'he?, 'The very moment he saw him'. Sometimes le is omitted; e.g., ka k'u'tfe:ne?, 'When I got there', 'No sooner had I arrived'. Aside from the characteristic intonation of such temporal clauses, the use of the suffix -e?(4.33; 4.58) is the only difference from ka k'u'tgen, 'And I arrived'; and ka k'u'tge:ne?, 'When I arrived'. 

rendered by the English conjunction 'that'.
This suffix has occurred in the texts only as a component of an intransitive construction with a reduplicated verbal stem. The verbal unit of which -ki is a component serves to assert a contemporary condition or circumstance, or to generalize upon the properties of objects. It is a construction that is permissible only with certain verbs. No rule can be given to distinguish the verbs that can be so used from those which cannot. In our texts this construction was used only with 3rd. pers. subject. Inquiries as to what is said in references to the 1st. and 2nd. persons disclosed that such references are either unusual or are not made by means of the constructions in question. Some informants dropped the -i of -ki upon affixing the pronouns -en and -etj, for 1st. and 2nd. pers., respectively; others retained it. The fact is that nearly all the verbs observed with this construction designate properties and changes in plants and in non-biological objects. Examples: 'henhen,ki, *It splits easily*'; 'hanhan,ki, (cord or thread) is easily broken; 'tj?etj?eb,ki, (pot or gourd) is easily tipped over; 'kakajj,ki, (stick, wood) is easily broken, it is brittle; 'hehel,ki, it changes (in form or condition); 'tjufjul,ki, (wood) is full of knots; 'babai,ki, (hair) is smooth, is combed; 'banban,ki, (fruit, ears of
corn) are scattered on ground; 'bibil,ki, it is filthy, it is full of trash; 'bibit'ki, has a very sharp point; "sfat'ki, (rope, knot) is very loose.
lah and -lah

4.64. In Modern Yucatec, lah occurs most frequently before the stem of a verbal unit. Hence, its usual position is that of an adjunct verbal stem (4.50). In that position it is used with transitive, passive and intransitive constructions. With intransitive and passive constructions it is also found, as in Old Yucatec, affixed to the stem of the verbal unit, and preceding any other components of the unit. In either position, it signifies 'all', 'totally', 'completely'. The main stress of the verbal unit is on lah when it occurs before the verb stem. In its affixed position, -lah is unstressed. Stressed lah is used when that which it specifies is a dominant topic (4.8) of the communication. When that is not the dominant topic, we find either the independent expression tu 'lakal, 'all', 'entirely', or the unstressed suffix lah. We do not know what determines the choice of the latter in intransitive and passive constructions. In emphatic utterance, both the stressed lah and tu 'lakal are frequently found in a sentence.

Examples:
1. 'ha:li,beʔ, ku lah bin tu 'lakal tu na'il. So, they all go to their houses. hal-ib-eʔ, etymologic analysis except for -eʔ(4.58); a rhetorical device introducing a new incident in a narrative; in conversation, it is often
equivalent to 'well, ...' introducing a topic that has some bearing on previous remarks, or preceding an inference, 'so', k-u bin, irregular k-IKAL, due to lack of -(a)l suffix for bin; see 4.56; 'they go' (habitually). \( \text{lah} \) and \( \text{tu 'lakal, 'all'. tu, fusion of ti and u; for the construction of tu na'il, 'to their houses', see 4.60.} \)

2. ti ka bi'ne:f lah kinsbl'li. There is where you are all going to be killed. For ti ... -i, 'there is where', see 4.59. k-a bin-e:f, irregular k-IKAL, you (plur.) are going. kin-s-bil, will be killed, in order to be killed; for special passive with -bil see 4.55; kin-s, kill; kim, die, with formative -s and change of m to n (1.3).

3. ts'ok u lah tal in maha'no:b, tat. All my helpers have come, sir. ts'ok u tal, he has come, they have come; irregular ts'ok+IKAL, due to lack of -(a)l suffix for tal (4.56). ma'han, to lend, to borrow, one who helps without remuneration.

4. ku bin u ja:l le u ta:'ta le \( \text{fjû:ma'lo? ka ma:nla:'hak u no:k'i'lo:b.} \) The father of the girl will order that all her clothes be bought. k-u bin u j-a:l, is going to tell (someone); see 4.56. le u ta:'ta le \( \text{f-jîp-(p)al-o?}, \) the father of the girl. ka man-lah-ak, that all be bought; passive ka-Form of NULLAK-construction (4.37, 4.39). u nok'-il-o:b, her clothes; nok', clothes;
for -il see 4.60.

5. ka binlaho:b tu jik'nal. And they all went to him.
bin-lah-o:b, they all went; bin-o:b, they went; intransitive AHAB-construction. t-u (ti u) j-ik'nal, to him, to where he was; see 4.11, Ex. 34.
4.65. This suffix may be said to be a sign of polychronic reference (4.6) used in constructions which are ordinarily employed in monochronic references, or which are ambiguous as to whether the reference is monochronic or polychronic. It is used when each of two or more individuals performs one or more acts, the acts being performed contemporarily (4.3), or one after another. It occurred in the texts only in transitive and passive constructions. Worthy of note is the circumstance that the formative -t is required after -lan, as though the combination of -lan with a simple stem constituted a composite stem. The following formulas indicate how this rule applies:

<table>
<thead>
<tr>
<th>Construction</th>
<th>Simple Stem</th>
<th>With -lan</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHAB</td>
<td>t-PA V-ah</td>
<td>t-PA V-lan-t-ah</td>
</tr>
<tr>
<td>IKAL</td>
<td>PA V-ik</td>
<td>PA V-lan-t-ik</td>
</tr>
</tbody>
</table>

With the composite stem -tuk -paej-t, 'to pursue', 'overtake', -lan is placed between the two components of the stem -tuk, 'catch', and -paej, 'behind', 'back'; -tuk-lan-paej-t.

Examples:
1. ku 'hok’slan'taal u pol le 'k’ek’eno:’bo?’. The heads of the pigs are brought out (each by a different individual, one after another). k-u hok?-s-lan-t-aal,
hok', come out, go out; hok?-s or ho?-s, to take out, bring out. pol, head. 'k'ek'en, pig.

2. ku k'aʃ'lan'taal tu †sel le †ʃ'ui'boʔ. They are tied to the sides of the gourd-holder. The passive k-IXAL-construction k-u k'aʃ-lan-t-sal(4.28) with the component -lan refers in this passage to each occasion in which several men are engaged in the preparation of the various utensils employed in the †ʃ'aat'af ceremony. Four vines serving as cords are to be tied to a large gourd-holder that hangs over the table. Thus, the verbal unit containing -lan refers to four acts of tying performed by two or more individuals one after another, or more or less coincidently, on each occasion in which such preparations are made. t-u (ti u) †sel, to the side, or sides of, †ʃ'ui-ub, gourd-holder; †ʃ'ui, hang; for -ub see 3.38; a device to hang gourds.

3. wa tu men jan'hi ka: tul wa of tul keh †s'o:no'leʔ, k kuʃ'lan'kelaʔ, k ta'asik. If it happens that two or three deer have been shot, we carry them, and bring them (to the village). wa t-u men, if perchance; see 4.44. jan-h-i, it so happens (4.61). ka: tul wa of tul, two or three (animate); see 4.68 and 4.70. keh, deer. †s'on-ol-eʔ, have been shot; construction V-(a)1 (4.52) with -eʔ for terminal component (4.58). k kuʃ-lan-t-ik, we carry them, each one of us takes turns
in bearing a deer as a load; kuuf refers to the act of bearing a burden, not to the transference from one place to another; like Spanish cargar. Both k kuuf-ik and k ta(1)-s-ik, are k-IKAL-constructions in Usage A (4.28) for descriptions of customs.
4.66. The suffix -ma occurs mainly in these two equivalent constructions: PA V-ma and PA V-ah-ma. The latter was the prevalent construction in Old Yucatec. It occurs frequently at present with some stems, and infrequently with others. The choice of one or the other of those two constructions is about as inconsistent in speech of Type A as in Type B. Strict adherence to the use of V-ah-ma with certain stems and not with others was observed only in the texts dictated by comparatively young informants whose speech was prevalently of Type B. It seems adequate to say that PA V-ma and its variant are the transitive constructions corresponding in referential usage to the intransitive and passive V-aan (4.53). In references with PA V-ma, it is clearer than in references with V-aan that what is spoken of as a dominant topic (4.8) is a contemporary (4.3) circumstance which is a consequence of an occurrence of the sort denoted by the V-component of the construction. Thus, in k'αl'ma, signifies coincidently both that the speaker locked up someone, and that the person referred to is still locked up. But there is unequivocal contextual evidence that the dominant topic is the assertion that the person is locked up at the time the communication is made. In agreement with this is the fact that bilingual informants having a good command of Spanish, rendered in k'al'ma by -
by *lo tengo encerrado*, and not by *lo he encerrado*, or *lo encerré*. Although the statement is vague, it may be useful to say that PA V-ma is used when the consequent circumstance has a bearing on some topic that is being dealt with. For example, in a discussion of one of the revolutions in Yucatan, one of the interlocutors is contradicted by another. Thereupon, the one contradicted argues that he knows he is right, because he saw the beginning of the revolution. For 'I saw' he says in this case in *wilah'ma* (variant PA V-ah-ma). The speaker proceeds to enumerate what he saw, and every one of the sentences of this enumeration begins, not with *wilah'ma*, but with the AHAB-construction tin *wilah*, 'I saw'. It may be objected that if his seeing the beginning of the revolution has a bearing on the topic discussed, his witnessing of each of the incidents he enumerates must have also a bearing on that topic; for it so happens that all he does in the enumeration is to itemize what was covered by the assertion 'I saw the beginning of the revolution'. We would say that when dealing with such phases of discourse as the one we have termed topical distinction (4.8), we observe that it is generally more feasible to make statements of the form 'When device D occurs, \( x \) is the case' than of this form: 'When \( x \) is the case, device D occurs'.
In fact, this is likely to be true of most phases of
discourse, excepting formal and phonologic phases.

Examples:
1. u ma[f]'ma u þ'on 'jetel u 'maskab. He was
   holding his gun (in one hand) and his machete (in the
   other). ma[f]' refers to the act of taking hold of; ma[f]'ma
   refers to circumstance of holding in the hand; for 'jetel,
   signifying 'and' see 4.62.
2. hun þ'el 'panwo u 'hentah'ma. He had a panwo-
   bag hanging from his shoulder. 'panwo or 'pa,wo (depend-
   ing on the region) is the name of a special kind of carry-
   ing bag (sabucán). The composite stem of hen-t-ah-ma is
   hem-t with change of m to n before t; the composite stem
   signifies 'to place across'; the bag in question hangs
   on one hip, being suspended by a cord crossing diagonally
   over the individual's chest and back, and resting on his
   shoulder, like a bandoleer.
3. behla'e?, k'a'bet a 'u'aik ten tu 'lakal a
   nok' a 'bukint'ma,o? . Now, it is necessary that you give
   me all the clothes you have on. For be-he-l-a-e?, now,
   see 4.51 and 4.58 (-e? at the end of the equivalent of a
   temporal clause). k'a'bet a 'u'a-ik, it is necessary that
   you give, you must give (4.20). ten, to me (2.6 ). t-u
   'lakal, all; see 4.52. a nok', your clothes. buk-in-t,
   to put on(clothes); with -ma to have (clothes) on.
4. ku ji'lik u 'mut's'ma u ji:'ye', ... When he sees that her eyes are closed, ... k-u j-il-ik, he sees; k-IKAL-construction in temporal clause with -e? at the end of the clause (4.33). mut's'm is applicable to the act of closing; with -ma the condition of being closed is referred to. iy', eye, eyes, face.
NP-Constructions

4.67. The notation 'NP' stands for (1) a word which in a given sentence is a Yucatec noun; or (2) a phrase consisting of a noun, or a pronoun, and another or other words describing, delimiting, or specifying the item or items (persons, animals, or non-animals) referred to by the noun or pronoun; or (3) for a pronoun which stands for the item or items spoken of in a given sentence. To facilitate a comparison of the NP-constructions with certain English constructions, let us write 'is(&)' to indicate that 'is' can be replaced by 'am', 'are', or 'was' or 'were'. Using 'NP' for English as specified above for the Yucatec devices, we can now say that what is communicated in Yucatec by means of the NP-constructions is generally equivalent to that which can be communicated in English by means of this construction NP is(&) NP; e.g., 'John is a carpenter', 'They are the men I saw', 'What he saw was a raccoon'. That which is signified in English by 'is(&)' in NP is(&) NP is in some cases signified in Yucatec by the construction and intonation of the sentence together with a brief pause between the two NP-components. We have used a comma to indicate the pause and the intonational differentiation of the two components, thus: NP, NP; e.g., le:'lo?, le p'ok tin mana'ho?, That is the hat I bought; word for word: 'That, the hat I bought'. le mak ta wila'he?, ten, The person you saw was I (The person you saw, I). The Yucatec con-
struction of such sentences differs according to whether NP is a single word or a phrase; a pronoun or a noun; a 3rd. pers. pronoun or some other. The pronouns involved are PC (pronoun of Class C) and -PB (pronoun of Class B). If we let 'N' stand for a simple or composite stem used as a noun; and 'PHR' for a nominal phrase, the NP-constructions that occurred most frequently may be indicated by the following formulas:

<table>
<thead>
<tr>
<th>Common</th>
<th>Variants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. N-PB</td>
<td>1(a). PC, N-PB</td>
</tr>
<tr>
<td>2. PHR, PC</td>
<td>2(a). PC, PHR</td>
</tr>
<tr>
<td>3. PHR₁, PHR₂</td>
<td>3(a). PHR₁, PC, PHR₂</td>
</tr>
<tr>
<td>4. PHR, N</td>
<td></td>
</tr>
</tbody>
</table>

In forms 1 and 1(a), -PB is a 1st. or 2nd. pers. pronoun, sing. or plur., inclusive of plural (-o:n-e:ʃ), or exclusive of plural and inclusive of singular (-o:n). For example, with the word 'pol:tuʔeʔ, 'carpenter', we have: pol:tuʔeʔen, I am a carpenter; pol:tuʔeʔet, you are a carpenter. For the 3rd. persons, form 1(a) applies if we take into account that the 3rd. pers. sing. pron. of Class B is a null sign (2.5): le:'ti,et, 'pol:tuʔeʔ, he is a carpenter. Form 1(a) is used also for 1st. and 2nd. pers. in certain contexts: ten, pol:tuʔeʔen, '(as for myself), I am a carpenter.' In a few instances, -PB has been affixed to the noun component of a phrase consisting of a pronoun of
Class A and a noun. That is to say, instead of PC, N-PB, we have found PC, PHR-PB, but only when the construction of PHR is PA N. In those cases PA is equivalent to an English possessive pronoun; e.g., ten, u ta:ta'en, I am his father. teq', in 'witja,met, You are my husband. In the instances conforming to form 3(a), that is, PHR₁, PC, PHR₂, the reference made by PC may be said to be a repetition of that made by PHR₁, and what is asserted is that PHR₁ is(₄) PHR₂. For example: le kan ta 'kina,he', le:'ti', u ja'la', The snake you killed was his pet (The snake you killed, that one, his pet).

When the NP-constructions are used in negations, the negative sign ma(?) appears sometimes before the first of the two main units composing the sentence, and sometimes between the first and the second. Roughly, it is like saying 'It is not x that is y', or 'x is not y'. The use of ma(?) with one or the other of the components depends mainly on what is the dominant topic (4.8). In conformity with what is said in 4.59, the suffix -i(?) is required in many of the negations with the NP-constructions. The NP-constructions most commonly found with the negative ma(?) and the suffix -i(?) are:

1. ma(?) N-PB-i(?)
2. PHR, ma(?) PC-i(?)
2(a) ma(?) PC-i(?), PHR
Miscellaneous examples:

1. tu men le na'a?, in wo'tot. Because this house is my dwelling. t-u men, because (4.52). le na-a?, this house (4.51). in w-ot-oř, my dwelling, home, residence (4.60).

2. le:tio:be?, in wet 'maki,lo:b, They are my companions. le:ti-o:b, they; for -e? see 4.55. in w-et mak-il-o:b, my companions; et, together with, in the company of; adjunct verbal stem (4.50); mak, person; for -il see 4.60; -o:b, plural.

3. le:'lo?, ma? a wet kaha'le:s'i?. He does not belong to your village. le-l-o?, that, one (4.51). a w-et kah-al-e:s-i, your townsman; a ... -e:sj, you(plural); et as in the preceding example; kah, village; ka'hal, inhabited place; also 'village' or 'town' in composite words, as in this example. For final -i? in negative sentences see 4.59.

4. le a:lab ti? 'kampanai'lo?, ma? 'kampana,i'; tjen hun b'el nu:'sji juf. What had been said to him to be a bell, was not a bell, but a big wasps nest. le .. -o?, that, the (4.51); al-ab, passive AHAB (4.10); ti?, to him; 'kampana, adopted Spanish, campana, bell;-il in reference to the class to which an object belongs (4.60). tjen, only, just. nu:'sji, X-variant of nu'sjib, 'big', applicable to animate referents; used here perhaps because the reference is to the nest and the wasps together, or because sji is the word both for the insect and its nest. Still, the numerical classifier used here, b'el, is for inanimate.
Numerical Classifiers

4.68. The Old Yucatec numerical system is at present obsolete except for the first four or five numbers. Still in current use are the numerals hun (in some localities un), ka:, of, kan, 'one, ..., four'. ho?, 'five', is known to many, but it cannot be said to be a word of their ordinary vocabulary. The old folk of some localities remember the Old Yucatec numerals to 20, hun k’al, and know how to proceed combining the first 19 numerals with the vigesimal unit k’al; but upon reaching 20 times 20, few seem to remember the second vigesimal unit, hun bak’, '400'. All this, however, is old lore to them, and not the ordinary way of counting.

The first four or five numerals that are still in current use, are always followed, as in Old Yucatec, by the words we term here numerical classifiers. These words designate various kinds of units in a special classificatory system which is in evidence only when the Yucatec numerals are employed. The use of the numerical classifiers is comparable to that of the English word 'head', as in 'a hundred head of sheep'. The total number of numerical classifiers is not known. Despite the long lists in Beltran’s grammar, and in other books, one can find even at present some which no author, so far as we know, has mentioned. Some seem to be used only in certain communities. The two which have the broadest application are
tul, for animate referents, and p'el, for any inanimate item for which there is no special numerical classifier in the speaker's own vocabulary. p'el is used also when counting without mentioning what is counted. There are individual and local differences with respect to the kinds of objects to which some numerical classifiers are applicable. Thus, te'it is generally used for counting ears of corn, bananas, candles, short pieces of bamboo, and other objects similar in form and size to some of these. In some communities it is applied to shot-guns; saying, for example, hun te'it ton, one gun; whereas in others the general inanimate p'el is used for a single gun; at least when the number of guns is not the topic in question; but for more than one gun te'it is commonly employed. kul is generally applicable to bushes and corn-stalks. In some communities it is also applicable to hair, but not in others. The numerical classifiers are not used before words which vaguely or otherwise designate quantity or plurality; as kut', load; mut', heap, group; lut', gourd, when referring to as much as a gourd of the kind called lut' can contain; p'it, a little (of liquid); wu', measure of pozol usually carried when traveling; puk', the quantity of pozol usually served in a gourd. Nor are they used in any case after the adopted
Spanish numerals.

As a rule, the plural suffix -o:b is not used when the noun is preceded by a Yucatec numeral and the classifier; e.g., hun tul pek', one dog, a dog; of tul pek', three dogs. But many exceptions to this rule are found in the discourse of individuals whose speech is predominantly of Type B, particularly if they are bilingual. When the adopted Spanish numerals are employed, the use and omission of the plural suffix are subject either to extremely complex rules, or to none at all, so far as we have been able to disclose. For 'ten men', for example, one finds djes wi'nik, djes wini'ko:b, and even djes 'ombrej8o:b, adopting in the last phrase the Spanish plural hombres, and adding to it the Yucatec plural, -o:b.
Reduplication and Duplication

4.69. As already stated (4.6), the device of repeating the first two sounds of a stem (reduplication), and that of repeating the whole stem (duplication) serve the same usage. Letting 'C' stand for a consonant, and 'V' for a vowel, the rules governing the two devices can be indicated as follows:

**Reduplication**

Case 1. When $C_2$ is not m or n

<table>
<thead>
<tr>
<th>Stem</th>
<th>Reduplication</th>
</tr>
</thead>
<tbody>
<tr>
<td>$C_1VC_2$</td>
<td>$C_1V-C_1VC_2$</td>
</tr>
</tbody>
</table>

**Duplication**

Case 2. When $C_2$ is m or n

<table>
<thead>
<tr>
<th>Stem</th>
<th>Duplication</th>
</tr>
</thead>
<tbody>
<tr>
<td>$C_1V_2$</td>
<td>$C_1V_2-C_1V_2$</td>
</tr>
</tbody>
</table>

Case 3. C is any consonant

<table>
<thead>
<tr>
<th>Stem</th>
<th>Duplication</th>
</tr>
</thead>
<tbody>
<tr>
<td>CV</td>
<td>CV-CV</td>
</tr>
<tr>
<td>VC</td>
<td>(No instance observed)</td>
</tr>
</tbody>
</table>

Case 4. Diphthongs: the first vowel is repeated; e.g., Oai; CaCai.

Due to the greater number of stems of the form $CV_C$, reduplication occurs much more frequently than duplication. There are a few exceptions to the formulation under Cases 1 and 2. The following have been observed: hun, 'one'; 'huhun, 'one by one', 'each one'. han, in a hurry (4.50); 'hahan,
in a great hurry, recklessly, etc. man, pass; 'maman'sah, pass repeatedly (transitive). mum, not ripe, tender; 'mumumkin'tah, make very tender.

Examples of instances supporting the formulation under Case 2: "'fin'fin, inclined, not vertical, not firmly set. "'fin'fin,pol or "'fin'fun,pol, upside down, standing on head. "'am'lam(-ah), to dent hollow objects (like Spanish abollar); "'en'enn,ki, solitary, in silence. "'int'fin(-ah), throw repeatedly. "'henhen(-ah), crack or split in several parts. "homhom(-ah), submerge repeatedly. "lamlam(-t-al) or 'lamlam'cp'a(-h), sink repeatedly in mud. 'tantan,buh, a half to each. 'tumtum'olal, caution.

Reduplication and duplication occur in verbal constructions and in a few expressions derived from them and constructed at least in part like verbal units. The two procedures are employed chiefly to signify a more or less rapid repetition. With some stems it signifies distribution; e.g., ku 'jofolkinti,ko:b, they kneel down here and there (not at once, and each wherever he may be standing during the ceremony). With a few stems it stands for a considerable magnitude, but not excessive; e.g., na'naatf, rather far; 'naatf, far. ts'e'ts'ek, quite a few. From special inquiries and tests, we infer that the old use of reduplication as a sort of diminutive is at present obsolete in the localities we visited. Miscellaneous examples of reduplication will be found in 4.63.
4.70. Depending on the sentence of which it is a component, 
the word wa is equivalent to 'if', 'whether', or 'or', aside 
from what it may signify in interrogative sentences. In 
exclamatory sentences having the construction of interroga-
tive sentences, wa has a sense similar to 'really?' Its 
use in the protases of conditional sentences has been shown 
in 4.11, 4.35, and 4.44. With the sense of 'whether' it is 
found mainly in reported disjunctive interrogative sentences 
(4.31) subordinate to k'at, 'to ask'; e.g., tu 'k'atah 
ti' o? wa 6'o:k u ta'sik, He asked him whether he had 
brought it. Jen a k'at ti'e? wa 6'o:k u ta'sik, 
Go and ask him whether he has brought it. Indicating 
alternative possibilities or any other sort of disjunction, 
wa can occur between any two components of a sentence with 
the sense of 'or'; e.g., ku 'k'sa:bal ti'o:b hun tul 
'ulum wa hun tul kaf, They are given a turkey or a 
chicken (customarily).

In disjunctive interrogative sentences (4.31), wa 
occurs immediately after the first assertive word of 
the sentence, except in interrogations beginning with 
the negative sign ma(?). About 40% of the disjunctive
4.70. Depending on the sentence of which it is a component, the word *wa* is equivalent to 'if', 'whether', or 'or', aside from what it may signify in interrogative sentences. In exclamatory sentences having the construction of interrogative sentences, *wa* has a sense similar to 'really?' Its use in the protases of conditional sentences has been shown in 4.11, 4.35, and 4.44. With the sense of 'whether' it is found mainly in reported disjunctive interrogative sentences (4.31) subordinate to *k'at*, 'to ask'; e.g., tu *k'at* ti'e? *wa* ṭō:k u ta'sīk, He asked him whether he had brought it. Jen a k'at ti'e? *wa* ṭō:k u ta'sīk, Go and ask him whether he has brought it. Indicating alternative possibilities or any other sort of disjunction, *wa* can occur between any two components of a sentence with the sense of 'or'; e.g., ku *tō:bal* ti'o:b hun tul 'ulum *wa* hun tul kaʃ, They are given a turkey or a chicken (customarily).

In disjunctive interrogative sentences (4.31), *wa* occurs immediately after the first assertive word of the sentence, except in interrogations beginning with the negative sign *ma(?)*. About 40% of the disjunctive
interrogative sentences in our texts contained wa. The difference in sense between those which contained wa and those which did not is difficult to disclose in most cases. The explanations offered by bilingual informants are to the effect that when one doubts that the person addressed can answer the question, wa is used. His explanation holds for some of the contexts in which wa was used, but it certainly does not hold for many others. It seems to account for the frequent occurrence of wa when the question is introduced by the phrase a wo:'hel wa ... ? which at least in some cases could signify 'Do you know perchance ...?' But it has occurred also in instances in which an interrogative sentence (interrogative in construction) is a persuasive request; e.g., ma: tan wa a t'/a'ik ten? 'Aren't you going to give it to me?' and in the sort of interrogative constructions known as rhetorical questions, as a variant of which we may regard those which serve to express gladness or surprise, as in this case: One who has been pursuing an enemy brings the welcome news, t'o:k in yu'kik, 'I have just caught him'. His interlocutor reacts by repeating the component t'o:k (4.15) followed by wa; viz.: t'o:k wa ?, 'You have?' 'Really?', or some other utterance of the sort with an intonation suitable to the context.
The suffix -\text{t}il is a component of a number of words used either as Yucatec nouns, or as Yucatec intransitive verbs of the sort that are equivalent to English adjectives, or to English verbal units consisting of a form of the verb 'to be' followed by an adjective; viz.: 'a tall man', 'a man who is tall', 'that man is tall'. Many Yucatec nouns containing -\text{t}il stand for persons and other referents respectfully evaluated; e.g., 't\text{a}ja\text{t}il, mercy, charity, grace; 'ts\text{a} (give)-ja (bounteous, repeated)-\text{t}il; as in the obsolescent ritualistic reference to maize: u \text{t}a\text{ja}\text{t}il ha'hal djos, the merciful gift of the true God. ko'lel, lady; ko'lel\text{t}il, highly respected lady; jum\text{t}il, respected gentleman. Such evaluation, however, is absent, or not evident, in quite as many words that contain the suffix -\text{t}il; e.g., 'ki'o(l)\text{t}il, merry; 'ki'o(l)ti'\text{l}il, merriment; 'o(l)\text{t}il, poor (worthy of sympathy, or destitute); 'o(l)\text{t}il, poverty; 'hak', o(l)\text{t}il, frightful. The preceding words contain the stem ol, 'mind', sentiment', etc., whose consonant l is generally omitted in those compounds. Other compounds with ol take -al instead of -\text{t}il; e.g., 'ki'mak\text{ol}al, happiness.

Excepting terms denoting kinship and marital relationship, it is not feasible to specify what kinds of nouns require the suffix -\text{t}il. It is true that all the words that contain -\text{t}il stand for items which can be said to
to be "abstract" in some sense or other of this vague term. But quite as many "abstract" items are referred to by words which do not contain this suffix. With terms of kinship and marital relationship, however, this rule is observed: Every one of these terms requires the suffix -iil when it is not preceded by a pronoun of Class A specifying whose relative is spoken of. Thus, u ta:'ta, 'his father'; le ta::ta'i'lo', 'the father', 'that father'. u 'jifjami, her husband; le 'ifjami,lo', 'the husband'. tu 'lakal-il', 'his relative'; hun tul 'lak'ili, a relative, someone's relative.
NOTES

INTRODUCTION

1. To the earliest investigators the words *Maya* and *Yucateco* were synonymous. In fact, it is probable that at least in the eighteenth century the language was more commonly referred to by the Spaniards as *Yucateco* than as *Maya*. Beltran entitles his grammar *Arte del Idioma Maya y semi- léxicon Yucateco*. Nevertheless, four of the dignitaries of the church refer to his work in the official approval contained therein as *Arte del Idioma Yucateco*, while one of them, Fr. Felipe Santiago Maria de la Madera, evidently specifies what the less common term designates when he writes, "... siendo Maestro de la Lengua Maya, que es el Idioma Yucateco." Beltran himself, notwithstanding the title of his book, begins the introduction (Prólogo al lector) with these words: "Es el Yucateco Idioma garboso en sus dicciones, ..." Another book of his is entitled *Declaracion de la Doctrina Christiana en el Idioma Yucateco*. In the seventeenth century, Juan de Acevedo is said to be the author of *Principios elementales de la gramatica Yucateca*. Earlier, perhaps, Francisco de Torralva writes sermons en lengua Maya ó Yucateca, and Villalpando, the earliest writer on the language, so far as the records show, wrote in the sixteenth century on *Doctrina Christiana en*
Idioma Yucateco o Maya. Those two ways of referring to the language are found in Spanish writings throughout the three centuries preceding the twentieth, and also thereafter, though less frequently.

The circumstances which brought about the use of those two names are not known. We do not know whether the natives themselves referred to their language by more than one name. To call the "same language" by different names in different localities where it is spoken is by no means a rare circumstance among illiterate peoples. In fact, within the Maya area it is the most prevalent practice at present. For example, our Tzeltal informants in the Bachajon region knew that their speech differed only slightly from that of Ocósingo. But they claimed that the name 'Tzeltal' applied to the latter, and not to their own vernacular. A name that would apply to both vernaculars was not known, nor did they have any need of it. Instances of that sort are common in Guatemala. In pre-Columbian times, the Quiche-speaking peoples may have been aware of constituting at least a political unit, regardless of the differences between local vernaculars, which may have existed then, as they exist now, not only there, but almost everywhere else on earth. At present, however, if individuals from different localities within the Quiche region say that they all speak Quiche, it would be by no means a common occurrence, and it would be
very probably due to information obtained directly or indirectly from someone who has read about it. Some of our Quiche informants in Chichicastenango thought that their language was called Cakchiquel, perhaps in view of the fact that the Whites referred to several other Indian vernaculars by that name. All this is quite natural, for the grouping of different local vernaculars under the name of "one language" is generally the work of individuals devoted professionally or otherwise to historical studies.

It is true that such conditions do not exist at present in the Yucatec area, but we lack unequivocal information as to what was the case when the Spaniards came to Yucatan. In the chronicle of Ah Naum Pech edited by Martinez Hernandez (Crónicas Mayas, Merida, 1926, p.25), the country is called yucal peten, and the people maya uinic. The language is known to have been called maya than, as at present. In these phrases, the word peten means 'country' or 'region', and than, pronounced t'an at present, signifies 'speech' in this context. But so far as the present writer knows, the combination yucal than, which would conform to the rules of Yucatec morphology and syntax, is not found in the extant literature. Had it occurred, it would have seemed plausible to conjecture that Yucatan is a Spanish corruption of yucal than, allowing, of course, for the possibility that the first Spaniards who inquired what the country was called
mistook the name of the language, or one of the names of
the language, for the name of the country. In the chron-
icle referred to, it is explicitly stated that Yucatan was
the name given by the Spaniards to the region (peten) known
to them as yucal peten. The word yucal is evidently an ad-
jectival form of the word yuc, the name of a species of
deer which abound in Yucatan. The epithet "the land of the
deer and the turkey", whatever its origin, is familiar in
references to Yucatan.

2. An extensive bibliography and much valuable informa-
tion concerning books and manuscripts about Yucatec, or
written in Yucatec, will be found in Alfred M. Tozzer's
Since the publication of Tozzer's book, an edition of the
Motul dictionary by Juan Martinez Hernandez, Merida, Yuca-
tan, 1929, and William Gates' A Grammar of Maya, Baltimore,
1938, have appeared. All the works and authors mentioned
in the Introduction and in the Notes there referred to are
listed in Tozzer's bibliography.

3. The chief source of information on the sounds of
Old Yucatec is, of course, what the writers of the sixteenth
and seventeenth centuries tell us about them. A knowledge
of Modern Yucatec pronunciation is of but minor service in
this inquiry. That may not be clear to those who have been misguided by the circumstance that the alphabet which the Spaniards devised to write Old Yucatec serves fairly well to write Modern Yucatec. This circumstance may indicate that so far as the number of sounds is concerned Yucatec has not changed much, but nothing can be reliably inferred from it as to what each sound was like. The fact that a word was written in previous times exactly as we would write it now does not necessarily imply that it was pronounced then as we pronounce it now. This is too obvious to require further comment. We offer the following illustration of this point mainly because of its bearing on subsequent remarks. In the sixteenth century the Spanish word for 'son', *hijo*, was written exactly as at present, but it is rather unlikely that a Spaniard of this day would understand it if he heard it pronounced as during the first half of that century. While the spelling has remained unaltered, the sound of the initial consonant has dropped out, and the sound for which *j* stood has undergone a series of rather divergent changes. The *h* in the word *hijo* represented, at least according to one writer, some sort of "guttural" sound, and the *j* stood for some sound similar to that denoted by English *j* as in 'John'. Incidentally, it is pertinent to note that those changes, and a few others which are by no means of the sort that requires a trained
ear to notice the differences, occurred in less time than that during which the Yucatec sounds are assumed by some writers to have remained practically unaltered.

It is well known that Spanish pronunciation has changed considerably since the time when the Spaniards began to use some letters of their alphabet to represent Yucatec sounds. This, however, does not seem to have been taken into account by some who wonder why the early writers employed for this purpose certain letters rather than others. For example, in a note to the second edition of Beltran's grammar (p.2), the editor says, "No sé que fundamento tuvieron los que formaron el alfabeto de la lengua Maya para darle á la h el sonido de j, cuando pudieron usar de la misma j y suprimir la h." That writer obviously assumes that h was always a silent letter in Spanish orthography. Laboring under the same erroneous impression, Pio Perez concludes that the difference between Old Yucatec hula, guest, and Modern Yucatec ula is solely orthographic. In his comment on these words under "J" in his dictionary, we read, "Los primeros ortógrafos del idioma cuando aun vacilaban sobre el uso de la h, escribían hula, por el huésped, hulul ó hulel por estar presente ó llegado por ulul ó ulel que se pronuncian suaves: esto prueba que la h no tenía el sonido fuerte que después le atribuyeron." In view of such confusions, it has seemed justifiable to deal with the whole
matter as much in detail as has been done in this note.

The set of characters and combinations of characters referred to in these paragraphs as the Old Yucatec alphabet is as follows:

\[
\begin{align*}
\text{A, B, C, Q, TK, O, OH, QH, E, H, X, I,} \\
\text{K, L, M, N, O, P, PP, T, TH, Y (u), X.}
\end{align*}
\]

It is certain that this alphabet was in use in 1567, for February, 1567 is the date on five of the letters addressed to Philip II in Yucatec by several Yucatec chieftains, the original manuscripts of which are kept in the Archivo General de Indias in Seville. Examining the photographic copies, we find that all the characters listed above, and no others, have been used. Furthermore, their uses conform to the orthography of the manuscript of the Motul dictionary. We need not consider whether the Old Yucatec alphabet was devised by Villalpando, who, according to various accounts, wrote the first Yucatec grammar and a dictionary, or by Landa, or by some other member or members of the Franciscan mission. It is sufficient to know that the one or ones who used letters of the Spanish orthography to write Yucatec were Spaniards who had learned to write their own language in the second or third quarter of the sixteenth century. Hence, that is the period in the history of Spanish sounds and orthography with which we shall be chiefly concerned later.
We find the Old Yucatec alphabet used without alterations in Coronel's grammar (1620) and in San Buenaventura's grammar (1684). Beltran suggests in his grammar (1746) that the character ̃ should replace ơ in Yucatec orthography in order to prevent certain errors resulting from a careless omission of the mark that distinguishes ơ from ç. It is possible that he did not follow his own suggestion in his grammar, but we cannot be certain. The only edition known to the present writer is the second. There we find that the letter ̃ is used throughout the text, but not in the chapter dealing with the sounds. One suspects that the notorious practice of modernizing old writings upon editing them, or quoting from them, may have led the editor to substitute ̃ for ơ except where the substitution would have rendered Beltran's statements nonsensical.

The sounds of Old Yucatec may have changed by the time Beltran wrote, but that is not necessarily implied by the orthographic reform he proposes. His, as well as later proposals to reform the Yucatec orthography, evidently reflect the changes which had occurred in Spanish. Thus, when Beltran wrote, the Spanish Academy had already decided to exclude the letter ơ from the Spanish orthography. In their first dictionary, usually referred to as Diccionario de Autoridades (1726), their decision reads in part as follows: "... porque haviéndose inventado la ç unicamente
para suplir el defecto de la combinación del Ce, Ci en las tres vocales a, o, u, a fin de pronunciar ca, co, cu en lugar de Ca, Co, Cu; lográndose esto mismo, y con la misma igualdad y blandura el día de hoy con la z, realmente se puede reputar por supérflua la ç" (p.LXXIII). By that time the distinction between the old Spanish sounds of ç and z was no longer observed, and, as many books and manuscripts amply show, few Spaniards could use those two letters consistently. By the first half of the nineteenth century, writers on Yucatec make no use of the character ç. Similarly, the use of u in Yucatec orthography where the old writers used y ceased at approximately the time that a corresponding reform was introduced in the Spanish orthography. We repeat that the orthographic changes which have been made since the Old Yucatec alphabet was devised do not necessarily indicate that the sounds of the language changed. Whether they changed or not is to be inferred from other observations.

It may facilitate further discussion if we indicate at this point what phonetic values are ascribed to the characters of the Old Yucatec alphabet by those who have assumed explicitly or otherwise that the sounds of Yucatec have undergone no change since that alphabet was devised. In the following tabulation, the consonants are grouped, not according to any phonetic order, but in a way which may
facilitate their discussion. The phonetic value ascribed to each character of the Old Yucatec alphabet is indicated by the IPA notation (notation of the International Phonetic Association) written under it, each IPA notation having the specific value described in Part 1.

**CONSONANTS**

**Group 1**

OY alphabet: b c ch x l m n p t
Phon. value: b k y j l m n p t

**Group 2**

OY alphabet: ʒ tz h y(u) x
Phon. value: s t h w f

**Group 3**

OY alphabet: ɡ th k pp th
Phon. value: ɡ' th' k' p' t'

**VOWELS**

OY alphabet: a e i o u(y)
Phon. value: a e i o u

It is probable that the phonetic values of the characters of Group 1 were approximately as indicated above. The argument in support of this probability is as follows. Various writers inform us that in the combinations ce, ci the letter c was to be pronounced as in ca, co, cu. In the Motul dictionary it is explained that y was used as a consonant, and
stood for the sound heard in the Spanish words *ve*, *verno*, *vo*, *yunque*, *yugo*. The fact that nothing is said about the rest of the characters of Group I seems to imply that they were to be pronounced more or less as in the Spanish of that time. If that is true, the Yucatec sounds for which those nine characters stood may have been similar to nine sounds in present-day Spanish. For the latter are assumed by all authorities on Spanish philology to be similar to nine sounds represented by those letters in the Spanish of the sixteenth century. In support of all this we find that the nine sounds of Modern Yucatec traditionally represented by those characters are similar to nine sounds of modern Spanish represented by those letters. Roughly outlined, the argument amounts to this: If A and B were similar at one time, and if neither A nor B has changed much, then A and B must be similar now. And we do find that they are similar. This, of course, tells us nothing about the degree of similarity. Granting that the evidence is conclusive with respect to the preservation of the nine Spanish sounds in question, the possibility that the Yucatec sounds differed more from them than they do now is not excluded. For the present similarity is compatible with this argument: A and B differed at one time; A has not changed, but B has so changed that it is now quite similar to A. Against this it can be said that, if the difference was considerable, it
is improbable that in as many as nine instances the sounds of the two languages changed, let us say, in the same direction. Of assimilation of the Yucatec sounds to those of Spanish there is no evidence at present. The assimilation observed is rather the converse; for, so far as the writer is aware, the Spanish pronunciation that resembles most closely that of Modern Yucatec is that which is prevalent in Yucatan. The argument receives some support also from the fact that the nine sounds in question occur in those languages of the Maya family which seem to be most closely related to Yucatec, as well as in some which seem to be less closely related, as Mam and Huastec. This, however, does not mean much until it can be shown that those sounds correspond etymologically among the various languages of the Maya family in which they occur. In conclusion it should be noted that the above form of argument is applicable only to the consonants of Group 1, and to the vowels used singly or in diphthongs, but it is not applicable to the double vowels. It does not apply to the other characters because some of them were not characters of the Spanish orthography; others were used in the sixteenth century otherwise than in modern Spanish; one of them, ç, is no longer a character of Spanish orthography; and the sound it represented at the time the Old Yucatec alphabet was devised no longer occurs in Spanish.
Let us consider now the characters of Group 2. The phonetic value of ẓ in the Old Yucatec alphabet has been supposed to be like the s-sound one hears now in Modern Yucatec and in the Spanish spoken in most parts of Spanish America. There are reasons for concluding that this supposition rests on erroneous premises. It has been supposed that ẓ and z always stood for the same sound in Spanish. The z of modern Spanish orthography is now pronounced like s in Spanish America and in some parts of Spain. It has been supposed that it was so pronounced also in those parts of Spain, particularly in Andalusia, at the time the Spaniards invented the Old Yucatec alphabet. It has been noticed that the character ẓ stands for an s-sound in French, which, of course, is quite irrelevant. And it is observed that Modern Yucatec has an s-sound where Old Yucatec written words have ẓ, which by itself proves nothing at all. But, contrary to some of these suppositions, it can be shown (1) that ẓ and z did not stand for the same sound in the Spanish orthography of the period that concerns us; (2) that it is probable that ẓ and z came to be pronounced like s in Andalusia about the time that the phonetic distinction between ẓ and z began to disappear in Castile; (3) that there is no reason to assume that the one or ones who devised the Old Yucatec alphabet were Andalusian. Full credit for the invention of the Old Yucatec alphabet has been given to
Villalpando, who was Castilian. Landa tells us that
Villalpando began to learn the language by means of ges-
tures and other devices, and ended by writing a grammar.
Landa could possibly have had something to do with the in-
vention of this alphabet, and he, also, was Castilian.
There is no disagreement as to the birthplace of these
individuals, and the authoritative Espasa encyclopedia
expresses no doubt upon this point.

To offer some evidence in support of our statements con-
cerning the old Spanish pronunciation of ç and ž, as well as
to prepare the ground for further remarks on the Yucatec
sound in question, we will quote a few statements from the
following works: Nebrija's Gramatica Castellana (1492),
E. Walberg's edition (Reproduction phototypique de l'éditio
princeps, Halle, 1909); and R. J. Cuervo, "Disquisiciones
sobre antigua ortografía y pronunciación castellanas,"
Revue Hispanique, March 1895. In that thorough inquiry
into the sounds of old Spanish, Cuervo quotes from numerous
sources. We transcribe here a few of his quotations from
works pertaining to the particular period that concerns us.

I. Statements indicating that the Spanish sound for
which ç stood at the various times specified was neither
an s nor the theta-sound of modern Castilian.

1. In 1492 Nebrija says that the Spanish ç-sound oc-
curred neither in Latin nor in Greek. He spent ten years
in Italy studying these languages. He wrote about the Hebrew language in Latin. That he knew how the Greek theta was pronounced is shown by his description of its articulation in Chapter IV of his grammar. Concerning the Spanish sound of ç he writes as follows: "La c tiene tres oficios: uno propio, cuando después della se siguen a, o, u, como en las primeras letras destas diciones: cabra, corazón, cuero. Tiene también dos oficios prestados: uno, cuando debaxo della acostumbramos poner una señal, que llaman cerilla, como en las primeras letras destas diciones: çarç, çevada; la cual pronunciacion es propia de judios e moros, de los cuales, cuanto io pienso, las recibio nuestra lengua, porque ni los griegos ni latinos que bien pronuncian, ni sienten ni conocen por suia."

2. In 1560, M. G. Mario Alessandri d’Urbino equates the Spanish ç with the s-sound of Italian z. "Si pronuntia come la nostra z quando ha gagliardo spiritu, onde la forza che ha la nostra z in queste voci ... confidenza, scherzo, zuccaro ... si possede dalla ç Castigliana in ... çaragoça, caça, oluidança ... et altri simili." (Il paragone della lingua Toscana et Castigliana. Zeitschrift für rom. Phil., XI, 419).

3. Twenty-two years later, Juan Lopez de Velasco indicates that at least to him the Italian z was not an
acceptable substitute for the Spanish ç. "El sonido y voz que la ç con cedilla hace, es el propio que la de su nombre, que se forma con la estremidad anterior de la lengua, casi mordida de los dientes, no apretados, sino de manera que pueda salir algún aliento y espíritu: como en lo alto del paladar se forma la ç, de donde nace la dificultad que los extranjeros sienten en pronunciar la ç cedilla, diciendo siempre se por ce, y así no hay en el Latin, Griego, Italiano ni otras lenguas vulgares, con que poder escriuir los nombres de personas, linages y otros que en el Castellano tienen çç, çç, çç, cuyo espíritu en el pronunciar a de ser blando y lleno, porque si se esfuerça, y adelgazándose sale con algún zumbido o silua: conuiertese en la voz y sonido de la ç, que se forma arrimada a los dientes, pero no metida entre ellos." (Orthographia y Pronunciacion Castellana, Burgos, 1582).

4. In 1623, John Minsheu implies that the sound of Spanish ç was similar to, but not quite like, that of English th. "ç is sounded by putting the tongue to the rankes of the teeth, as the French ç Viença, or very near: the Italian ç, as diligenza, scienza. This ç must be so pronounced, whether it be at the beginning, end or middle of a word, though ç, ç, ç follow, and is sounded as in English the, as çaraguelles... ççobra... çufre; pronounce thesaraguelles, thesothsobra..." (A Spanish
Grammar, London, 1623). Authorities on the history of English sounds do not doubt that English th as in 'thin' has always been articulated as at present.

II. Statements which show that q and z were not equivalent.

1. According to Cuervo, in Nebija's De literis hebraicis, q is used to transcribe the Hebrew letters samekh and tsadi, while z is used for zayin.

2. In addition to what was quoted above under 1.3, Lopez de Velasco proceeds to describe the difference between q and z as follows: "... arrimada la parte anterior de la lengua a los dientes, no tan pegada como para la q, sino de manera que quede paso para algun aliento o espiritu, que adelgaçado o con fuerça salga con alguna manera de zumbido, que es lo que diffiere de la q."

3. From various statements and observations, Cuervo draws this conclusion: "De estas explicaciones, aunque contradictorias algunas en la expresión, resulta que la q se pronuncia con toda su fuerza y que en su duración equivale a media z; que ésta va acompañada de un zumbido o ruido que hace cosquillas, saliendo el aire con más suavidad y dulzura que en la otra, mas blanda y amorosamente, como si fuese una q blanda y comedida. Difícilmente pudieran caracterizarse mejor una plosiva y una
fricativa en tiempos en que no había fonética; me parece
claro también que la fricativa debía ser sonora, circun-
stancia que cuadra mejor con su predominio en medio de
dos vocales y al fin de palabra."

III. Statements concerning the disappearance of the
distinction between ç and z.

1. In the first quarter of the seventeenth century,
the distinction is observed by some, but not by all.
Miguel Sebastian says, "La consonante zeta componen vnos
de las t y s, los mas de las d y g; pronunciase en el
mismo lugar que la ç algo mas blando, y como en las
palabras siguientes zaino, zenon, zimara, zorro, zagal.
Parientes muy cercanas son la ç y la z; tanto mayor
cuidado deve haver de no poner vna por otra. Como los
que escriuen Zaragoça por Çaragoça, Zarça por Çarça."

(Orthographia y Orthologia, Zaragoza, 1619).

2. By 1651, the phonetic distinction is entirely gone,
or little is left of it. For this reason Spanish writers
could no longer depend on their own pronunciation to
decide when they should write ç or z. Juan de Villar
clearly reflects the chaotic condition of the orthography
of his time with respect to those two letters: "Pues
como toda la dificultad nazca de la poca, o ninguna
diferencia que ay en la pronunciacion, quando se escrive
con la una, o con la otra, esso mesmo da licencia para
escrivir con lo que mas presto a la memoria venga: y a
lo sumo solamente señalará yo a el uso de la z el prin-
cipio de las diciones zelo y sus derivados zelar, zeloso,
y en el medio quando se escriben plurales de nombres que
el singular le tuvieron por final, como Cruz, cruzes,
luz, luzes, voz, vozes, y también quando se halla entre
dos vocales, como dezir, hazer, induzir, etc., esto es
inteligible, y como tal puede guardarse, lo demás es
adivinar." (Arte de la lengua española, reducida a reglas
y preceptos de rigurosa gramática, Valencia, 1651).

IV. Statements showing (a) that it is unjustifiable to
assume that at the time the Old Yucatec alphabet was
devised the speech of Andalusia differed from that of
Castile with regard to the pronunciation of ñ and z; and
(b) that in Andalusia the Castilian sounds of ñ, z, and s
converged into the Andalusian s.

1. As late as 1589 the older generation in Seville pre-
served the Castilian pronunciation. Cuervo comments as
follows on a quotation from Arias Montano's De varia
Republica, sive Commentaria in librum Judicium, Antwerp,
1592: "Benito Arias Montano, el célebre director de la
Políglota de Amberes, conocida con el nombre de Biblia
Regia, nos refiere en su comentario sobre el libro de
los Jueces que, siendo él niño, se pronunciaba todavía
en Andalucía, y sobre todo en Sevilla, exactamente lo
mismo que en Toledo y Castilla la Vieja, y que a la vuelta de unos veinte años se trocó de tal manera la pronunciación que apenas se distinguía un sevillano de un valenciano, tan completamente confundía la z y la ç con la s. Sabido es que los valencianos, sin duda por efecto de su parentesco con los catalanes y provenzales, jamás han acertado a distinguir exactamente dichas letras. Ahora bien, habiendo nacido Arias Montano por los años de 1527, puede suponerse que todavía en 1540 subsistía la antigua pronunciación, la cual conservaban los viejos cuando él escribía, que era como en 1589.

2. In 1609, the famous author of Guzman de Alfarache, the Andalusian Mateo Alemán, comments at length on the confusion concerning the use of the letters ç, z, s, and shows not only by what he says, but by the words he writes incorrectly in his criticism, that in his pronunciation there was no distinction between the sounds of ç and z, nor between either of them and s: "... pues poniendo una letra por otra, no solo se trueca el sonido, mas aun se altera el sentido diciendo a la braza [sic] braça, ó al contrario; la braza es la que llamamos ascua, que se haze de la lumbre; y la braça es una medida de dos varas, que se mide con los braços abiertos. Caça, es de aves ó animales de la tierra; i casa, la en que vivimos. Consejo, el que se da ó se recibe; i consejo
I see, la junta de regidores de algun pueblo." (Ortografía castellena, Mexico, 1609).

We take no account of any Spanish dialectal pronunciation other than that of Andalusia, because there is no reason to suspect that any other is relevant to this discussion. At least one writer on Yucatec has supposed that the Spaniards used the letter x for a j-sound in several American Indian languages because, according to him, the Spaniards who settled in America or came as missionaries or soldiers were mainly from northern Spain. I find no evidence in support of this assertion. Moreover, it has no bearing on the particular question that concerns us, because in the Spanish dialects of the north the s and the θ-sound are distinguished exactly as in Castile. In fact, such is the case even in Galician, except near the Portuguese border.

Before considering in the light of the preceding quotations what may have been the Yucatec sound represented by the character c, something should be said about the Castilian g. For this question readily suggests itself: Why did the Spaniards not use the letter  g in writing several American Indian languages which now have s-sounds? It would be a most rare coincidence if even in geographically separate and historically unrelated languages an s-sound had developed independently in each language since the Spaniards
wrote about them. The s-sound one hears now in at least 15 aboriginal languages of Mexico and Central America, as well as in the Spanish spoken there, is the common sort of s, such as occurs in the English word 'six', and in other European languages. For convenience of reference, let us call it 'Common s'. One need not be a phonetician to hear the difference between the Common s and the present Castilian s. A technical description of the modern Castilian s, comparing it with the Common s of other European languages, is given by Tomas Navarro Tomas in his Manual de pronunciación española, second edition, Madrid, 1921, pp.83-87. About its distribution in Spain Ramon Menendez Pidal says: "La s castellana es cóncava, ápico-alveolar; el ápice de la lengua, vuelto hacia arriba, forma una estrechez contra los alvéolos. Esta variedad de s se extiende por todo el norte de España (incluso por Galicia, norte de Portugal, Provincias Vascongadas y Cataluña). Al sur de la Península (incluyendo la mayor parte de Portugal) la s es convexa, dorso-alveolar; puesto el ápice de la lengua en los incisivos-inferiores, el predorso de la lengua forma una estrechez contra los alvéolos y dientes superiores. Esta s, propia de Andalucía, y por lo tanto de América, es una s semejante a la francesa, italiana o alemana, más dental que la castellana, la cual bien pudiera llamarse prepalatal, como hacen algunos fonetistas." (Manual de gramática histórica española, 4th
What we need to know, of course, is whether in the sixteenth century there was at least as much difference between the Castilian s and the Common s as there is now. Both Navarro Tomas and Menendez Pidal say that those to whom the Castilian s is not familiar hear it at present as some sort of j. Castilians who have lived in Spanish America may have observed that when their pronunciation is ridiculed, the natives exaggerate by substituting j for s. The same sort of substitution seems to have occurred in the Moorish pronunciation of Spanish previous to the discovery of America. The Spaniards represented the Moorish pronunciation of the Castilian s by the letter x, which, as is well known, stood then for a Castilian j-sound. Menendez Pidal speaks of this in the work quoted above, and gives this specimen: "xean llevadox todox estox" (se han llevado todos estos). The Spaniards brought cattle to America in the early colonial period, and several Indian languages adopted the Spanish word vacas, cows, to refer indiscriminately to cattle, cows, or a cow. With the stress on the last syllable, as is the rule for the native words in most of the Maya languages, this word is now pronounced wakaj (uacax, in present Yucatec orthography). The word castellano, Castilian, may also have been learned by the Indians not long after their first contacts with the Spaniards. This has become
in several of the aboriginal languages ka'lan, and the name Tomas, Thomas, has been reduced to maf. This reduction to one syllable is not a serious objection in identifying the word; for the same thing has occurred in a number of Christian names, as Pedro, Peter, which became pe'lu, and finally, lu', at least in Quekchi. I know of no unequivocal description of the Castilian s in the literature of the period that concerns us, but the above remark (1.3) by Lopez de Velasco, "como en lo alto del paladar se forma la s", does not seem to refer to the articulation of a Common s. If it is accurate, it indicates rather that the Castilian s differed more from the Common s than it does now.

From the foregoing one may infer that the Castilian s was such that some peoples who had both Common s and f-sounds in their languages classed it rather as a variant of the latter than of the former. But from this we cannot conclude that the difference between the two kinds of s-sounds was such that the Spaniards heard the Common s otherwise than as an s of some sort. At present it is rather unlikely that a Castilian would not class the Common s as a variant of his s. The reason, however, is likely to be that there is at present no other sound in his speech that strikes him as being akin to it. In the sixteenth century, and perhaps later, at least one phase of the articulation of Spanish ç may have had an acoustic effect which to the Castilian ear
was closer to the Common s than to the Castilian s. Cuervo infers in the above passage (II.3) that the articulation of ç was plosive. It is possible that he does not use this term strictly in the sense in which phoneticians understand it at present. All the evidence he presents indicates rather that the articulation of ç was either affricate or fricative. Referring to the statements quoted above, we find that it is compared with a s-sound in I.2. In I.3 we are told that the contact of the tongue with the teeth is not tight, so that the air be allowed to pass as in the articulation of s. In I.4 it is compared with the combination of the two English fricatives θ and s. In III.1 we are told that those who confused ç and z pronounced both as ts or as dz. These and other writers, although of different nationalities, agree in that at least the second phase of the articulation of ç was fricative, and that it was dental. And as a dental fricative one could class the most audible effect of the Common s, particularly the variety which is most prevalent now in the Maya languages. In twelve of those languages, the s is articulated with the upper and lower incisors in contact, or almost in contact, and the tip of the tongue next to the lower incisors near their edges.

These observations seem to account for those instances in which the Spaniards did not use the letter s in writing
American Indian languages which had s-sounds. But, needless to say, this does not enable us to conclude with any degree of confidence that if a Spaniard of the sixteenth or seventeenth century used ç to write for the first time a given language, that language had an s-sound. Perhaps we should mention the fact that a single ç written between two vowels stood in Spanish for a voiced sound similar to that of the English or French s in 'rose'. To represent the Castilian s between two vowels they wrote ss, as in assi, possession, necesidad, etc. We have not taken this into account in the preceding discussion of the letter s because it could hardly have been an obstacle for using this letter for the Common s-sound. If the voiced sound of ç between two vowels offered any difficulty, the Spaniards could have used ss between two vowels, as they habitually did when their s-sound occurred in this position in Spanish words.

In view of the foregoing remarks on the history of the Spanish sounds and orthography, let us try to understand what some of the early writers said about the Yucatec sound in question. In his discussion of the hieroglyphs, Landa includes "S" among the sounds (letras) which did not occur in Yucatec. His statement would be nonsensical if in that context the word letras does not refer to sounds, as it did frequently at that time, and does even now when it is not used by a phonetician. On the basis of the above observa-
tions on the Castilian s and the Common s, Landa's statement may be interpreted as asserting that Yucatec had no s of the Castilian sort. But, of course, it does not follow that if it had no Castilian s, it had a Common s. The earliest statement on the phonetic value of ç as a character of the Old Yucatec alphabet, so far as the extant literature is concerned, is that made by San Buenaventura in his grammar (1684). He says, "La letra ç se pronuncia de la misma manera que la letra z, v.g. cambez o cambez, enseña tu."

In interpreting this statement, two main possibilities may be considered. By that time, sundry writers were perhaps using ç and z to write Yucatec. San Buenaventura may explain to the reader that no phonetic difference was implied by the use of those two letters. If that is the case, his statement tells us nothing concerning the articulation of the Yucatec sound. The second main possibility is that his aim was to indicate what sort of sound the letter ç stood for in Yucatec writing. San Buenaventura was a Frenchman, but since he wrote in Spanish, and was supposed to write chiefly for the benefit of the Franciscan friars in Yucatan, it seems reasonable to proceed on the assumption that he tells the reader to pronounce ç in Yucatec as z was pronounced then in Spanish. How was z pronounced at that time? The evidence presented above (III.2) indicates that by 1651 either there was no difference between the sounds of ç and
or the difference was so slight to the Spanish ear that the author of a grammar is in doubt as to whether there was any difference at all ("la poca o ninguna diferencia que ay en la pronunciacion"). That holds for the speech of Castile. It would have been senseless for San Buenaventura to tell the Andalusians to pronounce $\mathfrak{c}$ as they pronounced $\mathfrak{z}$; because by the year 1609 they evidently pronounced $\mathfrak{c}$, $\mathfrak{z}$, and $\mathfrak{s}$ without making any distinction between any two of them. This is shown above in IV.1, and particularly in IV.2. The Castilian pronunciation of $\mathfrak{z}$ is, therefore, the one to be taken into account, even if San Buenaventura's aim was to tell the Andalusians and their descendants in America how the Yucatec $\mathfrak{c}$ was pronounced. The fact that he was a Frenchman would have led him to regard a Common $s$ as a regular sort of $s$. Indeed, if Yucatec had a Common $s$ at that time, as it has now, a Frenchman might have been more inclined to regard $\mathfrak{c}$ as the proper character to indicate the articulation of a Common $s$; for such was the phonetic value that $\mathfrak{c}$ had in his native language. But he evidently says that the Yucatec sound is to be pronounced "in the same manner" as $\mathfrak{z}$ was pronounced then in Castilian; if that is not the case, he does not tell us anything about its pronunciation. There is no doubt that in Castile the old sounds of $\mathfrak{c}$ and $\mathfrak{z}$ converged into the present $\mathfrak{s}$-sound. Suppose that by the time San Buenaventura wrote the convergence had not quite produced the present
$\theta$-sound. Was the sound in this transitional phase more like that of the old $\theta$ or that of the old $\zeta$? We would say that there is only a rather remote possibility that it was more like that of the old $\zeta$. This may be inferred from III.1 and from the circumstance that the change was toward an interdental voiceless fricative, and all the evidence available indicates that by San Buenaventura's time the articulation of $\theta$ was both voiceless and interdental. It was already so about 1623, as evidenced by the fact that an Englishman used his $\text{th}$ to indicate how at least one phase of it was articulated (I.4). From all the foregoing we conclude that it is doubtful that the Yucatec sound San Buenaventura speaks of was an $s$-sound.

This doubt increases rather than decreases when we consider what Beltran says about the Yucatec sound for which the letter $\theta$ stood in the first half of the eighteenth century. In his grammar (1746), he takes special care to explain that Yucatec $\theta$ was to be pronounced, not with an $s$-sound, but as $\theta$ was pronounced in Castilian: "Asi mismo careciendo de $s$, usa por ella la $\theta$ con cedilla; pero no con sonido de $s$, sino como el castellano la pronuncia en estos vocablos: $\theta$iceron, $\theta$apato, $\theta$inco, $\theta$orra." We are aware of the fact that the word *castellano* is used now in Spanish America to refer, not exclusively to the speech of Castile, but to Spanish in general. We do not know whether it was
so used in Beltran's time, but if it was, what we said above in San Buenaventura's case applies with even more certainty in Beltran's time. Beltran's explanation is futile if it is addressed to readers who do not know how Castilian was pronounced. And if his word castellano does not refer to the speech of Castile, what he tells us is not that there was no Castilian s in Yucatec, but rather that there was no s at all. Being a native of Yucatan, Beltran's ordinary pronunciation may not have been Castilian, but it does not follow that he knew nothing about Castilian pronunciation. He was educated by Spanish friars, and from them he got the knowledge of Latin he so frequently displays. His command of Spanish at the time he wrote may not have been as good as in previous years, but, as he himself says (p.46), it was simply a question of forgetting words during the time he had but little occasion to speak Spanish. As already shown, the Spanish Academy had by this time excluded the character c from the standard orthography. Even before their decision, the z was used much more frequently than the c when writers deviated from the previous uses of these letters. Beltran's examples, gapato, corra, and particularly ciceron and cinco, exhibit an orthography which was no longer sanctioned, and for other reasons was becoming, or had become, antiquated. Of course, since he spoke of c and not of z, it is natural that he should take advantage of
such orthography. But, whatever may be the case with regard to the orthography, those words were doubtless pronounced with a θ-sound at his time. Carlos de Tapia Zenteno wrote about the same time as Beltran. In fact, the date of three of the official approvals (privilegios) in Beltran’s Yucatec grammar is 1743, and that in Tapia Zenteno’s Huastec grammar is 1746. Huastec has now, and it doubtless had then, a θ-sound, for which Tapia Zenteno used the letter z. He explains that this z is to be pronounced exactly (con todo rigor) as in Spanish. His description of the articulation of the Huastec sound is quite unambiguous: “La z se pronuncia con todo rigor, con la lengua algo fuera de los dientes, pegada a ellos. Hallase en principio, medio, y fin de Vocablos, y en todos se pronuncia sin diferencia, como Zipac, Zamzul, Tuz, Iziz. Y en este (como en los demas) de darle a cada termino su propio sonido, pende el hablar perfectamente.”

Let us now consider the hypothesis that the letter ɹ stood for a θ-sound in Old Yucatec, and let us see how this hypothesis agrees with the foregoing statements and observations. None of the assertions and implications that the sound in question was not ɹ needs any special interpretation if we assume that it was a θ-sound. At the time the Old Yucatec alphabet was devised, there seems to have been no sound in Castilian as similar to θ as that of ɹ. The latter
hardly differed more from θ than it differed from the Common s, according to what may be inferred from the above quotations. San Buenaventura's statement does not offer any difficulty if the sound he speaks of is θ. The tendency to write z instead of c, rather than the converse, was already in evidence. At the end of the Motul dictionary, instructions are given to enable the reader to find the words he hears. For z the reader is directed to the portion of the dictionary where the words beginning with c are entered. That seems to provide for instances in which a reader might assume that a θ-sound had been represented by z. In view of this, San Buenaventura's statement that c was pronounced as z was would be helpful to those who more frequently used z to represent the Castilian θ-sound. Then, Beltran's object in emphasizing the assertion that c was not to be pronounced as s becomes clearer. The Andalusian and Spanish American pronunciation was doubtless known to him, and may have been his own. Those who so pronounced might ascribe an s-phonetic value to the c in Yucatec written words. Beltran warns them that it was pronounced as Castilian θ. From these agreements with the hypothesis, it seems justifiable to conclude that it is more probable that c stood for a Yucatec θ-sound than that it stood for an s-sound.

If Yucatec had formerly a θ-sound, by the first half of the nineteenth century this sound had already changed to s.
Pio Perez' proposal that the letter \( z \) be used instead of \( s \) definitely shows that the Yucatec sound was \( s \) in his time. About one century had elapsed since Beltran wrote. One century is not too short a time for \( z \) to change to \( s \). According to the above account (IV.1) a more complex change occurred in Seville in less time. If \( s \) stood for a \( z \)-sound in Old Yucatec, the phonologic system of this language seems to have been analogous to that of Huastec on all points, excepting the Yucatec \( p' \), the two sounds of \( h \), and the double vowels. Huastec has an \( h \)-sound like Modern Yucatec, but no \( p' \) or double vowels. It is pertinent to note at least that these two languages may have agreed on the following points of their phonologic systems:

<table>
<thead>
<tr>
<th>Old Yucatec (OY alphabet)</th>
<th>( s )</th>
<th>( tz )</th>
<th>( s' )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Huastec (IPA notations)</td>
<td>( z )</td>
<td>( t )</td>
<td>( z' )</td>
</tr>
</tbody>
</table>

For the sake of brevity, we shall not consider in detail the evidence for regarding it probable that the phonetic value of the character \( tz \) was \( s \) in Old Yucatec. That it was not interdental is indicated by the fact that the Spaniards used \( t \) to represent the plosive phase of this affricate. The fact that they did not represent its fricative phase by \( s \) may be accounted for by what was observed above with regard to the old Castilian \( s \). The combination of \( t \) and Castilian \( s \) might have had an acoustic effect similar to \( z' \), if the \( s \) was so much like \( z' \). San Buenaventura's
description of the articulation of the sound represented by tz supports this probability, and Beltran gives an unusually unambiguous and detailed description of how the tz was pronounced. In his time it doubtless stood for a ts-sound. It is of interest to note that although Tapia Zenteno used the letter z for the Huastec 0-sound, he used tz for a ts-sound. His description definitely shows that tz did not stand for an affricate composed of t and s: "La tz se pronuncia cerrando los dientes, y difundiendo por todos ellos la lengua, formando un sibilo sin violencia." The teeth are in contact also at present in the articulation of the Huastec ts-sound.

Proceeding now with the rest of the characters of Group 2, let us consider what is known about h. In the Motul dictionary, as well as in San Buenaventura's grammar, we are told that there were two kinds of sounds which those writers referred to as "sounds of h". One of them is called "h simple" and the other "h rezia". We will say untechnically 'weak h' and 'strong h', for a technical rendering would necessitate more information about these sounds than is now available. According to the Motul dictionary, the weak h was hardly audible, and was even omitted in some words when certain pronouns preceded them. No other information is given there about the sound of the strong h than that which is vaguely suggested by contrasting it with the weak h. The distinction between these two kinds of so-called h-sounds is not indicated
in the letters to Philip II mentioned above. The words hibici, hahal, hatch, and hunal, which according to the Motul dictionary had strong h, are written in the letters with the same character as all the others which are listed in the Motul dictionary as having weak h. Nor are these sounds distinguished in the dictionary by different characters. Which words had initial weak h and which had initial strong h is shown by entering them separately. But, so far as I know, there is no information in that work, nor in any other, as to whether the distinction between these two sounds applies only to h in initial position. We do not know whether the h in other than initial position was always strong, or always weak, or strong in some words and weak in others. This is not a negligible item, if we consider the large number of Yucatec words which have h in other than initial position. In Modern Yucatec, the final h is more prevalently omitted in some morphemes than in others. The initial weak h is consistently absent only in the root al, to say or tell, and in the words mentioned above in Pio Perez' statement. That much is in agreement with the distinction between weak and strong h, but, obviously, nothing can be inferred from it as to what may have been the case with regard to the words in which both the weak and the strong h are preserved.

It has been suggested that the strong h may have been
the voiceless velar, or uvular, fricative of other members of the Maya family which has been represented by the letter ʃ with one or another of its phonetic values in modern Spanish. But no valid reason has so far been given to lead us to suppose that it was, nor have we so far disclosed any clue in the etymologic correspondence between those velars or uvulars on the one hand, and the weak or the strong ʃ on the other.

The uses of the letters h and ʃ in the Spanish orthography of at least the first two-thirds of the sixteenth century account for the fact that the Spaniards used h, and not ʃ, to represent the Yucatec ʃ-sound or ʃ-sounds. The h was then silent in the syllable hue, and in words in which it was written simply because the ones from which they were derived, or which were borrowed and Hispanized by various writers, had h in Latin. On the other hand, it was not silent, and stood for a special Spanish sound wherever this special sound had developed from a Latin f. This arbitrary imitation of the Latin orthography developed mainly after the fifteenth century. Nebrija writes ombre, onestas, istoria, and even Omero; not hombre, honestas, historia, Homero, as is done now. But he wrote hazer, to do or make, and hijo, son, for example, because they were pronounced with the initial consonant which developed from the Latin f. It may be readily seen that from the fact that ʃ was not
used for the Yucatec sound in question nothing can be inferred as to whether this sound was like the present Yucatec h, or like the present pronunciation of the Spanish j. Nor do we know precisely what sort of sound the old Spanish h stood for when it was not silent. Nebrija says, "La h entre nosotros tiene tres oficios: uno propio, que trae consigo en las diciones latinas, mas non le damos su fuerça, como en estas: humano, humilde, donde la escrivimos sin causa, pues que de ninguna cosa sirve; otro, quando se sigue y después della, para demostrar que aquella y no es consonante, sino vocal, como en estas diciones: huesped, huerto, huevo; lo cual ia no es menester, si las dos fuerças que tiene la y distinguimos por estas dos figuras: u, v. El tercero oficio es cuando le damos fuerça de letra haziendola sonar, como en las primeras letras destas diciones: hago, hijo; e entonces ia no sirve por si, salvo por otra letra, e llamarla emos he, como los judios e moros, de los cuales recebimos esta pronunciacion." (Gramática, 1492).

San Buenaventura reports in 1684 that the Yucatec strong h was then pronounced almost as Spanish j. By that time, j was pronounced more or less as at present, according to the evidence presented by Cuervo. From this remark of San Buenaventura nothing can confidently be inferred as to the articulation of the Yucatec h in his time. Even at present some assert that the Modern Yucatec h sounds like Spanish j,
although the former hardly differs from English h. It re-
sembles a Spanish sound only if we specify that we refer
to the Spanish spoken in this or that part of Spanish
America. Furthermore, we do not know how the Spanish j
was pronounced in its transition from something like the
present sound of English j to something like that of modern
French j, and from this to the present sound. It may not
have reached the last stage of its development when San
Buenaventura wrote.

It is not clear whether Beltran draws a distinction be-
tween the Yucatec h-sound and the Castilian pronunciation
of j, or whether what he says is simply that the letter j
is not used in Yucatec writing. We refer to this statement:
"Esto supuesto se advierta, que la h se pronuncia con
aspiración, porque la usa el idioma en lugar de la j, que
no tiene." The situation with respect to the Spanish h in
Beltran's time is described in the Diccionario de Autoridades
as follows: "... pues los Castellanos jamás usan de la H, y
aunque precisamente la pidan diferentes palabras, en su boca
no se oye el mas leve indicio de aspiración: lo que no sucede
en Andalucía, y en casi toda la Extremadura, donde se habla
con tan fuerte aspiración, que es dificultoso discernir si
pronuncian la H o la J" (p.IXVII). Thus, it is possible that
in the Spanish known to Beltran there may have been a dif-
ference between the sound for which j stood then and an
"h-sound" such as occurred in some parts of Spain, and similar perhaps to that which still occurs in those parts and outside of the Peninsula.

It should be noted incidentally that in some editions of Old Yucatec manuscripts, ꞏ has been used where the original has a special form of the letter ꞏ after another ꞏ. In so doing, the editors conform to precedent, but in this case it is misleading. For the reader may be in doubt as to whether this ꞏ stands for a Yucatec sound other than ꞏ, or whether it is the old way of writing ꞏ at the end of a word, and even in Roman numerals. In the manuscript of the Motul dictionary, the way the second ꞏ of the double vowel ꞏ is written differs appreciably in form from the regular ꞏ used there in Spanish words. This explains our exclusion of ꞏ from the list of the characters of the Old Yucatec alphabet.

The phonetic values of the other two characters of Group 2 can justifiably be assumed to be as heretofore supposed. The Ꞑ was used only in initial position, and stood for a vowel sound when the next letter was a consonant, but it stood for a semivowel when the next letter was a vowel. This conformed to the Spanish orthography of that time so far as the ū-sound and the w-sound are concerned. At that time, Ꞑ and ū were merely two ways of writing the same character. So much so that as late as the eighteenth century there seems to have been no standard name for the Ꞑ.
as may be inferred from this statement in the **Diccionario de Autoridades**: "El medio para separar en lo escrito ambos oficios es usar de la regla ya comunmente recibida de substituir, quando son consonantes, en lugar de la I la Y, y en lugar de la U abierta o cuadrada la V cerrada, que llaman de corazónillo." Even now, it can hardly be said that there is a standard name for the Y in Spanish.

The character x was doubtless used to represent a Yucatec J-sound. Such was also the phonetic value of x in Castilian. There is no need of pointing out how the letter x is used at present to write Asturian, or Galician, or Catalan, as various writers have done, in order to account for the use of x in the various alphabets devised by the Spaniards to write the aboriginal languages of America. Castilian had a J-sound which after the sixteenth century converged, together with the old sound of J, into the present sound of Spanish J.

The characters of Group 3 obviously stood for sounds which differed from those of the Spanish language in a way that all writers found difficult to explain. It is quite certain that those sounds were ejective (using Daniel Jones' terminology) or glottalized (as is usually said, though ambiguously). In this instance, the etymologic correspondences observed between Modern Yucatec ejective sounds and the ejective sounds of other Maya languages enables us to infer with a high degree of confidence what was the case in Old Yucatec.
In the development of the present Maya languages from their common ancestor or ancestors, I have observed only one exception to the rule that ejective articulation has remained ejective; and this exception can justifiably be explained as a case of assimilation. I refer to the word for 'blood', which has two ejectives in some languages, and only one in others. In the languages and dialects in which I have heard it, this word is as follows:

Modern Yucatec ........ k'ik'
Lacandon ............ k'ik'-el
Mopan (British Honduras) .... k'ik'
Tzeltal (Eachajon variant) .... tʃ'iʃ'
Quiche ............... kik'
Cakchiquel ............. kik'
Tzutuhil ................ kik'
Quekchi ............... kik'
Pokomam (Mixco variant) .... kik'-el
  " (Chinautla, Palin). kjeik'
Mam ......... yik'
Solomec ......... yik'
Aguacatec ........... siʃ'
Huastec (Veracruzano) .... fiʃ'
  " (Fotosino) .... fiʃ'

The etymologic correspondences show definitely that the sounds represented by the characters of Group 3 were ejective,
and indicate besides that it is far more probable than improbable that some were plosive and others fricative, as they are now supposed to have been. That they were voiceless is implied by saying that they were ejective.

With respect to the vowels which compose the last group of characters tabulated above, we shall raise no question. But something should be said concerning the combinations aa, ee, ii, oo, uu. In Part 1 we describe the sounds for which the double vowels stand in this description of Modern Yucatec. The words which in the Motul dictionary are written with double vowel followed by one or more consonants have double vowel in Modern Yucatec. But in nearly all cases in which no consonant follows the double vowel, as the words are written in that dictionary, Modern Yucatec has a single vowel followed by a glottal stop. For example, haa, water, is now pronounced ha?; and cii, firewood, is now si?. So far as I know, the first instance in which a writer has alluded to the glottal stop in Yucatec is found in Pio Perez’ dictionary. Under the first entry in the dictionary he discusses the pronunciation of the vowel a in these terms: "Esta vocal se pronuncia de dos maneras, una suave que puede ser larga ó breve, y otra fuerte en la que como que se contiene el aliento ó sonido repentinamente al mismo tiempo de emitirlo: como en na, casa y na, madre; el primero tiene el sonido suave y el segundo fuerte."
Those words are now pronounced thus: na, house, na?, mother.
Thus, what Pio Perez considers to be a difference of vocalic
quality is clearly a difference consisting of ending or not
ending the vowel with a glottal stop. He calls what is now
a? "the Maya a", and whenever he says that a word is to be
pronounced with Maya a, or Maya ı, or o, etc., we find at
present a glottal stop; and in the Motul dictionary we find
the word written with double vowel. It is quite certain
that Old Yucatec had a glottal stop in those words. That
can be inferred with the highest degree of probability per-
missible in historical linguistics. Hundreds of words which
have a final glottal stop in Modern Yucatec have a final
glottal stop also in other languages, however else they may
differ. We give below three sets of examples from the
languages whose sounds we have investigated. We use IPA
notations except for Old Yucatec.

<table>
<thead>
<tr>
<th></th>
<th>water</th>
<th>metate</th>
<th>firewood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old Yucatec</td>
<td>haa</td>
<td>cee</td>
<td>gii</td>
</tr>
<tr>
<td>Mod. Yucatec</td>
<td>ha?</td>
<td>ka?</td>
<td>si?</td>
</tr>
<tr>
<td>Lacandon</td>
<td>ha?</td>
<td>ka?</td>
<td>si?</td>
</tr>
<tr>
<td>Mopan</td>
<td>ha?</td>
<td>ka?</td>
<td>si?</td>
</tr>
<tr>
<td>Quiché</td>
<td>xa?</td>
<td>ka?</td>
<td>si?</td>
</tr>
<tr>
<td>Cakchiquel</td>
<td>ja?</td>
<td>ka?</td>
<td>si?</td>
</tr>
<tr>
<td>Tzutuhil</td>
<td>ja?</td>
<td>ka?</td>
<td>si?</td>
</tr>
<tr>
<td>Language</td>
<td>Symbol 1</td>
<td>Symbol 2</td>
<td>Symbol 3</td>
</tr>
<tr>
<td>----------------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>Aguacatec</td>
<td>a?</td>
<td>ka?</td>
<td>si?</td>
</tr>
<tr>
<td>Soloméc</td>
<td>a? ex</td>
<td>ka?</td>
<td>si?</td>
</tr>
<tr>
<td>Pokomam</td>
<td>ha?</td>
<td>ka?</td>
<td>si?</td>
</tr>
<tr>
<td>Mam</td>
<td>a?</td>
<td>ka, ka?</td>
<td>si, si?</td>
</tr>
<tr>
<td>Huastec (Potosino)</td>
<td>ha?</td>
<td>sa?</td>
<td>θi?</td>
</tr>
</tbody>
</table>

The Mam words ka? (metate, grinding stone for maize) and si? occur in at least two localities: Tacana and San Pedro Necta (Guatemala). ka and si occur in Ostuncalco, Palestina, and San Pedro Sacatepequez. Taking account of only two possibilities (glottal stop, and no glottal stop) so that the estimate may be extremely conservative, and taking account of the number of languages and the number of words in which correspondences like the above are observed, we estimate that the chances that there was a glottal stop in Old Yucatec are more than 3,000 to 1. But that degree of probability does not hold for the supposition that those words did not have two vowels besides the glottal stop. That is to say, the combination aa, for example, could possibly have stood for a?, or for a?a, or for a??. Nor have we studied the matter sufficiently to decide whether in other than final position the aa, ee, ii, etc. of the Old Yucatec orthography stood for a?a, e?e, i?i, etc. In emphatic speech they are so pronounced at present.

4. It seems that the only evidence that a so-called
"Peten" or "Itza" dialect is spoken in El Peten is the material collected there in 1866-67 by Dr. Hermann Berendt. We observe that all but five of the words of this questionable dialect are found in Yucatec dictionaries or occur in our field notes on the Mopan spoken in San Antonio, British Honduras. Needless to say, we cannot assert that those five words do not occur in Mopan, particularly since we have studied only the Mopan spoken in San Antonio. Especially curious is the fact that in some instances Berendt seems to give the Yucatec and the Mopan words as alternative terms of the dialect he claimed to have discovered. For example, 'white' is said to be sac or sok. The former is Yucatec, and the latter could very well be the way in which the Mopan word sok sounds to one acquainted with German sounds and unacquainted with phonetics.

The work which has been most influential in adding the name "Peten" or "Itza" to the list of Maya dialects is Otto Stoll's *Zur Ethnographie der Republik Guatemala*, Zürich, 1884. Nearly 200 of the words of Berendt's vocabulary are included there in the parallel lists of words of a number of Maya languages. Those lists should not be trusted in deciding to what extent this "Peten" or "Itza" differs from Yucatec, for there are several instances like the following. Under the word for 'nothing', Stoll has mabal for Yucatec and mixbaal for "Peten". But mixbaal happens to be one of the
common words for 'nothing' in Modern Yucatec. These observations are in accord with the objections made by J. Eric Thompson in his monograph *Ethnology of the Mayas of Southern and Central British Honduras*, 1930, p.38. Thompson says: "He [Berendt] groups a number of villages as speaking the dialect, which he calls Peten. This group includes the villages of San Jose, Dolores, San Luis, Yaxche, San Toribio, Santa Barbara Poctun, and Santa Ana. Now San Jose certainly speaks a different dialect to that spoken in San Luis, Dolores, and San Toribio. Furthermore the vocabulary and few sentences, that Dr. Berendt gives, show that he has obtained a mixture of the two dialects. All the phrases with one exception are San Jose Maya, and not the Maya of San Antonio. On the other hand a few of the words are definitely San Antonio Maya. The manuscript was apparently written in Sacluc, and possibly the vocabulary and phrases were obtained there too. Sacluc, which lies northwest of Flores, is right outside Mopan territory. Possibly Dr. Berendt obtained some of his information in some villages of the Mopan-Pasion divide, and the greater part in the village of Sacluc. Hence the confusion."

Of course, we do not know whether since 1866 whatever differences there may have been between the speech of those localities and that of Yucatan have been obliterated, leaving no decisive evidence of the dialect in question. However, so far as Berendt’s material shows, it could hardly have been
more than a local variant of Yucatec. At any rate, the information available does not seem to justify the inclusion of the name "Peten" or "Itza" in the list of Maya languages or dialects. The number of dialects in the present list could easily be doubled if one chose to include as a newly discovered dialect the vernacular of every locality or group of villages differing appreciably from that of others.

5. The following remarks concerning description may render more understandable the discussion of the devices dealt with in this note.

A summary of what authoritative dictionaries say about describing is to the effect that we describe something by stating what are its "characteristics", and a "characteristic" is said to be a "distinctive feature". Needless to say, none of the definitions of the words 'distinctive' and 'feature' gives any clue as to how much information about that which is described should be included in its description. The term 'feature' seems to be applicable to almost any constituent, property, or phase, of whatever one chooses to describe. If "distinctive features" are those features which suffice to distinguish that which is described from everything else of its kind, then either the lexicographer's definition of the term 'description' does not conform to common usage, or most descriptions are superfluously informa-
tive. On the other hand, if the "distinctive features" include all the respects in which a given object differs from any other object of its kind, who can claim to have ever described anything on earth?

Guided by what is usually done, rather than by what is said about it, we come to the following conclusions. It seems to be generally true that a description is not expected to tell us how that which is described came to be what it is, nor why it is where it happens to be, nor why it is there at the time it happens to be there. Aside from that, a description of $x$, regardless of what we let '$x$' stand for, is expected to inform us about $x$ to an extent that may be adequate to our needs or aims in describing $x$. It is true that when $x$ is something of academic interest, academic conventions and traditional habits may determine the kind and amount of information expected, but insofar as such conventions and habits are not aimless the preceding statement takes account of them. Usage is extremely erratic with respect to what can or cannot be properly said to be describable, but it is clear at least that it does not confine the application of the expression 'to describe' to that which is visible. Indeed, even emotions are not infrequently spoken of as being describable. To speak of describing language, as some of us do at present, seems rationally justifiable.

We shall try now to indicate what sort of description we
will say, for lack of a better term, to be statistical. For convenience, let us call an item that which we choose to describe in a given instance. The task of describing two items can be accomplished by describing each separately. Or, if the two items have something in common, a single description can serve for both, if we are not concerned with their differences. But even if we are concerned with their differences, the statements which hold for both items can be supplemented by statements dealing with their differences to whatever extent may be feasible and desirable. Suppose now that we have to describe a million items. Needless to say, it might be neither feasible nor desirable to give one million separate descriptions, nor is it likely to be feasible or desirable to supplement an account of what a million items have in common by adding detailed information on the differences between each and the rest. The larger the number of items, the more is one compelled to resort to a common-sense procedure which is essentially like, or roughly like, the method of sampling in statistical investigation. That is our excuse for calling the result a statistical description. The procedure is quite familiar: a number of items termed samplings are studied. It is found that certain statements can be made which hold for them, and it is assumed that with some degree of probability those statements will hold also for all other items concerned in the investigation, or for a certain per-
percentage of them. Of course, the more detailed the information, the less likely it is that the description can consist entirely of statements which hold for all the items to which the description is expected to apply. Hence, when detailed information is needed, the description may have to contain statements which are not expected to apply to all the items concerned. In such a case it is desirable to be able to specify to what sort of items such statements are more likely to apply, and to what sort they are less likely to apply.

The foregoing is assumed to account for the use of the operational devices we proceed to explain. Let us call a speech-community the population whose language or dialect or vernacular a given investigator proposes to describe. A section of a speech-community will be said to be any portion of it that may be adequately delimitable with respect to locality, or age, or occupation, or speech, or in any other way. The number of sections into which it is desirable that a given speech-community be divided by the investigator depends both on the variability of speech and on how detailed an account the investigator plans to give in his description. The speech of a section of a speech-community will be called a speech-type.

The description of a language or dialect as spoken by a given speech-community could consist of separate descriptions of the speech-types into which it is divided by a given in-
vestigator. However, due to the numerous repetitions that would be made, such a plan is not economical. A more convenient plan is to describe one of the speech-types, and to specify the deviations of the other speech-types from it. The speech-type with reference to which the deviations are specified will be called Type A. The other speech-types can be labeled Type B, Type C, etc. For obvious reasons, it is generally preferable to choose for Type A the speech of whatever section of the speech-community includes more population than any other, but technical considerations may make it more desirable in some cases to do otherwise. Any choice is compatible with this method of procedure, provided the investigator specifies to a desirable extent what portion of the population is included in each of the sections into which he divides the speech-community. If such specifications are adequate, the facts would not be misrepresented even if the speech labeled 'Type A' were avowedly that of one, and only one, individual.

It may be evident that the distinction between the two Yucatec speech-types labeled 'Type A' and 'Type B' rests on the distribution of variants. Variants which are common in Type A and not common in Type B are referred to as 'A-variants'. Similarly, those common in Type B and not in Type A are called 'B-variants'. Variants which are not classed either as A-variants or as B-variants are called 'X-variants'. A
variant whose occurrence in one of the speech-types is said to be common satisfies these conditions: (1) the total number of its occurrences in our samplings is at least 100; (2) it has occurred in the samplings from at least three mutually distant localities; (3) it has occurred only in the samplings of the speech-type in which it is said to be common, or the number of its occurrences in those samplings is at least 90% of the total number of its occurrences. We class as an $\mathcal{X}$-variant any variant which does not satisfy those three conditions. Some of the $\mathcal{X}$-variants which have occurred less than 100 times are found only in the samplings of Type A. This and other observations concerning $\mathcal{X}$-variants are mentioned in the text at the various places where the deviations from Type A are dealt with.

6. Some of the city residents of Yucatan seem to believe that there are localities in the peninsula where "pure Maya" is still spoken. A few of them hold that this "pure Maya" is a language like that known to them through the literature of previous centuries, while others claim simply that it is Yucatec with no Spanish admixture. These reports generally disagree as to the places where this "pure" language is still spoken, and, so far as I recall, the ones who propagate these reports have never been in the places they recommend. Accompanied by a native of Sotuta who gave credence to these
rumors, we visited some of the localities which had been most frequently mentioned. In each of the localities visited, inquiries were made as to the speech of the surrounding region, and occasionally we were able to test the speech of transients from places not covered by this survey.

So far as Spanish admixture is concerned, the reports proved not to be entirely groundless, particularly with regard to the speech of the villages of Chemax and Chaczinkin, State of Yucatan, and Lunkini in the State of Campeche. Use of antiquated speech to an extent worthy of note was observed chiefly in Chemax, but only among the oldest members of this community. The speech of the main body of the population hardly differs from that of other parts of the peninsula in this respect.

Some data on speech-differences were obtained through the kindness of Professor Fernando Ximiello, superintendent of the federal schools in Yucatan, whose office needed some information of this sort. The writer was given the privilege of preparing a questionnaire based on previous observations, and this was sent officially to the teachers of the rural schools with detailed instructions for selecting informants and securing the desired information. The answers were obtained from at least two of the members of each community to which the questionnaire was sent. Each of the individuals selected as prescribed in the instructions was to be inter-
viewed separately, and his answers were listed separately under the name of the informant. The aim of the questions was to disclose the various respects in which the speech of the localities known to the informant differed from the speech of his native place. The answers showed that either the teachers or those who helped them could use fairly consistently a certain orthography prevalent at present in Yucatan, and known to most literate individuals at least from its use in writing family names, and place names, most of which are Yucatec throughout the rural districts. As a rule, the teachers were natives of Yucatan and spoke Yucatec. Particularly reliable were the instances in which the information given in one locality was supported by that given in another. For example, from a given locality it is reported that xectaba is the way to say 'sit down' in another, and from the latter it is reported that culen is the way to say 'sit down' in the former. In other cases the reports of two localities agree in that a certain expression is used in a third; 53% of the answers were comparable in this manner, and 79% of the pairs thus comparable were not contradictory.
7. In contemporary writings on language, the terms 'tense' and 'aspect' are used to refer to at least two kinds of items. Formerly, the word 'tense' seems to have been used most commonly as the name of a set of discoursive devices, rather than as the name of the items signified by the discoursive devices. It was taken for granted, either explicitly or implicitly, that the non-discoursive items signified by those discoursive devices were time items such as present, past, or future time. Such was the situation until some linguists pointed out that the discoursive devices which had been called 'tenses' did not stand exclusively for time items of the present-past-future sort. It was said that they stood also for other kinds of items. We will call them 'X-items' to facilitate further remarks. If the word 'tense' were still understood to be the name of certain discoursive devices, it would be quite proper to say that the tenses stand for X-items as well as for items of the present-past-future sort. That way of putting it is unintelligible at present. The reason is that the time items of the present-past-future sort are now called 'tenses'. That is to say, the name of the symbols has come to be the name of what the symbols stand for. The X-items
have been called Aktionsarten by German writers, and 'aspects' by English writers. In some statements it is difficult to decide whether the writers refer by the word 'aspect' to the X-items, or to the discursive devices, or to both. But it is rather clear that when a linguist says, for example, 'In this language, tense and aspect are expressed by means of suffixes', the words 'tense' and 'aspect' do not stand for discursive devices. In such cases, the writer evidently refers to the items for which the suffixes stand, if he refers to anything at all.

Let us now see what sorts of items, other than discursive devices, have been called 'aspects' by various linguists. According to Sapir (Language, p. 114) those items are "the lapse of action, its nature from the standpoint of continuity." This, of course, is just an incidental remark of the loose sort frequently made in footnotes. It is not intended, I think, to cover the whole range of Sapir's application of the term 'aspect'. As evidence of this, we notice that among the various "aspects" he mentions in that footnote there is one he calls "resultative", and which he exemplifies by the expression "to wear a coat". We presume that it is called "resultative" in consideration of the circumstance that in order to wear a coat one must first put it on. This example is preceded by "to put on a coat", apparently to contrast the "resultative" with the "momentaneous" aspect. Without stopping to consider the matter carefully, one may see that "lapse of action" has something or other to
do with the comparatively short time it takes to put on a coat; but a considerable degree of tolerance must be granted in order to admit that "lapse of action" or "continuity" have anything to do with the circumstance that having a coat on is a result of putting it on. According to Sapir and many other linguists, another "aspect" (the "iterative" or "repetitive") is demonstrated by doing something repeatedly; and still another (the "inceptive" or "inchoative") is exemplified by beginning to do something. This may be sufficient to illustrate how diverse are the items which have been called 'aspects'. What have they in common? If we do not know what they have in common, and in what respects they differ from the items which should not be called 'aspects', how can we determine whether or not the term is applicable to such items as rapidity, acceleration, reaction, cause, aim, and whatever else may pertain to action or have something to do with it? Should someone assert that all these items can be called 'aspects' if a given language has a special kind of devices to refer to them, then this question seems pertinent: What must those devices be like? That is to say, must they be prefixes, or suffixes, or reduplications, or special words? Must they precede, or follow, specifiable devices — specifiable in such a way that they can be identified in whatever language they may occur? We suspect that it is a futile to try to define "aspects" in terms of linguistic devices, as it is to attempt to define them in terms of what the X-items have in common. With
regard to defining the X-items, Bloomfield says: "... the definer, after stating the main principles, cannot do better than to resort to a demonstration by means of examples." (Language, 1933, p. 280). We agree that demonstration would have to be resorted to, but we wonder whether it is feasible to state any main principles which can account for classing as "aspects" all the items which have been so called.

8. This may be taken to be a mere convention in the use of our notations, or it can be defended on the ground that 't₁ - t₂' stands for the time during which the hands of a clock are on certain lines painted on the face of the clock. Even if the thickness of those lines were one millionth of an inch, some time would be "occupied" by the motion of the hands across them, or while they are "at" those lines. That is to say, we have proceeded on the assumption that if it is asserted that the occurrence of something, X, "occupies" no time, the assertion implies that X is nothing at all.

10. It is quite probably that the tan which is a component of construction tan+ IXAL is etymologically identical with the phonologically identical tan which signifies 'in the presence of', 'about the middle of', 'in the midst of'. One of the entries in the Motul dictionary is "tan a beelel: en medio de tu camino, or de tu caminar," which, as we
understand it, signifies approximately 'when you are about half way (to a certain place)'. In Old Yucatec we find *tan* used occasionally in a way which has some analogy to its present usage in construction *tan+IKAL*, particularly in Usage A; but other constructions were then employed in most of the references in which *tan+IKAL* is now commonly found. Pio Perez apparently attempted to define the Modern Yucatec usage when he says in his dictionary (1866-77) that the impersonal verb *tan* signifies "el acto o capacidad de hacer o ejecutar." This definition can hardly serve to distinguish the uses of this verb from those of many others, since it is applicable to most verbs; but his example "*tan u tal, está viniendo*" ('He is coming') conforms to present Yucatec usage even to the extent that in the construction *u tal* the verb *tal*, to come, is not *talel*, as it was in Old Yucatec and is still at present in some expressions in speech of Type A.

II. When confronted with the difficulty mentioned in the text, the expert in the sort of mythical grammar we have all been taught is expected to repeat what he has been trained to say; namely, that when I assert that I have done something I speak of something that stands completed or perfected at the time I speak of it. Let us consider an
instance of a rather common sort. A friend of mine who is looking for his child asks me "Have you seen Johnny?" And I reply "I saw him in the yard a while ago." According to the traditional grammatical myth, my friend asked me whether a certain "action" stood completed or perfected. If my answer had been "I have seen him" or simply "I have", I would have said something about the completion or perfection I am supposed to have been asked about. But as I chose to include in my answer some information about where and when I saw Johnny, it seems that I was compelled by the rules of the language to say nothing as to whether the "action" stood completed or perfected, although, according to the grammarian, that was precisely what my friend asked me. It need scarcely be said that this is a piece of folklore and of a rather dull sort. If when I say 'I have done it' I assert that a certain action stands completed or perfected at the time I say it, then that is also what I assert when I say 'I did it'. For it is obvious (1) that I did whatever I have done; (2) that whatever I have done was done by me, and hence I did it; and (3) that whatever I did is done. Obviously, it is not what I did, or how I did it, or where or when I did it, that determines whether I should say 'I did it' or 'I have done it'. Those who speak at present about "aspects of action" seem to claim that in 'I have done it' I talk about a certain "aspect" of the action. Presumably, the action I refer to when I say 'I did it' has the same "aspect" but I do not talk about it in that sentence.
do not know what evidence can be adduced in support of that claim, but we will assume for the sake of argument that the claim is valid, and proceed to ask this question: Is the speaker always at liberty to refer to any "aspect" of a given action, or must he refer to one "aspect" of it in some cases, and to another "aspect" in others, if he conforms to the linguistic habits of his speech-community? If there are no linguistic restrictions of that sort, the question of what determines the choice falls within the field of some discipline other than linguistics. But if it happens to be the case that there are such linguistic restrictions, then it is pertinent to ask further: Under what conditions do the English habits of speech require that the speaker talk about a certain "aspect" of a given action, and not about another "aspect" of it? If this question cannot be answered, what have we gained by calling "aspects" and "tenses" what were formerly called "tenses"? We notice that it does not conform to prevalent habits of speech to say, for example, 'I have seen him yesterday'. That is obviously a restriction of a linguistic sort. If I saw him yesterday, any "aspect" of the "action" of seeing him was an "aspect" of an "action" that occurred yesterday. But apparently I must not allude to the "perfective aspect" of that "action" in a sentence in which I say that the action occurred yesterday. On the other hand, it is proper to say 'I have seen him several times', referring to the fact that I saw him yesterday and on several other occasions.
9. The term "equipollent" is borrowed from logic. In *The Logical Syntax of Language*, Carnap explains its use as follows:

"We call sentences or classes of sentences having the same content *equipollent*. Two sentences are obviously equipollent when and only when each of them is a consequence of the other". The use of this term in the description of natural languages is similar but not identical. Carnap's use of the term is possible because in his artificially constructed language of science all terms are defined and therefore always occur with the same designation, with no context to modify it. In its present use the word refers to discourses asserting identical occurrences with the same declarative values and space-time specifications.

"I hit him" and "He was hit by me" are equipollent in this sense. It is not asserted that the communications made by these devices do not differ in some respect. To what extent the communications made by the use of equipollent sentences can be said to be alike would depend on the degree to which our description abstracts from what we have called "topical distinction" (4.8).
There are words and other devices in many languages, if not in all, which could be called contextual definitives. We would call a given symbol, $S$, a contextual definitive if and when $S$ satisfies these three conditions:

1. In different communications, $S$ can refer to different items (persons, or non-persons).

2. In each instance in which $S$ is used, it refers to a particular item, or to certain particular items, and no others.

3. What particular item or items $S$ refers to in each instance can be inferred only from the circumstantial or discoursive context, or partially from both sorts of contexts.

English expressions which satisfy those conditions in many instances are: the demonstratives 'this', 'that', 'those'; the "adverbs" 'here', 'there', 'now', 'then', 'today', 'yesterday', 'next year'; the personal pronouns 'I', 'you', 'he', etc. It is obvious, for example, that the word 'this' can refer in one instance to one thing and in another instance to something else; but in each instance it refers to a particular item, and no other. What particular item it refers to in each instance has to be inferred from what is said before it, or after it, or both, or from the circumstance that the speaker is pointing to something, or that he holds it in his hand, or some other circumstance or circumstances. When I said 'now'
last week I referred to a certain time; and I can say 'now at this moment to refer to another time. In each instance a certain period contemporary with the communication, and no other, can be referred to by the word 'now'; what period is referred to is readily inferred from the discoursive and circumstantial context, a constant contextual item being the very time occupied by the utterance.

13. Suspecting that Usage E of bin was determined by what the speaker chose to communicate, rather than by any constructional requirements, we experimented in this instance as follows. When the informant finished dictating the story, the text was read to him omitting the word bin in every instance in which it had been used as a sign of declarative value. The informant objected to this omission, but his corrections agreed only in part with what he had originally dictated; for he asked us to insert bin in a number of sentences in which it had not been used when the story was dictated. At one point he sternly objected that if bin was omitted, those who would read his account would think that he knew that all that he related had actually happened. His reply to our question as to whether he thought such things could have happened was hesitantly in the affirmative, but he repeated that he did not know whether they had happened in the particular instance referred to in the story.
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MIDDLE AMERICAN CULTURAL ANTHROPOLOGY
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