## CHICAGO JOURNALS

Analysis of a Mixteco Text<br>Author(s): Kenneth L. Pike<br>Source: International Journal of American Linguistics, Vol. 10, No. 4 (Oct., 1944), pp. 113-138 Published by: The University of Chicago Press<br>Stable URL: http://www.jstor.org/stable/1262781

Accessed: 22/06/2009 23:59

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at http://www.jstor.org/page/info/about/policies/terms.jsp. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at http://www.jstor.org/action/showPublisher?publisherCode=ucpress.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit organization founded in 1995 to build trusted digital archives for scholarship. We work with the scholarly community to preserve their work and the materials they rely upon, and to build a common research platform that promotes the discovery and use of these resources. For more information about JSTOR, please contact support@jstor.org.


The University of Chicago Press is collaborating with JSTOR to digitize, preserve and extend access to International Journal of American Linguistics.

# ANALYSIS OF A MIXTECO TEXT 

Kenneth L. Pike<br>Summer Institute of Linguistics

1. The argument
2. Introduction to text
3. Text
4. Chart of positions in noun phrases
5. Chart of positions in verb phrases
6. Analysis of text
7. The argument. Some changes of form and meaning are due to the position of morphemes in the phrase. In beginning analysis of a Mixteco text one finds, at first, the appearance of heavy prefixation and suffixation, and morphological processes of steminitial consonantal change, and inflection by interchange of tonemes; in addition, there appear to be many monosyllabic stems. Upon attempting an analysis from this point of view, the description becomes very unwieldy because one encounters long words with much incorporation of noun forms in verbs and verb forms in nouns.

After further study, monosyllabic "suffixial" morphemes begin to appear in dissyllabic form, in other positions in the phrase, and to occur as completely free entities. A study of layers of immediate constituents then indicates that even in monosyllabic form these items are not so intimately related to single morphemes to which they are adjacent (and with which they are phonologically linked as atonic forms) as to groups of forms which have every appearance of separate words.

Ultimately, then, one finds it more convenient to describe Mixteco without postulating a deep-rooted division between free forms and bound forms (syntax and morphology), but to handle items in accordance with the positions which they occupy in various relationships, without initial regard to whether or not they are tonic or atonic, as a less important subdivision within the
lists of items which can come in the basic positions, a dichotomy can be described between those forms which are phonetically independent and those which are not, and describe, where possible, the conditions under which full forms become atonic. The description of the tonemic and consonantal changes of stems do not occupy as grammatically important or descriptively as prominent a place as they would under severe insistence upon having a sharp morphologysyntax division, since they are handled rather as extremely advanced stages of sandhi changes, with their most important characteristics of positional occurrence and basic meanings plus positional meanings frequently remaining.

Once granting for description of a language of this type the value of emphasis upon positions first and form or form classes resulting from position as secondary, it might well be enquired whether a similar approach to languages of a far different type would not uncover some descriptive advantages which would help to supplement the traditional arrangement of grammars which takes for granted as its most prominent division (apart from sounds) a linguistic chasm between morphology and syntax.
2. Introduction to text. The analysis of the following text ${ }^{1}$ exhibits several Mixteco characteristics which carry special interest. One of these characteristics is the extreme amount of abbreviation, which, in rapid speech, makes a language which has

[^0]basic dissyllabic morphemes appear to be monosyllabic; another is the subdivision of morphemes into types which must be classified into various groups according to whether or not their tonemes may be changed, or whether they in turn may cause the perturbation of tonemes of morphemes which follow them. A third is the specialization of meaning and form caused by the position of morphemes in phrase constructions. A fourth is the near-lack of any unit which approximates a word, or any marked distinction between morphological and syntactic structure.

In order to demonstrate the specialization of construction and positional meanings, literal translations are given of the basic morphemes, rather than of phrases; often these must be compared with the free translation which follows each paragraph if one wishes to see the full resultant phrase meaning.

In order that the relationship of basic form to abbreviated or perturbed form may be readily apparent, the first line of text gives the material as it was dictated; the second line gives the morphemes as they are found in isolation, or in slow full forms, or in special contexts (the commentary usually indicates how to determine the basic form).

In order to separate those changed forms which influence the grammatical meaning from those forms which are changed mechanically, the forms changed for functional grammatical purposes are placed between bars [//]; thus, all verbs are given in the potential aspect in the second line of text (since these have the most highly differentiated tonemic forms and best serve as a basis of prediction for other forms) but occur between bars if the dictated form is in the durative aspect; it should be noticed that the forms between bars are in the minority. Where there is no change between the basic form and the form in the dictated text, [-] is given in the second line, so that the small proportion of unmodified forms can readily be seen. The
sign $\left[^{+}\right.$] preceding a basic form indicates that it is capable of perturbing the tonemes of a morpheme that follows it, if the following form in turn is capable of being perturbed; the sign $\left[^{ \pm}\right.$] preceding a form indicates that when unperturbed itself, and only then, a morpheme is capable of perturbing a following one. A question mark in the second line indicates that no dissyllabic form of that particular morpheme has as yet been discovered in this dialect.

In order to aid in the location of some of these items as they appear throughout the article, note the following brief index (numbers refer to the sections of the commentary rather than to morphemes so numbered in the text):

Problems in traditional syntax-morphology division: with prefix-like proclitics $8,10-11$; with suffix-like enclitics 10-11, 39; extended to English, note 8

Positions: as theoretically primary, establishing form classes and parts of speech 8 , note 7 ; in conjunction with immediate constituents in English analysis, notes 8 and 4 ; unit function of a complex constitutent in a position, note 7; ambiguous relationships $14-5$; items defective in position $14-5,26-34,88$; the relative order and meaning of positions within noun and verb phrases, see charts and references therein to commentary; function of positions not indicated in charts-dual affirmation 58-62, equational $88-93$, open modal prephrase $1,35,181$, close modal prephrase 47, 191, 244, close modal postphrase 35 , 121, 191, modal accompaniment 3 , transitional 7 , of nouns $6,26-34,39,88,252-3$, preverb emphatic 39, 252-3, locational phrase 14-5, 20-1, $66-70$, adjectival prephrase modifier 154, 160,169 , phrase modifier $126-38,84-7$, 178-80, 181-3, 275-80, 281-3, phrase as object $26-34,284-6$, negative with potential 48 , questions 212,121 , postquotative 103, 222, prequotative 103, 209-11, doubtful basic class 3, 212

Lexical meanings affected by position:
with loss of basic lexical meaning of verb modifier 5; directionals (from body parts to preposition-like words) $14-5$; of numerals and collective-like words 29 ; of nouns as abstracted qualifiers 161 ; of nouns as modal qualifiers 1 ; of adjectives as verbal qualifiers 191; of adjectives as prephrase modifiers 154

Forms: basically dissyllabic 2; monosyllabic and compounding tendencies, note 3,5 ; proclisis 8,39 , and immediate constituents 4; enclisis (pronominal and nonpronominal) 39; phonemic interpretation of long vowels 5 ; types of abbreviation $8,10-11,38,45,124,39$, see also interlinear text; zero phonemes of a morpheme 4; hesitation forms 8; homophonous forms 123, 249; consonantal change $1,4,18$
Tones: standard tonemic shift 4; perturbation of and by enclitics $39,42,53$, note 11 ; perturbation of proclitics 8,27 ; loss of perturbing power $10-11,13$; special perturbations-by high morphemes 14-5, of nouns for qualitative modification 161, of 9áčí 103, of bè?e 132 ; of ${ }^{7} \partial^{\mathrm{n}}$ gá 193 , of ${ }^{\mathrm{n}} \mathrm{dé}-244$, of ná- 121 , by ní 307-8
The phonemic symbols are used in general as in traditional phonetic alphabets: voiceless unaspirated stops: [p, t, č, k, $\mathrm{k}^{\mathrm{w}}$, ?]; prenasalized voiced stops: [mb, nd, ny, ng] (these tend to unvoice the occlusion in mor-pheme-medial position); voiced nasals: [ m , n , $\tilde{\mathrm{n}}$ ] (postsyllabic nasal is actualized as phonetic nasalization of the preceding syllabic, or, in morpheme structure CVV, CVPV, CVhV, of the two preceding syllabics -it occurs only morpheme final, and is the only consonant so to occur); voiced fricatives: $[\mathrm{b}, \mathrm{d}$, ž] ( $[\mathrm{b}]$ varies freely from a stop, especially initially in morphemes, to a flat fricative, in the same position, to a [w], especially morpheme medially; [ž] varies freely from a sibilant to $[y]$ ); voiceless fricatives: [ s , š, ṣ้, h$]$ ([这] is rare with this informant, whereas the retroflex phoneme $\left[\begin{array}{l}{[\boxed{S}] \text { is more frequent; some informants from }}\end{array}\right.$
the same village use only one phoneme which phonetically is usually of the nonretroflex variety; [h] varies from little to considerable friction on the velum); lateral: [1] (slightly fricative after [i]); the trill: [r] (fricative trill in all positions except enclitic initial, where it becomes a single flap); the vowels: [i, e, a, $o, u$, ə] (fairly close varieties of the first five, with [ə] somewhat back, high, unrounded, or centering); Spanish loans bring in some other sounds and problems. There are three level tonemes ${ }^{2}$; of these, high is written ['], low [], and mid is given no symbol here.

[^1]
## 3. TEXT

Text as dictated:
žóan-na te-híka
Basic isolated forms: žúkan ${ }^{1}{ }^{\text {? }}$ tee ${ }^{3} / \mathrm{kaka}{ }^{4}$
Literal translation of morphemes: that other and is thing (definite) walking

| ${ }^{\text {kuu }}{ }_{5}$ | ${ }^{\text {isò. }}$ | $\begin{aligned} & \text { te-nì-ke }{ }^{\mathrm{n}} \mathrm{da} \\ & \text { tee }^{7} \text { niì }^{8} \end{aligned}$ | - |
| :---: | :---: | :---: | :---: |
| about | rabbit | and complete | come |
| ti-Pinà |  | hínu-tà |  |
| ${ }^{\text {k }}$ 2ta ${ }^{10}$ | 11 | /kunu/12 | ${ }^{ \pm}{ }^{\text {k }}$ 2ta ${ }^{13}$ |
| animal | dog | is | animal |
|  |  | running |  |


| hín | ? isó. | te-nì-ndàbə-tà |
| :---: | :---: | :---: |
| 14 | ? ${ }^{\text {isò }}{ }^{15}$ | tee ${ }^{16}$ niil ${ }^{17}$ /kàbə/ ${ }^{18}$ |
| instrument | rabbit | and cp. enter |
|  |  | remaining |


|  | žaú | kaba. |
| :--- | :--- | :--- |
| + kətə $^{19}$ | žaù̀ |  |
| animal | hole | cliff |


te-nì-ku-núu
tee ${ }^{107}$ nii ${ }^{108}$ kuu $^{109}$ núu ${ }^{110}$
and cp. be moment
koò.
$+\ldots 13$
snake
Thereupon the rabbit came out and went to look for something to eat elsewhere. Then he saw that the snake had entered into the rabbit's cave, to wait for him, until he should come, "so that the snake might grab him and eat him," said the rabbit to himself. Then a little time went by since the snake had entered.

| te-nì-kačì <br> tee ${ }^{144}$ nii ${ }^{115}$ 116 $\qquad$ | $\stackrel{\text { Pisò, }}{117}^{\text {and }}$ | $\begin{aligned} & \text { "čó9ò, } \\ & +\quad 118 \end{aligned}$ |
| :---: | :---: | :---: |
| and cp. speak | rabbit | let's |
|  |  | go |




But the snake kept just as still as a rock ?áčí inside the cave; he was extremely ?ači ${ }^{117}$ happy that the rabbit spoke when he say arrived. "We'll eat him up right now," says the snake.

rabbit
žúan-na
žúkan ${ }^{201}$ ? ${ }^{202}$
that other
thing (definite)


## Ší-

$+{ }_{\text {SKílin }}$
or
há-má-ká?àn-žơ"

| +haà ${ }^{213}{ }^{+}$maà $^{214}$ | $\mathrm{ka}^{9}{ }^{2} \mathrm{an}^{215}$ | žóón |
| :--- | :--- | :--- |
| thing not | talk | we |
|  | (potential) | (inclusive) |

Thereupon the snake pondered at some length, ''Should I speak, or shouldn't I," says he.


| koò, | "tà-ní-Pini," | ?áćc |
| :---: | :---: | :---: |
| 232 | tàu(? ${ }^{233}$ nii ${ }^{234}+\ldots{ }^{235}$ | ${ }^{\text {Pači }}{ }^{236}$ |
| rabbit | good cp. become | say |
|  | late |  |

koò.
+___ ${ }^{237}$
snake
"Good afternoon," says the rabbit again. Then the snake replied, "Good afternoon," says he.


(familiar)

| hà-ká?àn <br> +haà ${ }^{248}$ ka?àn <br> 249 <br> thing talk | ?əən | kaba? |
| :--- | :--- | :--- |



| ?inìtò | te-nì-ku-kwipà |
| :---: | :---: |
| $298+$ kət2 ${ }^{299}$ | tee ${ }^{300}$ nii ${ }^{301} \mathrm{kuu}^{302}$ |
| insides animal | and cp. be sad |

"Now we know that the rabbit isn't dumb," says the snake, and came out and went away.
4. CHART OF POSITIONS IN NOUN PHRASES
(For explanation of any position, see the commentary which describes the particular morphemes which occur in that position. Numbers refer to mortext (160-2) is woven into the chart, since an adjective phrase can be included in a noun phrase. Any position modifies all other positions which are covered top and bottom by the extended space of that position.)

5. CHART OF POSITIONS IN VERB PHRASES
(For explanation of any position, see the commentary which describes the particular morphemes which occur in that position. Numbers refer to morphemes in the text, and include all verb phrases in this text with the number of each of their morphemes except the head. Any position modifies all other positions which are covered top and bottom by the extended space of that position.)


## 6. Analysis of text

1. žúkan is a noun meaning that thing, as in kuní-ná žúkan $I$ want that thing. It is of a subtype which can appear, as here, in specialized positions in the phrase. The phrase position in which it occurs here means temporal or modal modification of verb, so that the resultant meaning (combining basic morpheme meaning, which is sometimes considerably obscured, plus phrase-position meaning) is then, or following that. Another illustration of this position may be seen in morpheme 181. It is almost obligatory for this position (especially when the word is semantically more abstracted or adverb-like), to be accompanied by.te- (word 3), with a rhythmic break between them; if the accompanying word does not occur, a more marked pause tends to be inserted.
Phonologically, žúkan is one of a group of morphemes which may loose its middle consonant in rapid or slow speech; the consonant most frequently affected is [k]. Following this loss, the [u] has changed to [o], but the optional form with [u] is as frequent (see morphemes 201, 227, 287). The optional full form, including consonant, is occasionally found in this position, or when the word serves as an object of the verb. For another illustration of loss of medial consonant, see 260 .
2. All words spoken in isolation have a minimum of two moras, whether composed of two juxtaposed vowels, or vowel plus consonant plus vowel. Prediction of included (phrase) forms can best be made (when they can be made at all) from the two-mora forms, but two-mora forms can never be predicated from one-mora forms. Action in tonemic sandhi is likewise best predictable from the full form. For these reasons, the two-mora forms must be considered as basic ${ }^{3}$ if one wishes a simple

[^2]description of Mixteco phenomena. Any one-mora form, from this point of view, is phonologically incomplete; phonetically it leans for its pronunciation, always, upon a preceding or following form. This phonological dependence is shown in the text by hyphens. (It does not indicate compounding, nor affixation, as the total structure will show, since many forms which are phonologically dependent upon a neighboring morpheme are grammatically most directly linked to or modified by another [or others] in the layers of immediate constituents). -na therefore is an enclitic, phonologically dependent upon žúkan.
A relatively small number of morphemes, however, have never been related to full (two-mora, dissyllabic) forms. In these cases, special processes of conditioned change in proclisis or enclisis have so obscured the relationship that the forms can now only be related by suppletion, or, as in this instance, the two-mora form has either been lost, or the relationship with its full form so obscured that the full form has not yet been found. Note in the text, that no two-mora form is postulated for this particular item.

Its basic meaning is just one more, indicating definite limits, as seen in phrases like kuní-ná əən-nà I want just one more. As part of a minor construction (with zúkan) filling the modal position, it takes on an abstracted meaning of definiteness, or right then.
3. te- is seen in basic slow form, or hesitation form, tee. Accompanying the modal position, described under 1, the basic meaning of the morpheme can be almost completely ignored. Initial in a phrase, or as

[^3]a relator of phrases, however, it indicates a transition of thought or action, and can be translated and or then or but, or even ignored for English translation; many instances of this usage will occur later in the text (e.g. 7, 16, 22). It is one of the few items in the language which cannot yet be related either to a full noun, or verb, or adjective used normally in its various positions (cf. 212).
4. Mixteco verbs have with their basic stem form the basic meaning of a potential, incomplete, semantic aspect. Thus, kaka means will walk, or is going to walk, or is yet to walk, or, with appropriate accompanying words, would have walked, etc. If a preceding morpheme niì (contiguous or noncontiguous to the main verb concerned) is added, whose semantic aspect is to be finished, complete, then in conjunction with kaka, it gives the translation did walk or walked, or will have finished walking, etc. The morpheme niì carries with it the power to palatalize in one of a variety of ways an arbitrary list of words, all of which begin either with [ $k$ ] or with [ $\mathrm{k}^{\mathrm{w}}$ ], and of which kaka is one example: thus, nì-hika walked. If, instead of nii, the morpheme preceding the main verb is náá insist, the resultant form is ná-káka will walk! or let walk!, since náá does not cause palatalization, but, on the other hand, does cause a change of toneme of the following word. This particular set of tonemic changes is always caused by words which (like náá) are basically high high; another illustration of this type of perturbing word can be seen in number 14. The form of kaka as seen in the text (i.e. hika) acts as if it followed a morpheme which combined both perturbing and palatalizing powers, since on the one hand it has [ka] changed to [hi], and, on the other hand, the mid toneme changed to high. Further, this palatalizing and perturbing factor may transfer its effect to a morpheme earlier in the phrase, if various other morphemes precede kaka which would also come between kaka and
niì or náá. All these facts together make it appear as if a structurally present morpheme preceded and changed the basic verb, even though this interfering morpheme has neither consonants nor vowels; this morpheme with zero phonemes but palatalizing and perturbing power could be symbolized as $[+\ldots y]$, and would have a meaning of is in process; the translation of its combination with kaka would then be is walking, and so on.

The various types of palatalization which occur after $+\longrightarrow$ and niì can be briefly illustrated as follows: without palatalization of any kind, kunu to weave, kúnu is weaving; with spirantization of the velar stop, kača to dig, háča is digging; with change of velar stop to [ž], kahi to eat, žáhi is eating; with spirantization of initial consonant plus change of first vowel ([a], or [o], or [u]) to [i], kaka to walk, híka is walking, kùči to ripen, híči is ripening; with similar change of velar stop, and change of both vowels (rare), ko?o to drink, hí?i is drinking; with palatalization of the second consonant ([s] to [ s$]$ ) and both vowels (rare), kusù to sleep, kiši is sleeping; with change of both consonants and both vowels plus added [?] (rare), kuù to die, hípì is dying; with change of velar to glottal stop, and change of first vowel (rare), koo to exist, ?1ó is in existance; with spirantization of labialized velar, $\mathrm{k}^{\mathrm{w}} \mathrm{a}$ ?nu to grow, há?nu is growing; change of labialized velar to glottal stop, and replacement of medial nasal by final nasal (rare), $\mathrm{k}^{\text {wiñi }}$ to stand upright, ?'in to be standing upright.

The tonemic changes are by no means always substitution of a high for a mid toneme. When they are in the grammatical position just referred to, morphemes with basic toneme combinations high high, high mid, high low, and mid high, are never changed. On the other hand, morphemes with different basic types are perturbed as follows: mid mid to high mid (see illustrations in the preceding paragraph), with morphemes of type CVV having optional change
to high high, as in kee go away to kee or keé is going away; mid low to high low, in structure CVV, CV?V, or CV?CV, but to mid high with structure CVCV, ka?àn to speak, ká?àn is speaking, but kunì to see, hiní is seeing; low high to high high, šikó to sell, šikó is selling; low mid to high mid, kàan to become adapted, káan is adapted; low low does not occur as a basic morpheme type. This particular set of perturbations is conveniently given a label, say standard tonemic shift, since it is the most basic to the language, and demands constant reference.
It will be noted presently that apart from this one situation, that the same set of standard shifts occurs with extreme frequency, as a mechanical set of changes in sandhi, without reference to the principal form classes of the language (parts of speech: verb, noun, adjective), and without affecting the meaning of the words concerned. This fact contributes one more bit of supporting evidence to the conclusion that the change from potential to durative aspect is caused by a separate morpheme whose vowels and consonants are supressed in an extreme type of abbreviation, rather than being caused by changes of stem consonants or vowels or tonemes as a morphological process deeply imbedded in the structure of the language.

The verb is not closely related in its immediate constituents (layers of grammatical relationships ${ }^{4}$ ) to the preceding enclitic te-. Rather, the first structural break in the phrase te-híka kuu ?isò is between te- and the remainder, following which híka is closely related to kuu, so that ?isò comes off with the second structural layer; it should be emphasized upon evidence such as this, that proclisis of a form does not represent close grammatical association with that form, but only a loose and often optional phonological (or sandhi) one.

[^4]5. One of the most characteristic constructions of Mixteco is a main verb modified by a following verb, noun, or adjective, in such a way as to create a nuclear verb phrase which functions much like an unmodified verb. The meaning of the second position in the construction is modification of main construction-head verb by the characteristic action of the subordinate verb, or by the nature or abstracted characteristic of the subordinated noun, or by the quality of the subordinated adjective. The combination of verb plus subordinated word makes a type of construction which here, because of its tightness of relationship and unity as a head for further constructions, can conveniently be called a close-knit verb phrase. Close-knit noun phrases are composed in a similar way of head noun with subordinated verb or noun or adjective. Certain subtypes of noun modifiers undergo a tonemic change to indicate that it is the characteristic of the underlying object rather than the object itself which qualifies the verb or noun head. (Compare 161 and its commentary.)

Item 5 here is one of the verb-modifying types, with a further reservation: there is a tendency for the modifier to become specialized semantically (as well as tonemically) and to loose direct relationship with its originating regular form: as a later step, the modifier may appear only in that syntactic position, and loose completely its normal meaning, so that a native speaker cannot give a separate meaning for the modifier, but only for the head word and for the entire close-knit phrase as a unit. The phrase híka kuu approximates this situation, since most informants in the locality will shrug their shoulders if asked the meaning of kuu, but readily give a translation for híka (walking) or híka kuu (walking about); the simple deduction that kuu means here and there or about is not supported by use of that form with that meaning in other contexts. In this case, it would prove impossible to determine whether kuu is basically a noun,
verb, or adjective, except that the old man who told the story also uses a form not present in the speech of my younger informants: kúu kúu (tuku bá?ù) (the coyote again) walked here and there looking carefully about; this data, in conjunction with many parallels of verbs acting thus as modifiers of verbs makes probable the interpretation that kuu is basically a verb. In some cases, however, even this dubious evidence is unavailable. Thus, in the close-knit noun construction ko?ò kúù insense burner, native speakers readily identify ko?ò as bowl, but are utterly incapable of postulating a meaning for kúù.

One might well ask why close-knit noun or verb constructions should not be called compounds, in the cases in which one of the items has lost its isolated meaning and usage. The answer is twofold: on the one hand there are scores of instances of the simple juxtaposition of two free forms (each with its full basic meaning) which completely parallel this construction, and, on the other hand, absolutely no special phonological characteristics to distinguish those phrases which have special semantic features from those which do not. With ko?ò, for example, one may find ko?ò ndéžu bowl of (full of) food (with ndežu, an extremely frequent head of noun constructions elsewhere), in which the accentual and rhythmic features are the same as for insense burner. Many examples, especially of the noun constructions, will occur in the text: note for example the frequent use of žaù kaba cliff hole (words 20-21).

Vowels which are of the same quality and have the same tonemes in juxtaposition, as here in kuu, form phonetically long even vowels (not rearticulated ones). They have to be analyzed as two phonemes, not a single long vowel, on the basis of analogous two-vowel groups such as [oa, au, io] (which can be seen in žóan, žaù, and hio: morphemes $1,20,256$ ), and also because rules for tonemic interchange such as from kuu to kúu can only be conveniently described and predicted
if the separate moras are handled as independent vowels; in this respect, a morpheme of structure CVV acts (with some special subrules) like morphemes of structure CVCV, so that words of CVV type can be said to contain a medial zero consonant or, more convenient still, can be described as having two phonemic syllables. When, on juxtaposed vowels of equal quality, the tonemes of each mora are different, a phonetic syllable pulse division can often be heard, as in kúu.
6. The word for rabbit, ?isò, is one of the most interesting to watch throughout the text since it occurs so frequently. Phonologically, one may often see it perturbed to ?isó. Grammatically, it can be found as subject (6), head of locational construction (15), possessive modifier of noun head (83), object of verb (98). These are some of the normal uses of the average noun, rather than usage in positions restricted to a few nouns with accompanying change of meaning under the pressure of those positions.
7. This is a very normal use of te-. It can be translated by almost any type of English conjunction or adverb, if the specific context permits. Here it can be rendered then, and, next, etc. Compare its special usage described in 1, and lack of basic form as mentioned in 3 .
8. In hesitation forms, in narration, nioften becomes nii. Occasionally the narrator will begin a sentence with niì, stop to think of a following verb, pause, and begin over again with a rapid proclitic form ni-.

If the hesitation form occurs directly after te-, the two tend to combine as proclitic and enclitic, into te-nì; after saying this much, and hesitating, the narrator may begin over, but more often procedes without doing so.

The word is not found elsewhere than in the grammatical position illustrated by this phrase, in which it precedes the main verb, although various items can come in between the two, as will be seen later. Since it does not occur in other positions, nor in isola-
tion (except in hesitation), it tends to have no strong isolated meaning. Its meaning deducted from phrases is to complete or to be completed or finished (not past time, since it is found in such phrases as žakù-nà tè-nìkuu a bit more and it will have been completely finished [in the future without need of reverting to it again; if it were tè kuu, it would be temporarily finished in the future but without the same finality]).

In my early investigations I considered this morpheme a prefix (and the pronominal enclitics as suffixes, etc.). This hypothesis proved untenable for various reasons: In slow speech or hesitation the morpheme has the phonological requisites of a full word, since it then is found with two moras. More important, it is not bound tightly to the main verb it modifies, since morphemes of full phonological and semantic character which give every evidence of being free forms may come between it and the verb. Certainly in meaning, and apparently in a structural analysis of layers of immediate constituents, ni- modifies the verb head as a whole, not just the main verb, even when the verb head is loosely put together of three or even four words, so that if ni- is a prefix, it is a strange affair which enters into construction with only the first of a number of elements which it modifies. Finally, by parallels with similar problematical elements, the morphemes which might prove to be bound pronominal suffixes would, if treated as such in conjunction with prefixes like ni-, force into close bound words large strings of morphemes which are unwieldy, apparently free and unbound, and certainly not homogenous nor structurally like word units of languages with obvious affixation. (For positional limitation of the enclitic pronominal forms, see 39 ; this limitation further removes them from treatment as suffixes.) In this text, for example, any consistent procedure following out the implications of considering ni- as a prefix and -tò as a suffix would link into single words, groups of morphemes such as 300-305:
te-nì-ku-kwipà ${ }^{\text {Pinìtò }}$ and the snake was very sad, and ultimately, by parallel pressure, 188-192: te-nì-ka?àn tuku ?isò and the rabbit said again. As a matter of fact, in an earlier text, ${ }^{5}$ working on such a hypothesis, I attempted that type of analysis, with (inconsistent) results fantastic from the point of view of noun incorporation in the verb.

One is forced, then, to describe ni- as a separate word, but one which is phonologically in a proclitic form, dependent for its pronunciation on the following morpheme, and specially limited to this particular subordinate position in the verb phrase. Nevertheless, a quantity of such morphemes and specialized positions in the language gives to Mixteco the appearance of having no real boundary between morphology and syntax, between bound forms and free forms, between words and phrases-and this impression is greatly enhanced when, as seen in the discussion of item four, the phonemes of such an elusively defined morpheme can disappear altogether, and leave only the weird effects of palatalization and tonemic perturbations behind, while preserving order, and position, and meaning, with its ultimate analysis as an independent free form which cannot be found.

It becomes best to refrain from postulating, as a starting point in writing agrammar of Mixteco, any division into Morphology and Syntax, and to pass directly into a discussion of the particular positions in which morphemes occur, relationships between the positions, meanings which these positions carry, lists of morphemes which occur in specially limited positions, and the semantic changes which the basic forms undergo.

As an aid to the inductive study of some of the positions which can be seen in this text, a summary in chart form has been presented (pp. 11a-b) to delineate the basic noun, verb, and objective construction types which appear throughout the whole.

In the study of a language type such as

[^5]this, it becomes apparent that some of the traditional duplication of terminology between morphology and syntax is highly artificial and unwieldy, when similar grammatical function is given different labels ${ }^{6}$ merely because it appears on a different layer, or even a different type of layer, of analysis. In addition, it emphasizes the need of an initial approach to grammar which has as its underlying postulate the innate primacy of positions of items with the meaning of the position overlapping on lexical meaning of items. Next ${ }^{7}$ the relationships between
${ }^{6}$ Lg. 19.76 (1943). I have briefly discussed some samples.
${ }^{7}$ Results quite similar could be achieved by reversing the order of these first two steps, just so long as in each case both of them precede the one given here third (i.e. before the morphologysyntax division). It might be argued that the difference depends upon which comes first-the hen or the egg, inasmuch as positions might not occur but for relationships which contain them, nor could relationships occur without having the content of positions to be related. After testing both procedures, the one given here has proven most useful to date, for the following reason (material which I hope to present in a more amplified form elsewhere):

In a large phrase, each of the immediate constituents, i.e. each member of the relationship, has a unit function within that relationship, whether the member is simple or complex. For example Tom and Big Tom both function as subject in Tom likes apples and Big Tom likes apples. Now since Big Tom likewise has members of an internal relationship-big in modifying position and Tom in modified position-it is evident that a relationship as a whole can function as a unit in one position of a larger relationship as in Big Tom likes apples. Further, a simple item uttered by itself also has a unit function, which has to be defined, initially in an investigation (before enough of the language is known for definition in terms of the internal linguistic structure, at least), in terms of the physical environment. Thus, tree and run uttered by themselves each have a function by themselves, although the physical environment in which they are uttered (including gestures of pointing or running, and so on) indicates that each has a different kind of functional contact with that environment, which might be defined tentatively as labelled object versus labelled action, even although final description of the
positions (with their relationship-construc-tional-meanings), may be postulated as
function of these items can only be made after comparing various internal relationships in the particular linguistic system (here English), the particular relationships within that system, the positions within those relationships, and lists of items which can fill those positions.

Granted a unit function for each of two simple items uttered by themselves, and separate unit functions for each of those same simple items as separate members of a relationship, and then a composite unit function of that entire relationship (composed of the two small members) when it occurs as a single complex member in a larger relationship, one may deduce that the basic characteristic of a large complicated relationship is not its internal structure as such, but rather its total function as a unit in relation to the physical and linguistic environment in which it is uttered. Only after its function as a totality is stated, would it then be pertinent in a descriptive order to set forth the internal structure, including the relationships between the immediate constituents, of the complex phrase.

In practice, however, it of ten proves convenient for mnemonic reasons to give the total function of a complex item a label which draws on a lower layer of analysis (that of its first immediate constituents) for descriptive material for creating the label. In the end, this may prove a costly saving, since the labelling of a top layer and function in terms of a lower layer and function steals the source material for labelling, in due course, the lower layer; then, when the lower layer itself must be labelled, similar terminology must be more or less duplicated (which seems to carry the ear marks of an incorrect analysis), or source material must be drawn from a still lower layer (which produces the same difficulties for that layer); until, on arriving at the ultimate constituents (or words, if one is not describing bound forms), there is no adequate way to avoid duplication of terminology, or else the positional function of simple items is drastically obscured (so much so, that their positional function might even be denied, and it be affirmed that only relationships exist since everything would seem to have been described about the simple forms already).

The alternate possibility mentioned at the beginning of this note-the starting with internal relationships as primary, rather than position or total unit function in a position-tends to fall into the errors just described, but as an inherent weakness in the analytical system rather than as a more superficial (but decidedly difficult) problem of
descriptively important rather than an attempt to start with a basic division between bound forms and free forms ${ }^{8}$ or even with parts of speech (since the analysis of these latter basic form classes is made by finding restricted lists of words which can occur in specific designated positions having specific relationships to neighboring positions with which they enter directly into construction as immediate constituents of the constructions). Then, in the next stage of grammatical theory, it may at times be observed that the various positions may be either loosely related (in which case each position might contain items which also occur in absolute position, i.e. free forms) tightly joined or related (in which case at least one of the positions might contain items which never occur in absolute position, i.e. bound
labelling, since special devices such as zero relationships (or relationships between the phonemic forms indicated by the segmental phonemes and those of intonation, etc.) must be used to describe single morpheme utterances, or, ultimately, single morpheme constituents of complex utterances.
${ }^{8}$ It would appear that to a considerable extent it would eliminate the difficulties of analysis of such a form as the I don't want to's (of a sporled child) since, instead of trying to decide whether the I don't want to's is one word (because it has a suffix) or several (because of the presence of obvious free forms), it would have analyzed the second position, which in this instance contains a pluralizer, and the first position, which can contain any item whatsoever that can be pluralized; further, a list could be made of specific items found in position before the plural-the list to be subdivided into (a) grammatically simple forms, which here would be single-morpheme nouns, and into (b) complex items; the complex items of (b) to be further subclassified according to the relationships of their immediate constituents, which, in turn, are determined by the basic positions and relationships between positions which they contain. In other words, a positional analysis could first of all cut down through the syntac-tic-morphological boundary, and then, later, the free-form bound-form distinction (also extremely important to English, but independently operating, and not quite as innately essential as the positional characteristics) could be superimposed upon it with some inconsistent or overlapping residues where necessary.
forms). For example, English single-morpheme nouns comprise a list of items which can come in subject position in a predication or in preplural position in a relationship between a numerically tight-bound modifier and its preceding construction head, et al.

One further phonological fact needs to be mentioned about ni-. The general tendency of morphemes of structure CVV is to loose the second of the two moras. Assuming that this is also the case with nii, a mid toneme would be basic to the proclitic (as actually seen in 178). Following te-, however, or preceding a low toneme, the nitends to be perturbed to nì- (cf. 8, 17, 148); the rule has not yet been completely worked out on this point. Following a perturbing morpheme, the proclitic is changed to high (cf. 27, 175).
9. $\mathrm{ke}^{\mathrm{n}} \mathrm{da}$ is a normal verb form, head of the construction of the verbal part of the sentence.

10-11. kətə often is used in proclitic form with a noun following it, for names of animals. Frequently, as here, it is perfectly optional to use it or not: ?inà by itself is frequently used. This reflects a common construction of the language, in which a general noun takes first position, as head of the construction, and then a more specific noun modifier follows it. The semantic relationship varies considerably and could be translated $X$ of type $Y$, or $X$ of characteristics of Y , or X made of Y , etc.

With morphemes of the type CVCV, the first syllable tends to be lost, if abbreviation takes place. In this position, with this particular word, abbreviation is frequent, but not universal nor obligatory; with most words of CVCV type, abbreviation is rare.

Before front high vowels or palatal consonants, the [ə] usually changes to [i]. Compare saà or ta-saà bird, with ti-žò? ${ }^{?}$ flea. ${ }^{9}$

A further obscuring of word boundaries or morpheme boundaries can be seen in this latter type of word, since ti- plus a morpheme
${ }^{9}$ For this observation I am indebted to my colleague Mr. Donald Stark.
beginning with [ž] may optionally and frequently produce [č]-in this case, optionally čò?ó. kətə in full form is a regular perturbing morpheme, causing the standard perturbations described under 4. Note that in proclisis it loses this power, or else ?inà would be ?iná. For its usage as an enclitic, see 13.
12. See 4 for analysis of hinu from kunu.
13. kətə is a member of the subgroup causing the standard tonemic shift, butas an enclitic it retains its perturbing power only when it has its own low enclitic toneme: after a perturbing morpheme, -t̀̀ is changed to -t'́ and loses its power to perturb morphemes which follow it. In the instance here, the following morpheme is already high high, and hence unperturbable. For changes caused by -tà, see $33,75,81,144$, 278 ; for morphemes unperturbed by -t́ see 69,102 . The sign $\left[{ }^{+ \pm}\right]$before kata indicates that in basic form it is perturbing, but in enclisis perturbs only when unperturbed. The sign is abbreviated in later occurrences in this text.

Tonemic perturbing power of all kinds is ineffective across a pause. Thus slow speech has fewer perturbed tonemes than rapid speech, and morphemes at the beginning of large constructions are less likely to be perturbed than in the middle of them. For tonemes unperturbed after -tà, because of intervening pause or slight rhythm break, see 62-3, 139-40, 153-4, 180-1, 262-3.

14-15. This is one of the positions in the phrase which cause some of the most radical changes in meaning. The meaning of the position is something like the direction, location, or associate feature is so and so. A number of nouns may occur in this position. Most of them are used in other positions where all normal nouns occur, such as subject and object position, and comprise a group of items relating to parts of the body. The basic morpheme meaning of a body part has, in locational-directional phrase position, its locational relation to the body as a whole abstracted and applied as a locational
feature in general. These locators are modifiers of the noun or noun phrase which they precede.

In the directional-locational position:
čii stomach becomes under
žatà back becomes back of
sakò spine becomes on top of or even more abstractly, concerning, about
?inì insides, heart, stomach becomes inside of (see 43, 81, et al.)
nuù face becomes the most common of all in ordinary speech on the edge of, to, at, toward
?iči road becomes direction toward, and is one of the few which is not a body part.
$\mathrm{k}^{\mathrm{w}} \mathrm{e}^{\mathrm{n}} \mathrm{dá}$ account becomes belongs to, has similarities to, is used by; this is a Spanish loan-cuenta-and is used in other noun positions, as in taba $\mathrm{k}^{\text {w }} \mathrm{e}^{\mathrm{n}}$ dá ná-ndé-ó make out the account and we will check $i t$; compare this with $\mathbf{k}^{w} \mathrm{e}^{\mathrm{n}} \mathrm{d} \mathbf{a}$ ña?a kúu it (clothing) pertains to women.
Sometimes ambiguity occurs as to which of two words is the head of the construction. Thus, kani-ná čii-tà means $I$ hit the animal in the stomach, if čì is in object position in the phrase (after kani to hit) and head of a noun phrase before the possessive modifier animal's; the same words mean $I$ hit underneath the animal (e.g. something on the ground beneath a horse) if čì is a locational modifier of the following -t̀̀, with the two words constituting a locational phrase after the verb, rather than being its object. Similarly, žáhi-ná səkò-tó means $I$ am eating the meat of the spinal section of the animal, if sok̀̀ is in object position to the verb with possessive modifier -tó; it means either I am eating while on top of the animal, or, in the more abstracted and idiomatic usage, $I$ am making my living by using animals, if səkò is locational modifier of -ty, and the whole is in locational position in respect to the verb.

See also 20-1 for absence of locator with a
phrase which is nevertheless in locational position.

With this as a background, one can then describe hiin as a noun meaning instrument, as in nà-hín sá?a-žó what-instrument do-we, i.e. what instrument should we use, which is most frequently used in locational position, as in this text, translated with. Further, the noun is positionally defective, since it has not been found in object position or subject position.
hiín has basically high high tonemes. Words of this formation are of a perturbing type, but of a special subgroup which never perturbs the enclitics -de he, -i child, people, and -ña she, and which also has special rules for the enclitics which are basically low. These characteristics separate basically high high morphemes (but not those which become high high from a previous perturbation) from other perturbing types.

Notice in 15 that basic ?isò perturbs by the standard change for its type to ?isó.
18. Certain verbs may have a consonantal change involving some type of nasalization; the change of meaning involved implies resultant duration of action. Because of its analogy to previous analyses of stem changes (4; see also 10) it appears best to symbolize this by $\square^{-n}+$ k̀̀bə. The position from which the nasalizing influence is applied is directly before the head of the verb phrase, in contrast to the morpheme $+\quad$ which comes early in the phrase with various potential positions between it and the verb head, as has been indicated diagrammatically on 116 . The two modifying morphemes may be superimposed together upon the stem, thus: ${ }^{+}-\mathrm{y}+\square^{n}+$ kə̀bə produce ndábə, which occurs in 31 ; both meanings (i.e. of entering continuously or repeatedly and staying there hiding) can be noted.

Various types of change result from this nasalization; compare the following:
čaà-ná I will return (briefly, or without reference to duration of stay) but njaà-ná I will return (to stay for
considerable time after a long absence)
kasù to close (transitive), hasú closing (transitive), ndasú to be in state of closure ${ }^{10}$
ku?nì to tie, hú?nì tying, nu?nì a bundle nú?nì to be in state of being tied
kuu to be, kúu is, nduu to be turned into, to become
20-21. Notice that this two-word phrase is in locational position after the verb but that it lacks the specific locator ?inì. When the context is clear, the locator is often omitted.

Within the smaller locational phrase, notice that žaù (with standard perturbation to žaú) is the head of a construction whose modifier is another noun: kaba cliff.
24. Cf. 4.

26-34. Notice that this phrase is in object position in the larger phrase of which it is a part. Phrases of a type which occupy a single position in a larger phrase are very frequently nominalized by using as a head the morpheme haà, which is itself a noun, and which is modified by the entire following phrase, in this case by ní-ku-tənà beltá ndábə -tà žaú kaba. Any noun may be modified by a following noun (20-1: žaú kaba cliff hole) or verb (čà-žée a man who eats [a lot]) or phrase (66-67: hà kée-tá thing to eat animal, i.e. thing for the animal to eat).

Although any noun may thus be head for verb or verb-phrase modifiers, none is used with the extreme frequency of haà, which serves to throw phrases into nominal form ready in turn to occupy object position, subject position, or position for modifying nouns, verbs, or entire phrases, and so on. (It is interesting to note that often these must be translated in English by abstract nouns, or gerunds.)

[^6]In addition to its frequency, haà differs from other nouns by being partially defective positionally, and itself seldom or never serves as an ordinary subject or object; for thing in such positions, nda-tíñu is found. On the other hand, note haà being modified in the special case na-hà what thing, what reason, or uncertainty thing, i.e. why. In slow speech or normal speech with other informants the two-mora form sometimes appears.

In this particular context, haà is perturbed by preceding koò, and itself perturbs nito ní-.
29. Numerals or numeral-like words, collectives, and distributives, are nouns which may occupy a prehead numerative position modifying another noun, or may appear by themselves as subjects, objects, and so on. In this particular instance (29), tanà modifies beltá. Two other positions may in turn modify the numerative position, but are not illustrated in this text: a definite enclitic may follow and modify the numerative, or a distributive may precede and modify it. Thus: nde-tàká-ni kəbà each-all-definite day, i.e. every day (here, nde- [or optionälly ndə-] is a proclitic form of the noun ${ }^{\text {nd }}{ }^{2}$ ? $\partial$ everything or the verb ${ }^{\text {nd }}$ də? to be finished, tàká is a noun all things, -ni exactly that [cf. 162] has no full form yet discovered); nù-?ú?ùn-ni kabò in five days ('nuù face [cf. 14], ?u?ùn five, perturbed). These can be added together (substituting ta?àn sample for tàká): nde-ta?àn-ni nù-ndé-?ú?ùn-ni kəbà each group of every five days.
31. Explained in 18.
35. By analogy with other nouns in this open modal prephrase position (žóan 1; bina 181) nú- would appear to be a noun also, hypothesis, although it is defective positionally in that it does not occur as subject or object like the other two nouns just mentioned. There is a second usage, a close modal postphrase position, which probably gives the equivalent full form: sá?a-ná núú do-I hypothesis, i.e. I would have done it but didn't [because . . .]. In this position it frequently assumes an optional
enclitic form: sá?a-ná-nú. For close modal prephrase position see 47.
36. sáá modifying nú- gives together with it an impression of conclusion, that being the case...
38. Abbreviation of CV?V gives CV in proclisis before a main verb, but abbreviation of the main verb itself is much more rare, and, as here, the [ ${ }^{2}$ ] is sometimes retained. In slow speech the full form ki?ìn reappears, and occasionally it appears as an optional form in rapid speech.
39. The full form of the inclusive first person pronoun is žóó. This form appears under emphasis in any noun position, such as that for the object, or subject, or as an especially emphatic subject in emphatic position preceding instead of following the verb (if the full form precedes the verb, the enclitic form may or may not follow the verb at the same time).

The pronouns are regular nouns which form a special group primarily because they have enclitic forms in certain positions (not all of them as yet analyzed)-for example in subject position if they themselves are not modified by a possessor, or in possessive position if unmodified themselves; the full forms are normally used if modified by a following morpheme; in all positions under emphasis, the full forms tend to reappear. Some of the enclitics are best described as related to the full form by suppletion. On the other hand, the special characteristics of enclisis of noun forms are not limited to items which substitute for other forms. Thus, nduča water in similar positions (e.g. subject or object) becomes -čà; žúkan, as will be seen in 125, becomes -ún optionally, as a noun modifier, and so on. Thus a class of pronouns as such can by no means be set up as basic to the language. For convenience, however, the special substitutes which have enclisis can be listed as follows:
+žóó becomes +-žò we, ours (inclusive) 42, 46, 50, 133, 211
náá becomes -ná $I$, we, my, ours (exclusive, polite)
nii becomes -ní you, yours (singular or plural, polite)
čàa becomes by suppletion -de man, he, they, his, theirs (polite), 124, 51, 54, 128
${ }^{+} \tilde{n}^{2}$ ?a becomes $\pm$-ña woman, she, they, her, theirs (polite)
ruù becomes by suppletion -rì $I$, we, $m y$, ours, (exclusive, familiar) 253, 247, 258.
+róó becomes +-rò you, yours (singular or plural, familiar)
+sưčí becomes by suppletion -i child, he, she, it, people, theirs (familiar)
+?iPžà becomes 士-žà God, saint, idol, God's
+kətə becomes ${ }^{ \pm}$-t̀̀ animal, thing, animal's 13, 68, 147, 286
All enclitics tend to have different tonemes and tonemic rules than their full forms. ${ }^{11}$

Compare the following items in order to note the positions in which the enclitic forms appear:
žá?a ká-ňaà-i (the) child is seated here
žá?a ká-nj̆aà əən sùčí one child is seated here
žá?a kúu be?e-i this is (the) house (of the) child
žá?a kúu be?e sùčí lúlí this is (the) house (of the) little child
žá?a kúu be?e sùčí-ná this is my child's house
(This limitation of the positions in which the enclitic forms occur would make it difficult to treat them as suffixes. Compare 8 for further discussion of the prefixial problem.)

The nouns whose meanings are to be translated by first or second person, do not take modifiers following them, (and in this they differ from all the third person forms just given), but may be qualified either by the affirmation of an independent verb, or else may be preceded by an adjective to join in forming a special type of affirmation in the durative aspect (other aspects must be accompanied by verbs): ?íó ${ }^{\text {n }}$ dá?ú-žò we

[^7]are poor, in a bad plight or simply ${ }^{\text {ndáqún-žò. }}$ The short form of ruù (i.e. -rì) does not occur in object position.

In this particular form, 39, there is even further abbreviation than is customary. The loss of the second vowel of kipin and the loss of [ $\check{z}]$ has allowed the final nasalization to pass over to the [o] which is all that remains of žóó. In 42, the [ 0 ] is likewise all that remains, but there is no nasal in the preceding morpheme to affect it. Compare 50 for an intermediate situation. These extreme abbreviations are optional, and in speech which is a bit slower, the form -žo tends to reappear.

40-41. Some verbs have for potential aspect a phrasal form comprised of kuu be (potential) plus the morpheme form which can be found in the durative aspect minus the perturbations described in 4 , so that the basic form is located by choosing the morpheme as in the potential (nonperturbed and nonpalatalized) but omitting kuu. In 85 , ndátu occurs, as would be expected, but proves nothing since +hà- would perturb ${ }^{*_{\text {n }}}$ datu tò ${ }^{\text {ndátu anyhow. }}$
45. Compare this abbreviation type with those described in 39. The tonemic form is that of the durative (for which see 4).
47. Notice that here núu is in a different syntactic position from that seen in 35 . It is in a closer relationship to the following phrase, a close modal prephrase position, and does not have te- between the two.
48. maà as a negative is used only with the potential. túu occurs usually with the durative. When túu does occur with the potential, the semantic difference between it and maà is not yet clear.
51. For -de (here in object position) see 39.
53. -žò becomes mid only after perturbing morphemes which are mid mid and which belong to the perturbing subclass. Compare 42 where -žò is perturbed to high following a nonperturbing mid mid morpheme. In both forms it has caused the perturbation of the following morpheme.

58-62. Judging by its frequency of use, one of the most esthetically satisfying of all Mixteco sentence patterns would seem to be the one illustrated here. Two verb phrases in balance complement each other. (Compare the balance in English going-goinggone.) Oftentimes the second adds no new semantic element, but merely stylistic fullness. Note, here, that the second phrase ( $\mathrm{k}^{\text {wa}}$ a ${ }^{\text {àn-tò the animal goes) includes motion, }}$ as did the first (te-nì-kenda ?isò the animal came out), but not a very specific addition (not direction away, as it might seem in this one context; compare 79,80 where the words are the same but the direction diametrically opposite).

The same general structure gives the appearance of simple parataxis when the verbs differ considerably in meaning, as in kee kuní eats, wants, i.e. (he) wants to eat but the construction strikes more deeply into basic Mixteco structure than that, as can be seen by the fact that a dual affirmation is often modified as a whole, not just in its parts, in various ways: in $75-83$ the dual affirmation modifies the haà (75) which in turn is the near-empty morpheme serving as head of the expression in object position; in addition, the locational phrase of 81-3 modifies the entire dual affirmation preceding it (76-80). In $57-62$, te- must be analyzed as applying to the entire following dual affirmation.

The simplest form of a dual affirmation is composed of two verbs. Note kee ki?ìn go away go, i.e. he has gone; kee kuní eat want, i.e. he wants to eat.

63-65. This does not form a triple affirmation, since a pause separates it off from the dual affirmation which precedes it.

Morpheme 64 is head of the premodifying 63. Main verbs, like ndúkú here, may be preceded by an auxiliary-motion position; only a few verbs of motion may occupy this position, which follows the aspectual morphemes ${ }^{+}$náá, niì, ${ }^{+}$ni-, and $+\longrightarrow$, but precedes stative —n. In slow speech the full form is very frequent, and natives writ-
ing their language are likely to write the full forms of the auxiliary-action morphemes. Notice this same morpheme serving as head of a verb phrase in 61 and 79. The durative of the combination $63-5$ would be há-ndúkútó, or há?àn ${ }^{n}$ dúkú-tó since $k^{w}$ a ${ }^{\text {ª̀n, }}$, according to processes explained in 4 , would become há?àn because of the preceding $+\ldots$ and then optionally be abbreviated. $k^{w a} a \mathrm{a} n$ is unique in a number of ways: it may have a unique imperative form $k^{\text {wá?án }}$ or a completive aspect without nii.
66. Cf. 26.

66-70. Note the numerative position modifying lado, and the combination serving in locational position for the entire phrase even though no specific locator is given (cf. 29 and 14). Spanish loans of CVCV structure are borrowed usually with mid high tonemes, as here in lado. See also 89, ?orá.
72. See 4.
79. See 61.

81-3. Note the combination of locator modifying its head, which is first modified by a possessive noun.

84-87. The short phrase modifies the preceding phrase (75-83), in a position of phrase modifier. For the verb, see 41.

The object position is seen clearly here with ?isò. It contains a full-morpheme object form in comparison to the enclitic object of 51 or the phrase object of 66-68.
$88-104$. The style here is slightly awkward since the narrator begins the section by describing it in third person and ending it as a quotation. The beginning of the quotation as marked is therefore a bit arbitrary, but certainly fairly close to the actual point of transition in style.
88. The full form naà appears in slow speech. This noun morpheme is positionally defective, in that it is not found freely in subject and object positions nor before adjectives. The usage here is to be first modified by a second noun (?orá, a Spanish loan from hora, cf. 70), and then the short noun phrase serves as subject of the equa-
tional sentence. For object position see 121-2.

88-93. This is an equational type of phrase beginning with the subject, followed by the verb (instead of the reverse order normal to other phrase types), and in turn followed by an equated phrase, which here is of a nominal type already described in object position (26-34). The additional factor is further abbreviation of haà to -à, especially frequent (but still optional) after kuu.

95-96. təən is head of the verb phrase, with a type of pressure-auxiliary (meaning pressed close to accomplish the action) preceding it. The position of ka- is closer to the head than that of the motion auxiliaries (see 63 for a sample of the latter). A two-morpheme form of ka- has not been found, but it has been treated as a verbal item by analogy with others which are more certain.
103. Páčí-tà fills a postquotative position, used for indicating the source of a statement. The form has a rare type of unique perturbation for the durative, from the basic form 'ačì, and is cognate to but apparently not directly derived from kačì (durative kačí) to inform, to say. Often kačì in prequotative position precedes an utterance, with ?ačì following the phrase in postquotative position. For a similar situation with ka?àn . . ? ?ačì see $231,236$.
118. A unique item in that cannot be followed by a subject.

119-20. A motion auxiliary plus main verb (cf. 63-4).
121. See 88. Note that this is a noun head of a phrase in object position. -ún is the enclitic form of žúkan (cf. 1 for an optional full form). In a postphrase modifying position (similar to the position described for núú under 35 ), with a high perturbation to ná-, plus ún, the uncertainty is increased, so that a request for confirmation may be implied: ki?ìn-ní ná-ún you are are going uncertainty, i.e. are you going? (Cf. also 212 about questions.)
123. The context would imply that sá?a is durative, but since basic high mid morphemes do not have their morphemes perturbed by this aspect, the durative and potential forms for this morpheme are homophonous, and therefore no certain decision can be made as to the presence or absence of the durative proclitic.
124. Third person subject, čàa, modified by -ún, in basic form abbreviated to čà-, but still different from the same morpheme -de in enclisis without modifier, in 128. Cf. 39.

126-38. Phrase modifier of the entire phrase 121-5. For its internal structure, compare dual affirmation types described in 58-62.
132. The normal perturbation of be? ${ }^{9}$ would be to bépe; ?inì perturbs no other morpheme yet found. This makes the perturbation here doubly unique.

145-7. Note the position of the modifiers: the noun modifier of quality follows the noun head, and the noun possessive modifier in enclitic form follows that.
154. The translation of this phrase is given by informants as good afternoon; nì-?ini is used independently to imply it has become late. No other occurrences have been found, however, of a morpheme meaning good which can be related to tà-; tàu is postulated on the basis of usage by other informants of the same community.

There is considerable probability that tàis an adjective, however, because of the position it occupies and its implied relationship to the verb phrase. Compare with it the phrase bà?a ni-kúu good complete is, i.e. that is fine, or the similar phrase with a Spanish loan word, bwenú ni-kúu. In the following set of phrases, notice the specialization of the adjective meaning when it modifies the verb phrase or an adjective rather than modifying a noun: žučì şaàn sharp knife, kətə şáàn fierce animal, ṣ̂aàn ñáá very bad, şaàn kú-səà ?iní-de very happy he is. Only a few adjectives are found in the prephrase modifying position. Another one, in addition to tà-, occurs in the text, number

169; in this case also, the adjective is positionally defective, since, in spite of the general tendency to frequent noun modification and rare phrase modification, it has been borrowed from Spanish tanto for use only in the prephrase modifying position and not as a post modifier of nouns or verbs.
160. ná $?_{1}$ is an adjective in the same position just described for 154 and 169, except that the morpheme is first modified by a special type of derived adjective, and by a definite particle, before the entire adjective phrase modifies the verb phrase.
161. Derived adjectives may sometimes be formed from nouns or verbs by a special tonemic change, in which the noun or verb tonemes change to high high, regardless of the basic tonemes of the noun. (There is, however, a special subrule: following morphemes of mid low variety, the tonemic change may optionally and most frequently be to low high instead of to high high.) At the moment, there is no evidence other than the analogy with durative and perfective aspectual formation (4 and 18) to cause one to postulate a phonemeless morpheme causing this perturbation.
žúú would seem to be derived, by the process above mentioned, from žuù rock. Semantically, the derived adjectives indicate some outstanding characteristic which is inherent in the related basic noun. In this case, the translation could be given as silent as a rock, or, more literally, silent rock-like.

The derived adjective can modify an adjective, as just illustrated, or a noun (as in ndežu žúú thick food as distinct from ${ }^{\text {n }}$ dežu žúù food made out of rocks), or a verb (compare kani hit, tá?an comrade, tá?án togetherness, kani tá?án to trade blows).

The derived adjective can characterize the basic original noun. Compare the following fairly common phrase forms: ?íó žúú žúù is rock-like a rock, or a rock has the characteristics of rocks; ká-tá-kwángó tá$\mathrm{k}^{\text {wa }}{ }^{\mathrm{n}}$ go has (the form of) crookedness (a) crooked thing.
162. -ni is an item which cannot be re-
lated to a two-mora form. Its meaning is of specification, or definiteness, and can be translated just that [modifying nouns or adjectives], or right then [modifying verbs], or nothing else; all in all, it gives a connotation of emphasis by its definiteness. In position, it modifies the adjective, or verb, or noun that it follows. (For use with numerative nouns, see 29).
$163-4$. ká-ndee is member of a form class of close-knit verb phrases composed of a verb for existence plus an adjective of position. Compare ku-nyaà, to be in a sitting position. The verb head in both cases has kuu in the potential, but ká- in the durative. The classifications as to whether a close-knit verb phrase of this and related types will have in potential and durative, respectively, kuu and káa, or kuu and kúu, or kuu and zero, are highly arbitrary and irregular. In 170-171 the kuu/kúu form appears with səə̀.
169. Phrase-modifying adjectives and this illustration have been discussed in 154 and 160.

170-1. Cf. 163-4.
172. Many verb phrases indicating psychological states are formed by adding ?ini to a verb otherwise quite concrete. The most striking case in this text is to think composed of to repeat, plus to hit, plus insides (204-207). This psychological verb modifier occupies a position following the main verb, but may have several other morphemes intervening and more closely related to the verb. No other noun occupies this position (not even the other nouns which, with ?ini, may occupy the locationaldirectional position, for which see 14).

The particular verb phrase type found here is one of the most frequent with ?ini: a verb head of existence followed by an adjective modifier, giving a close-knit nucleus, and then the entire nucleus followed by the psychological modifier. For one other illustration, in which the postmodified nucleus then is premodified by an aspectual morpheme (nii), see 297-8. For
a longer form, compare nì-ku-səə̀ şáàn túku ?inì koò the snake was very happy again.

178-80. Note parataxis to indicate modification of one clause by another, to be translated in this context by when he arrived.

181-3. For this modal type of phrase modifier, and use of te- with it, see 1 . For the adjective modifier of the head morpheme in this position, see 161.
191. tuku is an adjective meaning different. Compare the usages in the following positions: čàa tuku kú-de man different is he, i.e. he is different from us in his habits; tuku čàa kú-de (with about the same meaning as the other construction but with the adjective in the more rare premodifying position); ni-nà-čakù tuku-de complete repeat live different he, i.e. he came to life, he lived again (here, the use of tuku as a modifier of the verb indicates, by a positionally specialized meaning, repeated action; the nà- in the same phrase indicates more the renewal of state than the repetition of action). It is as repetitive modifier of a main verb that the adjective occurs here in 191. No other morphemes have been found in this position. It comes before the psychological modifier (seen in 172) but after the main verb or an adjectival qualitative modifier of the verb (seen in 171). Compare the difference in meaning when tuku is a prephrase or postphrase modifier: tuku nì-sá?a-de he did it differently, nì-sá?a tuku-de he did it also, nì-sá?a má-de tuku he did it again (máá is an emphatic noun, with demonstrative meaning, which premodifies nouns).
193. This form is unique, in that in normal groups of three morphemes there is no perturbation of the third by the first. In this respect, ${ }^{2}{ }^{\text {ng }}$ gà acts like morphemes of $\mathrm{CVC} \overline{\mathrm{V}}$ pattern, in that in standard perturbation it changes to mid high. The uniqueness of the form consists in the fact that it has that type of tonemic perturbation found elsewhere only within a single morpheme, although this form is presumably
derived from ${ }^{\text {? }}$ ən one plus the enclitic -kà other (this enclitic is as yet unrelated to a dissyllabic form). Compare the form kunižò ${ }^{2} \partial^{\mathrm{n}}$ gá (which has the toneme of the second syllable perturbed, meaning $I$ want another) with kuní-žò Pəəən-nà (in which the first syllable of the regular numeral noun one is perturbed, meaning I want just one more). Morpheme 193 is in numerative position modifying 194 (cf. 29).
205. The proclitic na- indicates a renewal of state of the action of the main verb. This renewal auxiliary precedes the main verb but follows the auxiliary-motion morphemes (63). Its position is the same as that occupied by the intensifying auxiliary 95 ; the two seem to be mutually exclusive in the verb phrase; na- is quite frequent, occurring with many verbs, but ka- is rare.
207. See 172 for the psychological modifier.

209-11. The form of the phrase is nominal, with haà as its head (cf. 26-34), and the whole is the object of a prequotative position. (For postquotative position, see 103).
212. Questions are indicated by no special phrase form, nor special morpheme, nor toneme, nor formal intonation. The context must indicate whether a question is intended, although gesture context, surprised or protesting voice often help give a clue (although even here, they may still be ambiguous with simple surprise or protest). One of the most common ways to indicate indecision, and hence a question, is the arrangement given here whereby an affirmative statement is repeated negatively with or between. (For an English near equivalent, compare to be or not to be [that is the question].) Another frequent question method is to make a statement and then to immediately deny it, indicating indecision in that manner: You have done it. No! (Compare English you haven't gone and done it!) Even morphemes which, translated into English, seem to be interrogative, are deceptively so, due to the translation: the same morphemes are used for statements
with no query implied, once granted that the context is appropriate (as, with a shrug, nà-ún sá?a-de-bi what thing do he indeed, i.e. I haven't any idea what he has done). With the proper physical context and gestures (e.g. tossing back the head and spreading the palms of the hands outward) this same phrase could mean what is he doing?

Since šíl, like tee (3), has not yet been found in the more normal noun, verb, or adjective positions, it may ultimately be necessary to postulate a basic form class of connectives or miscellaneous particles. Even if this be done, it by no means makes the particle class as important to the grammar as the others; since nouns are already known to serve so many functions other than subjects, objects, and so on, evidence may yet be found to prove that síí also is a noun of a particularly restricted subtype.
222. 'aà is a frequent form in postquotative position; possibly it is slightly less formal and deliberate, or more rapid, than ?ačì.
244. ${ }^{\text {ndé- }}$ is here in a close modal prephrase position like nú- (47; cf. also 35) rather than in the open modal prephrase position seen for žúkan (1). In this position, the toneme may be either mid (or low) or high. Apparently, but not certainly, the high toneme is caused by the combination of +__ plus the basic morpheme whose phonemes are more apparent. It is by no means certain that the perturbing influence is $+\ldots y$, the same as described in 4, because palatalization does not accompany the change; the result is not to modify a verb; and the order is different (occurring before the aspectual position). On the other hand, one can often detect a difference in meaning between the perturbed and nonperturbed forms, in which the high, perturbed, form more frequently occurs in contexts which have something continuous about them; here, for example, the rabbit implies that all his life he has never heard a cliff talk (for ná- cf. commentary for 121).
249. The context might be either dura-
tive or potential. The durative form would be ká?àn, as here, but the potential form ka?àn would be mechanically perturbed to ká?àn by preceding +haà, so the form is ambiguous.
$252-3$. This construction occupies the preverb emphatic position, which generally has a pause between it and the verb phrase which follows it. Note that a normal postverb subject (257-8) accompanies the phrase. The emphatic item, $I$, and the regular subject, my head, are not completely equal. This causes no inconsistency, however, since by subordinating $I$ (ruù) to thing (haà), the personal-substitution meaning becomes heavily abstracted (even as haà modified by verbs gives abstract noun phrases [see 26]) and the resultant meaning is best translated as for me...
254. Cf. 48.

255-6. Cf. 163-4.
260-1. A close-knit nuclear verb phrase, with the verb head hiko modified by the verb kaba. (Compare verb head modified by perturbed noun; illustration given in commentary for 161.) This is one of the characteristic contructions of Mixteco. A verb head may be modified by such a subordinate verb, or noun, or adjective (163-4), and then be modified by the repetitive modifier (191), and psychological modifier (172), as well as by preverb modifiers of various types.

275-80, 281-3, 284-6. The last of these three phrases with haà is in object position to the phrase immediately preceding it. The first of the phrases modifies the complete preceding phrase (269-74), and the second (plus the third, i.e. 281-6) modifies the resultant phrase (269-80).

307-8. After tú-, the completive used is ${ }^{+}$ní- (high, and perturbing). This makes the morpheme form unique, since elsewhere niì is nonperturbing, whether or not it is itself perturbed to high; the meaning remains the same, as for unperturbed niì. Nothing is visible in túu which would cause
either the perturbation of niì or the giving of perturbing power to it; when not used with niì, túu is non-perturbing. It seems preferable to state that after tú- that niì (in an arbitrary unique subclass) becomes high and perturbing, rather than to state that, before niì, tú- perturbs both the contiguous ni- and the succeeding noncontiguous syllable. (A further complication is that in this case ní- becomes homonymous with a different aspectual auxiliary which is likewise perturbing, and which means it is too bad that so and so was
not done; the informant insists that the statement here means nothing more than a mere negative assertion, even although the context and the ambiguity between the morphemes might allow for the other also. In contexts where the only possible interpretation is simple completive negation, where the niì form would be expected, only the high toneme occurs [a low toneme on nìnever occurs after túu] so that 307-9 cannot be explained as the use of the morpheme of unfulfilled advantageous action rather than the one of completed action.)


[^0]:    ${ }^{1}$ This material was gathered by the author in various field trips to the Mixteco region of south western Mexico (State of Oaxaca) during 1935-41, under the auspices of The Summer Institute of Linguistics, Glendale, California. The dialect is that of San Miguel El Grande; narrator: Narciso Merecías.

[^1]:    ${ }^{2}$ For a deductive description of Mixteco tonemic interchange as related to a general procedure for the analysis of tone languages, see my Tone Languages: The Nature of Tonal Systems with a Technique for the Analysis of Their Significant Pitch Contrasts, to be published by the Linguistic Society of America.

[^2]:    ${ }^{3}$ Mixteco has been described by J. de Angulo as monosyllabic, presumably because of the number of single-mora items, and two-mora items composed of juxtaposed identical vowels, found in

[^3]:    rapid speech. Compare his The Development of Affixes in a Group of Monosyllabic Languages of Oaxaca, Lg. 2.46-61, 119-23, (1926), and The Linguistic Tangle of Oaxaca, Lg. 1.96-102 (1925). The present development from dissyllabic morphemes to monosyllabic sandhi forms might tend toward a monosyllabic language, were it not for the counter tendency for enclitics and proclitics to develop multimorphemic words, by way of compounding.

[^4]:    ${ }^{4}$ For layers of immediate constituents and discussion of their technical relations, with English illustrations, see K. L. Pike, Taxemes and Immediate Constituents, Lg. 19.65-82 (1943).

[^5]:    ${ }^{5}$ K. L. Pike, in Investigaciones Lingüísticas, Tomo IV, Nums. 3 and 4, pp. 262-4 (1937).

[^6]:    ${ }^{10}$ Some cognate transitive and intransitive stems differ only by their tonemes. The rule for relating them, if that is possible, is yet to be determined. Compare: nì-saka-ná, I planted (transitive); nì-sakà was planted (intransitive); toən grasp (transitive); tə̀ən take root (intransitive.

[^7]:    ${ }^{11}$ For a discussion of the differences in tonemic usage of these forms, see Tone Languages.

