

JOSEPH E. GRIMES

# HUICHOL SYNTAX

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*Huichol Syntax* is a grammatical study of a Uto-Aztecan language of Mexico. It employs both conventional and transformational modes of description in an endeavor to be thorough and at the same time readable.

Word structure is examined only to the extent necessary to talk about relationships between words. Grammatical phrases—word groupings for which single words can be substituted within clauses—are classified and described. The clause is the principal descriptive framework. Some phrases and clauses can conveniently be described as transforms of others. The function of clauses within sentences and of sentences within paragraphs is stated briefly. A Huichol text is examined in the light of the patterns described in the study. Notes on features of the verb morphology that are not directly pertinent to syntactic patterns conclude the work.

The use made of the transformation concept, because it is not doctrinaire, is of special interest for the theory of linguistic description. As for content, this is the first large-scale description of Huichol grammar to be made; very little of what is said about Huichol is available elsewhere.

## HUICHOL SYNTAX

# JANUA LINGUARUM

STUDIA MEMORIAE  
NICOLAI VAN WIJK DEDICATA

*edenda curat*

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STANFORD UNIVERSITY

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# HUICHOL SYNTAX

*by*

JOSEPH E. GRIMES

SUMMER INSTITUTE OF LINGUISTICS



1964

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## PREFACE

One way to lose friends is to stand by while a controversy is going on, then tell both sides blandly that one doesn't see the point of the fuss. This gives the controversialists opportunity to pause, wipe their foreheads, and tell one that he must be blind, or insensitive to the spirit of the times, or a coward. Then they go back to their fun.

To judge by some of the current debate in the field of linguistics concerning transformational theory, it would seem that a mortal issue had been joined. One does wonder, however, whether the field has really reached such a crisis. Certainly transformational theory had done service in making explicit one more feature of human language that used to lie partially neglected. Yet the arguments that insist that transformational theory forces linguistics to shift foundations fall short of being compelling. The discipline has been amplified and enriched, but not changed to something particularly different from what we are familiar with already, except for the mathematical trim on the new model. And so one wonders why all the fuss.

This study of a Mexican Indian language views transformational theory in a calmer light than do some treatments pro and con. It should therefore contribute toward a more sober evaluation of that theory. Without acting as either apologist or polemicist, I have employed various available approaches to grammatical description as judiciously as possible, keeping clarity for the reader in mind as one goal. Here, then, transformational theory has been made to take its place on equal footing with other products offered in the marketplace.

This way of writing a grammar is far from simple eclecticism. There are myriad ways of describing any linguistic phenomenon, but some things in language are more amenable to one type of description than to another. Furthermore, a good description made from one point of view can always be converted into a good description made from another point of view. Now it is worth while to write a description from one single point of view but once or twice in the development of a particular linguistic theory: at the point where it is necessary to demonstrate that a language can be described using that theory. Once the demonstration is made, the theory goes into the linguist's toolbox. From then on, any linguist who is not at the moment trying to prove that his own theory works ought to feel obligated to this readers to choose the right tool for each part of his job rather than try to drive a nail with a saw blade. He should, in other words, search for ways of treating data that render the description of

each kind of linguistic phenomenon clearest. When enough linguists do this, they can then identify those areas of language that are most easily describable by each available approach; this too is something worth knowing about language.

It will be evident that I have leaned on the work of Charles F. Hockett and Kenneth L. Pike even more heavily than on that of Harris and Chomsky. The emphasis of the first two on the structurally relevant position in a linguistic form together with the elements appropriate to that position, especially as formulated by Pike, has made it possible to turn out syntactic descriptions of languages with an ease that ten years ago was unheard of. Their work, though a powerful advance in linguistics, is easier to take for granted because it comes unaccompanied by the novel-sounding formulations of transform grammar. But the impact of their thinking as I have studied with Hockett and both studied and taught with Pike has influenced the way I approach language in general, and Huichol here in particular, far more than anything else.

The proof of the pudding is in the eating. Since this study was completed in early 1960, I have spent a total of ten months living in a Huichol community. During that time the grammar has worked well as a guide both for producing utterances (in the translation of the Huichol New Testament) and for interpreting utterances (in interacting monolingually with members of the community). Further, the approach taken here has been of use in making theoretical generalizations of help to students and colleagues of the Summer Institute of Linguistics seeking help on linguistic problems in a variety of languages.

This study in its original form was presented to the faculty of the Graduate School of Cornell University for the degree of Doctor of Philosophy. Part of the work on it was done under a Cornell University Graduate Fellowship. Charles F. Hockett directed my study program and writing, and Frederick B. Agard and Allan R. Holmberg took part in guiding my studies. Some details of the grammar have been revised, and others, such as the system of stem sets, sandhi, and paragraph syntax, are still awaiting the time when I can dig in and work out the remaining problems.

Barbara Fornasero Grimes has contributed linguistic criticism, stenographic help, and an uncommon amount of wifely patience to field work and writing alike.

Román G. Díaz and the late Higinio Muñoz spent what must have amounted to months of their time teaching me Huichol. Their patient but persistent criticism of my attempts to speak and understand their language stands behind every page of the book. Many others tutored me without realizing it in the course of conversation. Even if I could list their names, many of them would prefer that I did not, because it would mean to them that a part of their soul had been taken far away and imprisoned in a book.

Instituto Lingüístico de Verano

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## CHAPTER 1

### INTRODUCTION

This is a description of the patterns by which words are combined in the Huichol language. Elements within words that mark syntactic relationships are also included.

The composition and classification of verb stems and the privileges of occurrence of some verb affixes are not yet fully systematized; for this reason the study is not a full-scale grammar of Huichol. An understanding of the syntax should, however, serve as a basis for further work on problems of morphology (Pike 1957).

The problem of how to describe the syntax of a language has been met here by drawing freely on several current models in whatever way seems to bring out the characteristic patterns of Huichol most clearly, as mentioned in the preface. The description centers around a grammatical unit called the **WORD** and one called the **CLAUSE**. The word is discussed in Chapter 2, the clause in Chapter 4.

Immediate constituent analysis of a clause can be carried out to the point where all constituents are single morphemes. It can also be carried out only as far as the point where all constituents are words (or lexemes, Chapter 2); words are defined independently of their occurrence in clauses. Immediate constituent analysis of clauses also yields grammatical forms larger than single words. Some of these grammatical forms are substitutable for single words within the matrix of the clause. It makes no difference in the treatment of clauses whether they are described as composed of such complex grammatical forms or of the equivalent single words. If the latter alternative is chosen, then the complex grammatical forms must be described by themselves. Any grammatical form that is substitutable for a single word in a clause in which it occurs is a **PHRASE**. Phrases (except for certain shunting transforms described in Chapter 5) turn out to be built upon patterns quite different from those upon which clauses are built. To recognize the grammatical **LEVELS** of word, phrase, and clause, each of which is characterized by a set of constructions and a size-relationship to the other levels, results in a certain economy.

Any grammatical form larger than a single morpheme is a **CONSTITUTE** made up of **CONSTITUENTS** of a lower level. The constituents that go to make up a constitute are ordered in a particular arrangement; each constituent fills a **POSITION** or **SLOT** in the arrangement. The class of all constitutes in which the constituents (which must be identified) are arranged in a particular way is a **CONSTRUCTION** (Hockett, 1954.225). A construction may be described by listing all the constitutes that belong to it, or by

describing the slots in which constituents are arranged and the classes of constituents that fill each slot, making the description equivalent to a recipe for reproducing constituents that belong to the construction. Such a descriptive statement implies that for classes *a*, *b*, and *c*, for example, any member of *a*, of *b*, and of *c* may be chosen to fill the slots in the arrangement and the result will be a constituent that belongs to the construction. Every member of each class is therefore SUBSTITUTABLE for every other member of its class within the limits of the construction.

If the constructions of a language were described in these strict terms, little idea of the basic regularities of that language could be communicated in a grammar. Each construction would be described as a simple relation between two or more variables, and the values for each variable enumerated; then the next construction would be taken up. The members of a constituent class in one construction are, however, often identical or nearly identical with the members of a constituent class in some other construction. It is more convenient, and gives more unity to a description, to combine similar constituent classes from different constructions into composite MAJOR constituent classes that subsume, in a relatively small number of classes, most of the forms of the language.

The price paid for combining constituent classes that are not exactly identical in membership is that statements must be appended to take care of the cases in which it is not true that every member of each major class in the construction is substitutable for every other member of its class.

For example, in Huichol there is a class of words that can occur after any of a small class of SPECIFIERS in a bipartite specifying construction (Chapter 4).

*hákee kii* 'where's the house?'

*hákee neʔaya* 'where's my wife?'

*hákee tuapúri* 'where's Santa Catarina? (a community)'

*káma tuapúri* 'there's Santa Catarina'

Constituent classes in many other constructions almost, but not quite, match this class in membership. If the composite major class made by collating all classes that show overlap in membership with this one is identified in many constructions, then the grammatical presentation is more unified and meaningful than if classes that are similar are left unconnected. In order to do this, however, it is necessary to specify for each construction in which members of the composite "noun" class are constituents what the range of substitutability is, or negatively, what forms in the total list cannot be constituents in the construction under consideration.

Each position or slot in each construction can be filled by a member of a particular subset of forms from some composite major class; each member of the subset is substitutable for the rest in the construction. The subset of a major class that can fill a particular position in a construction is the CONSTITUENT SET appropriate to that construction. A member of a major class may belong to several constituent sets; they are

not mutually exclusive as are subclasses<sup>1</sup>. For example, the constitute *téwí panéci + Puzéi née* 'the man saw me' is a member of a large class of constitutes that make up one of the constructions subsumed under "transitive clause" (Chapter 4). The form in the first position is a member of a major class of "nouns", but in this construction not every form that is a noun can fill the first position. The form in the third position is likewise a member of the major class of nouns, but it is a member of the highly restricted subset of nouns that can occur in this position in this construction. The form in the second position is a member of a major class of "verbs", but in this construction it can only be a member of the subset of those verbs that contain inflectional markers for a third person singular subject and first person singular object, and that contain transitive stems. Given the two nominal constituent sets that can fill positions in this construction, and the proper verbal constituent set, any form is substitutable within its slot for any other form, so that the grammatical description shows the relationship of the cited constitute to all other constitutes that belong to the same construction (or that can be generated by the same description).

Some constructions are related to others in that they consist of the same composite major classes in the same arrangement, but contain different constituent sets of those major classes. If by controlling the constituent set that occurs in one position it is possible to predict the constituent set that will occur in another, then distinctions in the controlling (or independent) set can be retained and distinctions in the controlled (or dependent) set passed over; the constructions are related by AGREEMENT (Bloomfield 1933.190-194; Hockett 1958.214-218). For example, the constitute already examined, *téwí panéci + Puzéi née* 'the man saw me', is a member of a construction that takes a member of one nominal constituent set in the first position, a member of a second nominal constituent set in the third position, and a member of a verbal constituent set in the second position. There are other constructions that have nouns in the first and third positions and verbs in the second, and a good many of them differ from the one described in their verbal subject and object inflectional markers. In this group of constructions it is possible to predict from the inflectional form of the verb what subset of nouns can occupy the first position (depending on the subject marker) and the third position (depending on the object marker). A number of constructions can thus be related by saying that the first constituent of the composite construction (which will be referred to in most connections simply as a CONSTRUCTION) is a member of a nominal constituent set determined by the subject indicator of the verb, and the third constituent is a member of a nominal constituent set determined by the object indicator. The first constituent and the subject indicator stand in CROSS-REFERENCE

<sup>1</sup> The forms that can fill a position in a construction are here taken to characterize and identify that position. Pike (1954.104ff.), focusing on the filled slot in a construction, regards the elements that fill that slot as a tagmemically conditioned variant or alloclass of a major class as well as an identificational feature of the tagmeme. The descriptive application of either point of view gives about the same results, but the former requires less by way of terminology and is less open to suspicion of circularity.

with each other, as do the third constituent and the object indicator. The first constituent belongs to a SUBJECT constituent set, the third to an OBJECT set.

Constituent sets are labeled so as to make it easy to follow agreement between constituents. Where no agreement is involved, constituent sets may be designated by semantic labels that give an idea of what forms are likely to be included in the set, and facilitate description of the communicative function of the construction. In some cases it is convenient to label constituent sets only by the position they fill. In the example cited in the preceding paragraphs the constituent belongs to a construction that could be symbolized

Subject/noun + Nucleus/transitive verb + Object/noun

in which the constituent sets are defined by cross-reference relationships.

There are other sets of constructions in Huichol that differ only in the linear order of constituents, not in their component constituent sets. Inasmuch as differences in order can be described independently (Chapter 5), all constructions in a group of such constructions are considered for some purposes as variant forms of a single construction. Variant linear orderings are found mainly in clause-level constructions.

Clause-level constructions will be described here in terms of their component constituent sets and their cross-reference relationships, and where necessary, their order. Phrase-level constructions will be described in terms of their constituent sets and their arrangements. Little will be said about constructions or constituent sets within words beyond mapping relative orders of morphemes. For syntactic analysis the most relevant things about words are their membership in major classes and constituent sets, and the bound markers of syntactic relationships that some of them contain.

The transformational approach to grammar of Harris (1957) and Chomsky (1957), elaborated on by Lees (1957, 1960) and others, makes for economy in certain areas. As Harris says by way of definition (1957:332), "the difference between any two constructions which are satisfied by the same n-tuples of their word classes comprises a transformation". At the clause level only one each of certain groups of constructions need be described in constructional terms; the rest can be treated as transforms of the first. Transformations are used here wherever they seem to make the description clearer or more concise.<sup>2</sup>

<sup>2</sup> Harris's view of transformations as statements of relationships between constituents that belong to different constructions seems quite different from Chomsky's assertions that descriptions of constructions as such fail to show such relationships and are therefore inadequate, as in his Chapter 5. In this study transformations that account for regularities of co-occurrence of the type mentioned most frequently by Chomsky and Harris (core transformations, in my terms) are offered with less enthusiasm than those used to describe much more general relationships (shunting and order transformations, described in Chapter 5); all the core transforms could be described well by other models, and were so handled in earlier drafts.

## THE HUICHOL LANGUAGE

The Huichol data used for this study were recorded on magnetic tape in Mexico and transcribed in the United States. They were processed not as a closed corpus, but as a sample interpreted against a background of thirty-four months' field contact with the language. Thus some reference is made to field notes that have not been studied as intensively as have some of the tape recorded materials. Also, I rely heavily on my own speaking experience for judgments of what is a relevant analysis.

Huichol, also called Guichol, Guisar, Usilique, and by its speakers *wii+záari+taari waniúki* 'the language of the Vixaritari', is spoken by the seven thousand or so members of a relatively unassimilated aboriginal society of west central Mexico (Vogt 1955, including bibliography). Over ninety-five per cent of the speakers live in the 2,300 square mile area whose corners are at 22°21' N 103°54' W, 21°30' N 104°00' W, 21°29' N 104°27' W, 21°43' N 104°47' W, and 22°21' N 104°17' W (Grimes and Hinton). Most Huichol live in the north and east of the area.<sup>3</sup>

Major dialect divisions follow natural barriers. An eastern group of dialects is found east of the Sierra de Buenavista, which bisects the area from the south to the Río Chapalagana in the north central portion; from there the dialect boundary follows the Chapalagana north. A western dialect is spoken in and northeast of the western tip of the region. Central dialects are spoken in the rest of the area. All dialects are mutually intelligible to a high degree; most speakers recognize forms peculiar to other dialects and can give their own equivalent forms. This study is based on the central dialects, which differ from each other only in minutiae: such local variants as *máci-/méci-* 'you', second person singular object prefix, *me-/we-* 'they', third person plural subject prefix, *PitAarai/PatAarai/PatAarai* 'mosquito', *zíc+kári/zíA+kári* 'sand', reflexive object prefix after *nu-* (translocative)/reflexive object prefix before *nu-*.

McQuown (1955) classes Huichol, together with the extinct Tecual and Guachichil, as *Huicholan*. These Huicholan languages he groups with Cora and the extinct Zayahueco, Coana, and Huaynamota, plus Totorame, into the *Coran* group of the *Aztecoi-dan* (Coran plus Nahuatlán) branch of the *Uto-Aztecan* language family. Hale (1958, 1959) and Voegelin, Voegelin, and Hale (1962) suggest on the basis of glottochronological evidence that Coran may be less closely affiliated with Nahuatlán and more closely affiliated with Taracahitian. On an impressionistic basis, having learned Huichol, listened to Cora, and done field work for brief periods in several of the Nahuatlán dialects, I consider McQuown's classification reasonable, but am not yet in a position to evaluate the conclusions of Voegelin, Voegelin, and Hale.

<sup>3</sup> Huichol names are transliterated into the hispanicized version of the phonemic orthography that is taught the Huichol (McIntosh y Grimes 1954), except that the high back vowel /ɤ/ is now written "ü" rather than "i" as formerly for reasons of typographic convenience, and word-initial glottal catch " ' " (which experience has shown must be written for new literates) is omitted here. Geographical names are from Parkinson 1951. Population estimates are from Fabila 1959.

A brief summary of the more obvious phonemic correspondences between Huichol and Cora is given as Apéndice IV of McIntosh y Grimes (1954).

The ethnographic writings of Lumholtz (1900, 1903, 1904), Klineberg (1934), and Zingg (1938) contain citations of Huichol forms. Pimentel (1903) and Lumholtz (1900, 1903) include word lists in their published works. The notations used by various authors are compared with what were probably the intended phonemes in Apéndice III of McIntosh y Grimes (1954).

Diguet included in his report on the Huichol language (1911) a useful list of nouns divided into *Termes servant à désigner la frimille [sic] et ses membres*; *Désignation des parties du corps* (with comparative lists for Huichol, Cora, Tepehuan, and Yaqui); *Couleurs* (comparative list); *Désignation des animaux*, divided in turn into *Mammifères* (comparative list), *Oiseaux*, *Oiseaux nocturnes*, *Reptiles*, *Batraciens*, *Poissons*, *Crustacés*, *Insectes*, *Végétaux*; *Termes employés pour exprimer des idées abstraites*; *Quelques substantifs et leurs dérivés*; *Quelques métaphores employées dans les chants huichols*; *Etymologies toponymiques de quelques villages huichols de la sierra du Nayarit*.

McIntosh and Grimes (1954) published a vocabulary list of around 2,700 items, indexed alphabetically by the Huichol stem and by the Spanish gloss.

Huichol phonology has been described in modern terms in some detail (McIntosh 1945, Grimes 1955, 1959).

Diguet's work (1911) is unfortunately of negligible importance to the linguistic study of Huichol except for the vocabulary materials embodied in it. Though written as a linguistic description, little attempt is made to say anything about how Huichol works; Diguet evidently felt that Spanish had obliterated the aboriginal patterns:

... la conjugaison des verbes en général n'est guère praticable, cependant, d'après les indiens consultés à ce sujet, on peut, pour les verbes les plus usuels, établir une sorte de conjugaison, mais cette façon d'exprimer les différentes phases de l'action doit sûrement être attribuée à l'influence des missionnaires.

Il est évident que cette influence a eu pour résultat d'amener progressivement des modifications dans l'antique langage, lequel n'a pu arriver un peu pur jusqu'à nous, que par les chants qui se transmettent de génération en génération. Les missionnaires pendant plus d'un siècle ont gouverné les indiens, et pendant ce long espace de temps, ils ont composé des vocabulaires et des oraisons, non seulement pour l'usage des néophytes, mais aussi pour l'exercice de leurs prédications et de leur enseignement, pour cela, la langue indigène a dû être pliée aux règles de la grammaire latine.

The Huichol language has in fact come through white contact relatively unscathed; probably the most drastic reorganization of its grammatical system is the one imposed on it by Diguet himself where he presents an extensive paradigm of a verb frequently glossed as "be" (which has a stem of a type atypical for verbs in general) in all the tenses and moods of Latin.

A minor difficulty compared to the foregoing is that Diguet considered substantival forms basic to related verbs (as in the section *Quelques substantifs et leurs dérivés*)

rather than the other way around. This may have been why he concluded that “l'idée du verbe à l'infinitif est chose peu réalisable”. Most verb stems have a nominal derivative (Chapter 2) which in environments such as “I like to —” is a good translation equivalent for a European infinitive. This “infinitive” was made the basis for alphabetizing verb stems in the McIntosh-Grimes vocabulary list, inasmuch as it is one of the few forms built on a verb stem that regularly lacks prefixes.

Robert H. Barlow left an unpublished manuscript “Noticia sobre la lengua huichola”, now in my possession. In it he compared Huichol forms taken down by one Ing. Rosendo V. Corona in 1888 with Náhuatl and Cora forms, and concluded that the relationship of Huichol to Cora is “notoriamente mayor que la que tiene con las otras lenguas de la familia *ópata-pima*. Puede decirse que la huichola forma con el cora y los dialectos de éste una rama de la familia *ópata-pima*, del grupo mexicano.” The first conclusion will probably survive further comparative work; the second probably will not.

## PHONOLOGY

Consonants, which function as syllable onsets, are *p t k q* ([k<sup>w</sup>]) *c* ([ts]) *z r m n w y ʃ h*. Syllable peaks contain one or two vowels *a e i u ʌ* (high back unrounded); they may also contain *p c z m n* as coda. Syllables are either high (') or low (unmarked) in tone, short (CV) or long (CVV, CVC, CVVC) in length. One or more syllables go together to form FEET, which have phonemically unpredictable boundaries (written with + within words, space between words); a stress peak in each foot is predictable from the pitches and lengths of the syllables in it. One or more feet between terminals or between silence and a terminal constitute an INTONATIONAL PHRASE. Terminals are fade / #/, sustain, //, and abrupt /!/. Intonation morphemes represented by one to three pitches in sequence begin usually on the stressed syllable of the final foot of the intonational phrase. Occasionally an intonation begins on the stressed syllable of the penultimate foot of a phrase, and rarely a pitch 4 is found on the stressed syllable of a foot still earlier in the phrase. Intonational pitches are written here with superscript numbers<sup>1</sup> (low) through <sup>4</sup> (high), after the syllable whose pitch they represent. A sequence of numbers after a syllable denotes a pitch glide. Most forms are cited without intonation; the ordinary intonation 31 # can be supplied wherever no intonation is indicated.<sup>4</sup>

<sup>4</sup> This paragraph is a condensation of Grimes 1959, which should be consulted for fuller detail. Some symbols have been changed. Intonational pitch 4 had not been observed occurring early in the phrase when Grimes 1959 was written.

## MORPHOPHONEMICS

An adequate study of Huichol morphophonemics has not yet been undertaken. There are extensive patterns of alternation that involve tone, foot boundary position, and syllable length. Allomorphs that differ by any of these are not discussed here; some allomorphs that differ in other ways are discussed.

Canonical forms of morphs in Huichol include a single consonant (*r*-, distributive prefix), a vowel (*a*-, allative prefix), and one or more complete syllables (*ne*- 'I', first person singular subject prefix; *tái* 'fire', *máaye* 'mountain lion', *cíi*+*qízaka* 'chanter, shaman'). Two morphs have anomalous shapes: the stem *-áine* 'say' in *páine* 'he says' and related forms, and the suffix *-áye* 'of a certain color' in *pacíi*+*rááye* 'it is bile-colored (green)', from *cíara* 'bile', and related forms. Both forms are disyllabic but do not begin with a consonant, as do all other polysyllabic morphs in the language.

## CHAPTER 2

### WORDS

The definition of a word in Huichol can be approached from three mutually supporting points of view.

The first is adapted from Bloomfield's "a word is a minimum free form" (1933.178). Any Huichol form that can occur with the intonation morphemes 3/ 'slight attention' plus # 'finality' (Grimes 1959), preceded and followed by pause, is a free form and consists of at least one word. Some free forms do not consist wholly of smaller free forms; they are minimum free forms.

Hockett (1958.169) points out that constituents with phrases as one constituent and bound forms (such as the Huichol directive enclitics, Chapter 3) as the other are minimum free forms no matter what their length. Bloomfield's definition, modified by Hockett's definition of a "lexeme", yields a unit satisfactory for grammatical analysis. A form that occurs only as a grammatical form, when it is in a context in which it is not an immediate constituent of a larger form that is itself a grammatical form whenever it occurs, is a LEXEME. Lexemes in Huichol are of two kinds, minimum free forms (free lexemes) and bound lexemes (directive enclitics). The revised definition then is: Any free lexeme, or any combination of a single free lexeme and a following directive enclitic, is a WORD.

The second criterion is morphophonemic: a word is a sequence of morphemes in fixed order relative to one another (Garvin 1951, 1954). The patterns described in this chapter under "Word Patterns" delimit words; the point where a pattern ceases to be relevant and another (or the same one a second time) becomes relevant is a word boundary.

The third criterion is also morphophonemic: A word is a sequence of morphemes between points of potential pause (Hockett 1958, 166). This is useful for most speech styles, but in extremely slow dictation informants have occasionally split forms which by the other criteria count as single words.<sup>1</sup>

<sup>1</sup> Most splits in words occur in supplicative mode (*na-*) forms before the tenth-order verb object prefix: *penaka harizaa néci+Putáaqaa+ni* 'please don't eat me up!' for the more usual *penaka+néci+Putáaqaa+ni*. The interrupted form contains an emphatic adverb *harizaa* after the first part of the prefix complex. Intrusion of this kind into a normal prefix sequence occurs nowhere else, and supplicatives may have to be taken as a special case.

Word boundaries cannot be identified by phonological criteria alone. The boundaries of most grammatical words (as already defined) coincide with the boundaries (+) of phonological feet. However, foot boundaries also occur within words (*zai*+*pírʌ*+*kári* 'papelillo tree') and word boundaries within feet (*mézʌka*+*héeyáa*+*ní* 'or else, if he does go ...' with no foot boundary before the word *zʌka* 'if').

The transcription used here indicates a word boundary that coincides with a foot boundary by means of a space; the space replaces the plus sign of phonemic transcription. A dash (—) indicates a word boundary that is not at the same time a foot boundary. Subscript numbers before each Huichol word correspond to subscript numbers before words or word groups in the English gloss: <sub>1</sub>*mé*—<sub>2</sub>*zʌka* <sub>3</sub>*héeyáa*+*ní* 'or else, <sub>2</sub>if <sub>3</sub>he does go ...'.

#### WORD CLASSES

Words are classified by the major classes they belong to in clauses.

##### VERBS

Words that, as heads of phrases or by themselves, belong to nuclear constituent sets in clauses, are VERBS. Verbs are Type I words (see under "Word Patterns").

*nekaníi*+*zéiya* 'I saw him'

*pékú*+*ʌrʌarʌka* 'it is thundering'

*pányé*+*yʌʌwi* 'he has a black spot on his nose'

Verb subclasses are based on the specific clause constructions in which they occur and the grammatical relationships of non-nuclear constituents to the verbal nuclear constituents. Further subclasses are based on internal affix and stem-formation patterns. A summary of the subclasses recognized so far is included in Appendix B.

##### NOUNS

Words that, as heads of phrases or by themselves, belong to primary constituent sets (Chapter 4) are NOUNS. Nouns are Type II words or, in the case of place names, Type IV words.

*kíi* 'house'

*kawáaya* 'horse' (Spanish *caballo*)

*tuu*+*nuwáame* 'chanter, shaman'

*Puuki*+*ráaci* 'old man'

*wiiri*+*kúuta* 'Peyote Country' (place name)

Each noun belongs to a GENDER, of which there are two, ANIMATE and INANIMATE. The gender of a noun is not marked within the word, but comes into play in patterns of agreement between nouns and verbs and in patterns of substitution for nouns by quantitative and deictic pronouns. Whether singular or pluralized, inanimate nouns

stand in cross-reference with third person singular subject and object indicators in verbs or possessive indicators in nouns, and are substituted for only by singular deictic or quantitative pronouns:

*ʔaʔaʔaʔa* 'arrow' (inanimate noun)

*ʔaʔaʔaʔate* 'arrows' (plural)

*ʔaʔaʔaʔa nepee + zéiya* 'I have an arrow' (singular object)

*ʔaʔaʔaʔate nepee + zéiya* 'I have arrows' (plural object with third singular object cross-reference)

Animate nouns, depending on their number, stand in cross-reference with both singular and plural indicators of subject and object in verbs and with singular and plural possessives in nouns; they are substituted for by singular or plural deictic and quantitative pronouns:

*kawáaya* 'horse' (animate noun, singular)

*kawáayá + ciizi* 'horses' (plural)

*kawáaya nepee + zéiya* 'I have a horse' (singular object with third singular object cross-reference)

*kawáayá + ciizi nepawaré + zéiya* 'I have horses' (plural object with third plural object cross-reference)

Other significant subclasses of nouns are DEPENDENT nouns, LOCATIVE nouns, DIRECTIVE nouns, and PROPER nouns. Dependent nouns, which include kinship terms and names of body parts, are POSSESSED except in vocative clauses (Chapter 4): *neʔiwáa* 'my sibling', *nekee + táa* 'my leg'. Locative nouns belong to secondary as well as primary constituent sets (Chapter 4) without any obligatory marking in either; they may be inflected for possession, using in third singular the locative possessive *-na* when they belong to secondary constituent sets: *nekii* 'my house' or 'at my house', *kíena* 'at his house' (locative possessive, compare *kíiya* 'his house'), *kíe + kári* 'the ranch' or 'at the ranch', *witári* 'the rainy season' or 'during the rainy season'. Locative nouns also include PLACE NAMES, Type IV (uninflected) words that have the distribution of locative nouns: *tuapúri* 'Santa Catarina, Jalisco' or 'in Santa Catarina'. Directive nouns are sometimes paired formally and semantically with enclitics and are always possessed; they belong to secondary, and only occasionally to primary, constituent sets. *tacerieta* 'on our right, to the south', *taʔutáata* 'on our left, to the north', *tahee + -taapa* 'beneath us', *táheima* 'above us', *tahizáapa* 'in our center, to the east', *tacuu + -taapa* 'in the place of our origin, to the west (i. e., in the Pacific ocean)' are directive nouns that are not paired with enclitics (but the *-pa* with which some end may be the enclitic *-pa* 'in'). Other directive nouns are listed together with the corresponding enclitics in Chapter 3. Proper nouns are the nouns that belong to the complement constituent set of an equivalent complemented clause when the verb stem is *-teewáa* 'be called something' or a related form. The denotation of proper nouns may shift from one discourse to another (Jakobson 1957): *háí + témai* 'Cloud Boy', *néí + káme*

'Born When the Maize Sprouts', *wáni* 'John' (Spanish *Juan*). Any noun that is not dependent, locative, directive, or proper is a COMMON noun: *wái + kári* 'toy, ceremonial object', *háaci* 'dew', *Paazaaci* 'story'.

### ADVERBS

Words that, as heads of phrases or by themselves, belong to secondary constituent sets (Chapter 4) in clauses, but not to primary constituent sets, are ADVERBS. Adverbs are Type IV words or temporal and extensive case forms of Type III words, or in a few cases are words that appear to be built on a Type I model but are otherwise uninflected.

Adverb subclasses are based on the particular secondary constituent sets each form belongs to: adverbs of LOCATION (*múwa* 'there'), TIME (*túuka* 'at noon'), MANNER (*mayá* 'thus'), EXTENT (*hai + kákla* 'thrice'), and EMPHASIS (*yéme* 'extremely'). The secondary constituent sets of instrument-purpose and association-accompaniment have as members only directive nouns or directive phrases, not adverbs.

### PARTICLES

Words that never occur as heads of phrases are PARTICLES. They include POSTPOSED ATTRIBUTIVES, PREPOSED ATTRIBUTIVES, and free MARKERS of various syntactic constructions and transformations.

*kúzi* 'still' postposed attributive (Chapter 3)

*kumu* 'about, approximately' preposed attributive (Chapter 3)

*Payuu + míeme* 'therefore' sentence connector (Chapter 6)

*zaka* 'if' introductory particle, conditional transformation (Chapter 5)

### SUBSTITUTES

Words that can potentially replace any member of a grammatically definable class (the DOMAIN), and that have as referent the referent of the form they replace, are SUBSTITUTES. Substitutes are Type III or Type IV words (see under "Word Patterns"). Inasmuch as any constituent of an appositive phrase is substitutable for the whole phrase (Chapter 3), substitutes are most readily identified as Type III or Type IV words that are constituents of appositive phrases.

Substitutes differ from one another in domain, in FORM, and in TYPE. By domain, substitutes are PRONOUNS, PROADVERBS and PROCOMPLEMENTS. By form, pronouns are DEICTICS and QUANTITATIVES, and proadverbs are ADVERBIALS and QUANTITATIVES. By type, substitutes are DIRECT and INTERROGATIVE.

### PRONOUNS

*Deictics.* The deictic pronouns (direct) are Type IV words that replace nouns. Each deictic is further restricted as to the person, gender, and number of noun it can replace.

*née* first person singular  
*táame* first person plural  
*ʔeekΛΛ* second person singular 'you'  
*zéeme* second person plural 'you-all'  
*ʔiikΛ* third person (singular or plural), proximal  
*ʔiime* third person plural, proximal  
*ʔiyá* third person  
*mΛΛkΛ* third person, distal  
*mΛame* third person plural, distal

The third person forms that are not specifically plural have as domain any noun that does not refer to speaker or addressee, whether singular or plural, animate or inanimate. The third person plurals have as domain only animate plurals.

*Quantitatives.* The quantitative direct pronouns are Type III words that replace nouns; as pronouns they are inflected in the nominative, accusative, or zero case, and in either gender. Some quantitatives are irregular in their inflection. Paradigms are given in Table 4.

*Interrogatives.* Interrogative pronouns mark primary interrogative transformations (Chapter 5), in which they replace nominals. All but the quantitative interrogative are third person only, and all but one contain a morph *kee*. They are listed in Chapter 5.

### PROADVERBS

*Location.* Locative (direct) proadverbs are *mána* 'there', *ʔéna* 'here'.

*Time.* Temporal proadverbs are *ʔáana* 'at that time', *hiikΛ* 'now, at present', *ʔari* 'finally, at last', *ʔariké* 'later on, afterwards, after', *ʔee + páΛqa* 'at a point in a temporal cycle (day, month, year) comparable to the present', *yaa + páΛqa/yaa + páuqa* 'suddenly, without warning, in a short space of time', and any temporal case form of a quantitative, such as *hai + ríeka* 'the third time, thrice' (Table 4).

*Manner.* The proadverb of manner is *ʔípaΛ* 'in this way'.

*Extent.* Proadverbs of extent are *táawáari* 'again' and any extensive case form of a quantitative, such as *hai + kákΛΛ* 'three times'.

*Interrogative proadverbs.* Interrogative proadverbs mark secondary interrogative transformations (Chapter 5), in which they replace adverbials and locative or directive nouns.

### PROCOMPLEMENTS

All the procomplements include in their domain some complement constituent set; two include in their domain secondary constituent sets as well.

*mΛpaΛ* 'thus, in that way, as follows' replaces a quotative complement (Chapter 3) or a manner constituent

*yaʔané* 'thus' replaces a quotative complement

*kee* 'what? how?' (interrogative) replaces quotative or manner constituents.

TABLE 1

*Position Classes of Type I Prefixes*

15	14	13	12	11	10	9	8	7
ʔaci <sub>G</sub> ʔe <sub>G</sub> ʔeci <sub>G</sub> ʔu <sub>G</sub> ya <sub>G</sub>	ne <sub>A</sub> pe <sub>A</sub> te <sub>A</sub> ze <sub>A</sub> we <sub>A</sub>	ka <sub>H</sub>	p <sub>Λ</sub> <sub>C</sub>	ka <sub>I</sub>	ne <sub>B</sub> ma <sub>B</sub> ta <sub>B</sub>	ti <sub>J</sub>	ni <sub>D</sub>	wa <sub>B</sub> ze <sub>B</sub>
m <sub>Λ</sub> <sub>C</sub> n <sub>Λ</sub> <sub>C</sub> z <sub>Λ</sub> ka <sub>C</sub>								
ke <sub>F</sub>								

6	5	4	3	2	1	S T E M
r <sub>J</sub>	e <sub>K</sub>	i <sub>B</sub> u <sub>L</sub>	wa <sub>M</sub>	ne <sub>B</sub> ʔa <sub>B</sub> ta <sub>B</sub> yu <sub>B</sub>	ka <sub>N</sub> ku <sub>N</sub> ta <sub>N</sub> ti <sub>N</sub> ye <sub>N</sub>	
	a <sub>K</sub>					
	na <sub>M</sub> nu <sub>M</sub>					

## WORD PATTERNS

Every word in Huichol conforms to one of four patterns of morpheme arrangement. TYPE I words are inflected for subject, and optionally for object and mode. TYPE II words are optionally inflected for number and possession. TYPE III words are inflected for case, and optionally for gender and person. TYPE IV words are not inflected. More detailed descriptions of each type follow.

*TYPE I WORDS*

*Affixes.* Affixes are classified by their position relative to other affixes and to the stem; position classes are numbered out from the stem. Affixes are also classified by mutually exclusive distribution.

The relative order of Type I affixes is given in Table 1 for prefixes and in Table 2 for suffixes. Each affix is represented in the table by a single allomorph. Affixes that occur between other affixes that are more than two positions apart are assigned to the entire intervening range. Subscript capital letters refer to substitution classes, which are formed on a more comprehensive basis than pure position, and are discussed in the following paragraphs and in Appendix B.

TABLE 2

*Position Classes of Type I Suffixes*

	1	2	3	4	5
S	we <sub>O</sub>	ka <sub>P</sub>	mΛ <sub>Q</sub>	kai <sub>S</sub>	me <sub>C</sub>
T	zime <sub>O</sub>	ni <sub>P</sub>	ke <sub>Q</sub>	yu <sub>S</sub>	ni <sub>D</sub>
E	mie <sub>R</sub> ne <sub>R</sub> nΛa <sub>R</sub> wa <sub>R</sub>			tΛ <sub>E</sub>	
M				kaku <sub>E</sub>	
				ka <sub>E</sub>	
				ku <sub>E</sub>	
				me <sub>E</sub>	
				yu <sub>E</sub>	
				ke <sub>E</sub>	
	zΛ <sub>T</sub>				

In many cases position class membership is sufficient basis for predicting what affixes may or may not co-occur in a Type I word. Some affixes that are not in the same position class are, however, mutually exclusive. *i*<sub>B4</sub>, for example, is in the same position class as *u*<sub>L4</sub>, but it is also mutually exclusive with the other B affixes, none of which is mutually exclusive with *u*<sub>L4</sub>. *i*<sub>B4</sub> is therefore classified as a member of Substitution Class B rather than of L.

Affixes that mark syntactic relationships, whatever else they may mark, are INFLECTIONAL (Hockett 1958.209ff); such are those of Substitution Classes A through F. Other affixes are BASE affixes; these constitute a morphological layer between inflectional affixes and stems. The base affixes of some classes, especially those of negation (H, I) and tense-aspect (P, S) might be considered inflectional, since their occurrence entails (or reflects, as the case may be) a sharp restriction on the selection of emphasis or time constituents in the same clause. Only inflectional affixes are discussed in this chapter.<sup>2</sup> Base (and derivational) affixes are described in Appendix B.

<sup>2</sup> Some stems contain *derivational* affixes. Some Type I words have semantically equivalent narrative-assertive pairs of forms, each with a different stem form. Base affixes are shown to be outside the stem when they occur in narrative-assertive pairs in which there is a stem change with no change of base affixes; affixes that occur only in narrative-assertive pairs where there is no stem change are themselves derivational, part of the stem. Any derivational affix probably occurs with fewer one-morpheme stem elements than does any base affix. Suffix order is easy to plot if only base and inflectional affixes are taken into account; it becomes more difficult if derivational affixes are added to the plot, presumably because derivational affixes are so highly restricted. Nouns formed from verb stems include derivational affixes but not base affixes. Derivational affixes are mentioned in slightly more detail in Appendix B.

(A) *Subject*. Three persons and two numbers of subject are distinguished inflectionally. They are the only affixes that are obligatory with Type I words:<sup>3</sup>

	<i>Singular</i>	<i>Plural</i>
First person	ne <sub>A14</sub>	te <sub>A14</sub>
Second person	pe <sub>A14</sub>	ze <sub>A14</sub>
Third person	. . .	we <sub>A14</sub>

Each subject category correlates with a particular constituent set of external (free) subjects; the affix and free subject stand in cross-reference (Chapter 1). A FIRST PERSON SINGULAR subject inflection takes the first singular pronoun *née* 'I' and noun phrases with *née* as head or appositive constituent in the corresponding constituent set.

*née nep<sub>A</sub> + y<sub>A</sub>ane* 'I am doing it' (pronoun)

*née wáni nep<sub>A</sub> + y<sub>A</sub>ane* 'I, John, am doing it' (appositive phrase with first singular pronoun)

A SECOND PERSON SINGULAR subject inflection (which includes, besides the regular affix, the imperative form discussed below under (F) *Hortatory*) takes the second singular pronoun *peek<sub>A</sub>* 'you', singular proper nouns, singular animate nouns, noun phrases with *peek<sub>A</sub>* as head or appositive constituent, and phrasal transforms with second singular subjects in the corresponding constituent set.

*peek<sub>A</sub> pep<sub>A</sub> + y<sub>A</sub>ane* 'you are doing it' (pronoun)

*wáni pep<sub>A</sub> + y<sub>A</sub>ane* 'you, John, are doing it' (proper noun)

*paazaac<sub>A</sub> nunúuci pepti<sub>A</sub> + Pee + níwa* 'you, child (*nunúuci*), are obeying badly' (singular animate noun)

*peek<sub>A</sub> nunúuci pep<sub>A</sub> + y<sub>A</sub>ane* 'you, child, are doing it' (appositive phrase with second singular pronoun)

*ziikée pemuu + núa pep<sub>A</sub> + y<sub>A</sub>ane* 'you who have but recently come are doing it' (phrasal transform with second singular subject)

A THIRD PERSON SINGULAR subject inflection takes any non-plural third person pronoun, any inanimate noun (singular or plural), any animate singular noun, any singular proper noun, any phrasal transform with third singular subject, or any phrase with one of these as head or appositive constituent, in the corresponding constituent set.

<sup>3</sup> Lack of a subject prefix signals always and only third person singular subject in a Type I word. This could also be described by calling all Type I stems implicitly third singular in subject, following Aschmann and Wonderly (1952), but the statement of agreement in cross-reference would then be more complicated. As a full-fledged zero morpheme, this third singular indicator meets Haas's requirements that it never contrast with its own absence, and (by analogy with the object indicator paradigm, Substitution Class B) that it be independently established as a morpheme (Haas, 1957); this last, however, may be questioned.

*PíikA palyane* 'he is doing it' (third person proximal pronoun)

*káyé péé + téewa* 'the tree is a long way off' (inanimate noun, singular)

*káyeezi péé + téewa* 'the trees are a long way off' (inanimate noun, plural)

*kawáaya palyane* 'the horse is doing it' (animate noun, singular)

*wáni palyane* 'John is doing it' (proper noun)

*ziikée muu + núa palyane* 'the one who just arrived is doing it' (phrasal transform with third singular subject)

*PíikA wáni ziikée muu + núa palyane* 'this fellow John who just arrived is doing it' (appositive phrase)

A FIRST PERSON PLURAL subject inflection takes the first plural pronoun *táame*, plural proper nouns, plural animate nouns, and phrasal transforms with first plural subjects, or any phrase with one of these as head or appositive constituent, in its constituent set.

*táame tepalya* 'we are doing it' (pronoun)

*maariye + túmá + ciizi tepalya* 'we Mayordomos (ceremonial officials) are doing it' (plural proper noun)

*te + téri tepalya* 'we Indians are doing it' (plural animate noun)

*zikée temúu + Pázla tepalya* 'we who just arrived are doing it' (phrasal transform with first plural subject)

*táame maariye + túmá + ciizi ziikée temúu + Pázla tepalya* 'we Mayordomos who just arrived are doing it' (appositive phrase)

A SECOND PERSON PLURAL subject inflection takes the second plural pronoun *zéeme*, plural proper nouns, plural animate nouns, and phrasal transforms with second plural subjects, or any phrase with one of these as head or appositive constituent, in the corresponding constituent set.

*zéeme zepalya* 'you-all are doing it' (pronoun)<sup>4</sup>

*wii + záari + taari zepalya* 'you Huichols are doing it' (plural proper noun)

*Páráawé + ciizi zepalya* 'you wolves are doing it' (plural animate noun)

*ziikée zemúu + Pázla zepalya* 'you-all who just arrived are doing it' (phrasal transform with second plural subject)

*ziikée zemúu + Pázla wii + záari + taari zepalya* 'you Huichols who just arrived are doing it' (appositive phrase)

A THIRD PERSON PLURAL subject inflection takes any third person pronoun, plural proper nouns, animate plural nouns, and phrasal transforms with third plural subject, or any phrase with one of these as head or appositive constituent, in the corresponding constituent set.

<sup>4</sup> As a gloss for the second plural pronoun as over against the second singular, I use 'you-all', a graphic representation of an awkward form, but one not foreign to my colloquial speech, in contrast with the singular 'you'.

*mλame wepλyλa* 'they are doing it' (pronoun)

*wii + zāari + taari wepλyλa* 'the Huichols are doing it' (plural proper noun)

*λarāawé + ciizi wepλyλa* 'the wolves are doing it' (plural animate noun)

*ziikée wemúu + λázλa wepλyλa* 'those who just arrived are doing it' (phrasal transform with third plural subject)

*ziikée wemúu + λázλa wii + zāari + taari mλλkλ wepλyλa* 'those Huichols who just arrived, they are doing it' (appositive phrase)

Constituent sets based on person and number distinctions in cross-reference with subjects also serve for object and possessive cross-reference. When a constituent of a construction is called "subject", "object", or "possessor", this means that it is a member of the particular constituent set that correlates with the person-number of the subject, object, or possessive inflection of another word in the construction.

(B) *Object*. Three persons and two numbers of object are distinguished inflectionally. Each object category corresponds to a constituent set of external objects, with the same agreement in person and number as for the subject. In addition, identity of object with subject (or reciprocal action of subject and object on each other) is indicated by the use of the reflexive object affix. The reflexive allomorph used is determined by the person and number of the subject indicator.

	<i>Non-reflexive</i> (morphemes)		<i>Reflexive</i> (allomorphs)	
	<i>Singular</i>	<i>Plural</i>	<i>Singular</i>	<i>Plural</i>
First person	ne(ci) <sub>B10</sub>	ta(ci) <sub>B10</sub>	ne <sub>B2</sub>	ta <sub>B2</sub>
Second person	ma(ci) <sub>B10</sub>	ze <sub>B7</sub>	?a <sub>B2</sub>	yú <sub>B2</sub>
Third person	i <sub>B4</sub> /e <sub>KB5</sub>	wa <sub>B7</sub>	yú <sub>B2</sub>	yú <sub>B2</sub>

Tenth position *ne(ci)*- 'me', first singular, *ma(ci)*- 'you', second singular, and *ta(ci)*- 'us', first plural, occur in their shorter forms *ne-*, *me-*, *ta-* before affixes of Classes D and J, and in their longer forms *neci-*, *maci-*, *taci-* elsewhere. In any form that contains allative *a*-<sub>K5-4</sub> the third singular non-reflexive affix is represented by *e*-<sub>KB5</sub> replacing *a*-; elsewhere the third singular is represented by *i*-<sub>B4</sub>.

$$a_{K5} + i_{B4} = e_{KB5}$$

$$a_{K5} + i_{B4} + nu_{M4-3} = enu_{KBM5-3}$$

$$e_{K5} + i_{B4} = ei_{KB5-4}$$

The third singular non-reflexive inflection in either form is automatically omitted if an external object precedes the verb directly.

*nep̄li + zéiya kii* 'I see the house'

*kii nep̄azéiya* 'I see the house' (object first)

*pénu + P̄Aani tumiini* 'he will take the money'

*tumiini pánu + P̄Aani* 'he will take the money' (object first)

(C) *General modes.* Three classes of mode indicators, GENERAL, NARRATIVE and CONJUNCT, are almost in complementary distribution. A few Type I words, however, contain general and narrative, general and conjunct, or narrative and conjunct modes together. The combinations have mild desiderative meaning.

*nem̄an̄li + zéiya* 'I'd like to see it' (general + narrative)

*nem̄izéi + yákaku* 'I'd like to see it' (general + conjunct)

*nen̄izéi + yákaku* 'I'd like to see it' (narrative + conjunct)

Some Type I words contain no mode indicator. They are sometimes questions, especially if they contain a distributive prefix (J9, 6). Questions not formed by the interrogative transformation (Chapter 5) have no special marking that identifies them unambiguously. Any assertion can be agreed with or disagreed with; so that a plain assertion is the semantic equivalent of an English "yes-or-no" question. In a conversational context, however, modeless assertions are most likely to be interpreted as questions.

*mázá tikuu + cúu* 'is the deer asleep?' (3sg subject, no mode indicator, distributive prefix)

The general mode indicators are listed here.

*p̄A-/p̄-C12*, assertive mode, occurs only in main clauses (Chapter 5). It denotes a statement or assertion. The allomorph without the vowel precedes vowel-initial morphs.

*pée + t̄Aa* 'he left'

*m̄A-/m̄-C13-12*, phrasal mode, occurs in simple phrasal transforms (Chapter 5) and in some main clauses; in main clauses it is equivalent to *p̄A-*, but it is rare. A clause the verb of which contains *m̄A-* may be construed ambiguously as a phrasal transform or as a main clause, but the immediate context usually resolves the question. The allomorph without the vowel precedes vowel-initial morphs.

*mée + t̄Aa* 'the one who left' (phrasal transform), or rarely 'he left' (main clause), depending on context.

*n̄A-C13-12*, supplicative mode, always occurs with *ka-111* (strong negative) and second singular subject; it denotes an urgent request or plea.

*pen̄aka + néci + Put̄áaqa + nii* 'please don't eat me up!'

*z̄Aka-C13-12*, conditional mode, is interchangeable with the introductory particle of the conditional transformation and equivalent to it (Chapter 5).

*pez̄Aka + héeyáa + nii* 'if you leave'

$-me_{CS}$ , absolute phrasal mode, is the only suffix in Class C. It occurs in absolute phrasal transforms (Chapter 5). It may be the same morpheme as the nominalizer suffix of absolute noun stems, or it may be an inflectional affix whose similarity to the other is, at least synchronically, fortuitous. It does not mark the same relationship as the proximate antecedent incomplete conjunct marker  $-me$  (Chapter 5), nor does it belong to the same position class. The relationship of these three suffixes, all of shape  $-me$ , is not yet clear.

*héeyádame* ‘the one who left’

(D) *Narrative mode*.  $ni-/n_{-D8}$ , narrative mode, occurs in main clauses of sentences that are the centers of periods (Chapter 6). The allomorph without the vowel precedes vowel-initial morphs except  $u_{-L4}$ . Any verb in the narrative mode matches an equivalent form in the assertive mode, though the two equivalent words do not always have the same stem allomorph (see Footnote 2 of this chapter).

*néeyáa + ní* ‘he left’ (stem  $-yáa$ , narrative mode)

*pée + taa* ‘he left’ (stem  $-taa$ , assertive mode)

$-ni_{D5}$ , narrative closure, a suffix, occurs with many Type I words in the narrative mode to complete the word. With some stems it is obligatory in the narrative mode; with others its absence denotes completed action and its presence, incomplete action; with others it does not occur.

*néeyáa + ní* ‘he left’ ( $-ni$  required in narrative mode)

*weenée + kaaane* ‘they left’ ( $-ni$  obligatorily absent in narrative mode)

(E) *Conjunct modes*. The conjunct mode indicators mark conjunct transformations. They are described under that heading in Chapter 5.

(F) *Hortatory*.  $ke_{-F13-11}$ , hortatory mode, occurs in all persons, with no other mode indicator, with a hortatory or jussive meaning: “let us . . . , let you . . . , let him . . .”. With the narrative mode and no subject marker it forms a second singular imperative; with the narrative mode and the second plural subject marker  $ze-$  it forms a second plural imperative.

Person		Narrative	Remainder
ne-	ke-	–	$\rho i + z\acute{e}i + y\acute{a}ni$ ‘let me see him’
pe-	ke-	–	$\rho i + z\acute{e}i + y\acute{a}ni$ ‘let you see him’
-	ke-	–	$\rho i + z\acute{e}i + y\acute{a}ni$ ‘let him see him’
te-	ke-	–	$\rho i + z\acute{e}i + y\acute{a}ni$ ‘let us see him’
ze-	ke-	–	$\rho i + z\acute{e}i + y\acute{a}ni$ ‘let you-all see him’
we-	ke-	–	$\rho i + z\acute{e}i + y\acute{a}ni$ ‘let them see him’
-	ke-	n-	$\acute{e}u + z\acute{e}iya$ ‘see him!’
ze-	ke-	n-	$\acute{e}u + z\acute{e}iya$ ‘see him, you-all!’

Type I words also include as a marginal variety words that appear to contain Type I prefix sequences but are not further inflected. These words are adverbs.

*panu + táaye* 'on the other side of a reference line that lies at right angles to the speaker's line of sight or trajectory of motion' (-*aye*, which fills the position of a stem in that it follows what looks like a first directional prefix *ta*<sub>N1</sub> [Appendix B], recurs elsewhere only as the second member of some adjectival intransitive verb stems that are inflected normally)

*panaa + táaye* 'on the speaker's side of a line that lies at right angles to the speaker's line of sight or trajectory of motion'. The difference between this form and the preceding form is analogous to that between the translocative and cislocative prefixes of the third directional class (M); these may be the morphemes that occur in the second syllable of the two forms given here. See Appendix B.

*ranuka + Páatu* 'the day before the day before yesterday' (*Páatu* 'the day before yesterday')

*ranuti + Paayei + mána* 'the day after the day after tomorrow' (*Paayei + mána* 'the day after tomorrow')<sup>5</sup>

## TYPE II WORDS

*Affixes.* Type II affixes include possessive and plural indicators.

*Possessive.* For some person-number categories of possessor, Type II stems take distinct possessive affixes depending on the identity of the possessor and the syntactic position of the whole word, as follows: Type II stems that are not part of the subject constituent of a clause, but whose possessor is named by the subject, take *reflexive* possessive affixes. Type II stems that belong to primary constituent sets in clauses, that are heads of phrases that belong to primary constituent sets, or that are non-head constituents of phrases in any constituent set, take ORDINARY possessive affixes (unless they take those of the reflexive set). Type II stems that belong to secondary constituent sets in clauses, if they do not take reflexive possessive affixes, take the LOCATIVE possessive affix if the possessor is third singular.

The third singular ordinary possessive -*ya* has a second allomorph -*ma* that occurs only with the allomorph -*ma* of the pluralizer that goes with kinship terms and a few other terms with implications for social organization: *Piwaa + máama* 'his siblings'.

The indefinite *ra-* labels the stem it goes with as possessed, but is indefinite as to the identity of the possessor: *ráaPAA + rAA* 'somebody's arrow'. The specificative -*yari* denotes a relationship other than possession but is formally parallel to the other possessives: *Páye téwí + yari* 'a Turtle (*Páye*) Person (*téwí*)'.

<sup>5</sup> Progress through time is treated linguistically in much the same way as progress up a hill. The future is "higher" than the speaker, the past "lower". *ranuka + Páatu* contains the directional prefix *ka*-N1 'down'; *ranuti + Paayei + mána* contains *ti*-N1 'up'. The later of two events is *yee + táana* 'up-hill from' the earlier, the earlier *heetáana* 'downhill from' the later.

TABLE 3

*Type II Possessive Affixes*

Number	Singular			Plural	
Person	Ordinary	Locative	Reflexive	Reflexive	Ordinary
First	ne-			ta-	
Second	ʔa-				ze-
Third	-ya	-na		yu-	wa-
Indefinite	ra-				
Specificative	-yari				

In allocating phrases (Chapter 3) the indefinite and reflexive possessives do not occur; the other affixes mark the head of the phrase. The possessives (not including the specificative *-yari*) stand in cross reference with the modifier constituent of the phrase in regard to person and number.

*née netumíni* 'my money'

*PeekΛ Patumíni* 'your money'

*ziikée muu + núa tumínieya* 'the money of the one who just came'

*zápá tumíni + yaari* 'money made of paper'

In Type II words that are not in allocating phrases, possessive affixes have anaphoric reference.

*netumíni* 'my money'

*Patumíni* 'your money'

*tumínieya* 'his, her, its money'

*ratumíni* 'somebody's money'

*tumíni + yaari* 'the particular money we are concerned with'

*Plural.* Each pluralizer morph occurs with an arbitrary list of stems. Some stems may occur with two pluralizers in series, or with either of two pluralizers. The productive pluralizer is *-te*; it occurs with most recent borrowings from Spanish and with newly coined absolute stems. Other pluralizers are *-ri*, *-ci*, *-zi*, *-ma* (kinship terms), *-ciizi*, *-riizi*, and a few forms with stem reduplication or stem replacement. The plural suffix follows the stem, and possessive suffixes (*-ya* and *-yari*) follow the plural. Examples of plural forms follow. Hyphens indicate morpheme division.

*-te*: *záari-te* 'pots', *máakuu-te* 'mangoes', *ne- ʔakáa-te* 'my legs', *haráarú-te* 'plows' (Spanish *arado*), *záa + riu-te* 'radios' (Spanish *radio*), *te-ʔuu + tΛ-wá-me-te* 'writers, writing instruments, pencils, secretaries'

-ri: *qázú-ri* 'herons', *caa+tú-ri* 'saints' (Spanish *santo*), *ca+pá-ri* 'fresh-water bass (?)', *tui+zú-ri* 'pigs', *ṖAA+pá-ri* 'skunks', *mee+tá-ri* 'raccoons', *tekAA-ri* 'gray squirrels', *paa+tú-ri* 'ducks' (Spanish *pato*), *waa+kána-ri* 'chickens, domestic or wild', *puuzúu-ri* 'donkeys' (Spanish *burro*), *Pai+ná-ri* 'crayfish'

-ci: *máayé-ci* 'mountain lions', *káuzai-ci* 'foxes', *mázá-ci* 'deer', *nai+ká-ci* 'mice, rats', *Paa+tée-ci* 'lice', *tee+pA-ci* 'fleas', *ziurii-ci* 'tadpoles', *záyé-ci* 'rattlesnakes'

-zi: *téi+wárii-zi* 'mestizos', *tAwée-zi* 'jaguars', *yaawi-zi* 'coyotes', *wii+rAkA-zi* 'turkey vultures', *Páruu-zi* 'turkeys, wild or tame', *wéurai-zi* 'mourning doves', *wii+kíi-zi* 'birds', *waa+kArii-zi* 'Tepehuans (tribal group that lives north of the Huichol area)'

-ma (Grimes and Grimes 1962): *ne-Piwá-ma* 'my siblings', *ne-taataáci-ma* 'my uncles' *ne-maree+-má* 'my relatives', *taa+-tewarii-ma* 'our grandfathers' (both kin and a subclassification of deities), *ne-tewaa+má* 'my domestic animals', *ta-kuu+cí+-yári-ma* 'our owners, masters'

-ciizi: *Ṗaráawé+-ciizi* 'wolves', *máa+ráika+-ciizi* 'black vultures', *períku+-ciizi* 'parrots' (Spanish *perico*), *kaa+wáayá+-ciizi* 'horses' (Spanish *caballo*), *múurá+-ciizi* 'mules' (Spanish *mula*), *haaréerú+-ciizi* 'traveling merchants' (Spanish *arriero*), *huriyú+-ciizi* 'Jews' (Spanish *Judíos*, folk tale characters who slew the Virgin on Good Friday), *zinúurá+-ciizi* 'mestizo women' (Spanish *señora*), *tuu+pírí+-ciizi* 'policemen' (Spanish *topil*), *maariye+túmá+-ciizi* 'ceremonial officials' (Spanish *mayordomo*)

-riizi: *táciu+-riizi* 'rabbits', *háica+-riizi* 'coati-mundis'

Reduplicated stem: *ne-máa-má+ṖAA-ma* 'my grandsons, woman speaking' (*maṖAA*), *ne-qee+-qé-ma* 'siblings of my spouse who are not of my sex, spouses (who are not of my sex) of my siblings' (*qé*), *ne-tee-téi-ma* 'sisters of my parents' (*téi*)

Stem change: *waaká+-ciizi* 'cows, cattle' (*waa+kázi* 'cow', Spanish *vaca*), *cai+kA-ri* 'dogs' (*cAAKA* 'dog'), *teA+té-ri* 'people, Indians' (*téwí* 'person, Indian'), *tAARI* 'children' (*númuuci* 'child')

Two pluralizers (exclusive of reduplication): *Piwáa-má-riizi* 'brethren' (*Piwaa+-máa-ma* 'his brothers'), *tewarii-cí-ma* 'grandchildren' (*tewarii-ma* 'grandchildren'), *Pai+cári+-tee-zi* 'deities that live in Aisari' (*Pai+cári*), *ṖAArAA+-tée-zi* 'ancestral spirits that appear as rock crystals and are kept in a bundle tied to an arrow' (*ṖAArAA*), *tuu+pírí+-ciizi+-máa-ma* 'policemen or messengers attached to his office, under his control' (*tuu+pírí+-ciizi* policeman, messengers)

Alternate forms: *kAyée-te/kAyée-zi* 'sticks, trees, poles'

*Stems.* Type II stems include single morphemes and derived stems of at least four types; there may be others.

*Compounds.* *kii* 'house', Type II + *téni* 'mouth', Type II, give compound *kii+ténie* 'doorway, window opening', Type II. *Ṗaté-ci* 'lice', Type II + *píi+-wá-me* 'depriver', absolute transform of Type II, give compound *Ṗatéeci+píi+wáme* 'device for removing lice = comb', Type II absolute, in which the first element is semantically the object of the verbal stem that underlies the second; compare English *bartender*, *woodcutter*.

*Infinitives.* Most Type I stems except adjectival stems and a few others combine with a stem nominalizer *-ri/-riya/-ya/-yari/-zi/-ci* or others according to the stem, to give Type II stems. *-kúkú* 'be hot like chile', Type I + *-ri* stem nominalizer, give infinitive *kúu+kúri* 'chile'. Most verbs in McIntosh y Grimes 1954 are listed under this infinitive form because it can occur without prefixes. It was this form that Diguët took to be the base form of verbs (Chapter 1).

*Pi-stems.* A few Type I stems plus a prefix *Pi-* give Type II stems. *Pi-* + *-qazi* 'be ripe', Type I, gives *Piqaazi* 'fruit'.

*Absolutes.* Most Type I stems that do not form infinitives, as well as some that do, occur in the form they would have if they were in an absolute phrasal transform described in Chapter 5, with base and reflexive object affixes attached, but with no subject affixes. *-puutaa* 'write', Type I + distributive + habitative + *-me* absolute nominalizer (which may or may not be the same morpheme as the marker of the absolute phrasal transform; see the discussion of Type I affix class C, general modes, earlier in this chapter) give *ti-puu+-ta-wá-me* 'writer, writing instrument, community secretary', which has as plural (*te-puu+-ta-wá-me-te* with plural number of the distributive (Appendix B) as first morpheme and the ordinary Type II pluralizer as last morpheme.

*Other derivatives.* *Puu+kii* 'man' + *-yari* derivational suffix (not the specificative *-yari* discussed under possessives; both may occur in the same word) give *Puukí+-yáari* 'elder, dominant male of a household cluster' (Grimes and Grimes 1962, Grimes 1961).

### TYPE III WORDS

*Affixes.* Type III affixes mark case, gender-number, and person.

Five case forms are distinguished: NOMINATIVE, ACCUSATIVE, TEMPORAL, EXTENSIVE, and ZERO. Nominative forms belong to subject constituent sets in clauses, accusative to object and complement constituent sets, temporal to time constituent sets, and extensive to extent constituent sets. Zero case forms occur in phrases and in lists.

Type III stems, except for *zewí* 'one' and *hii+páta* 'several, others', may occur with prefixes *ta-* 'first person animate plural' and *yu-* 'non-first person animate plural' (Compare the Type II reflexive possessives and the Type I reflexive object indicators). Type III stems that have no person indicator are inanimate except for *zewí* 'one', which is always singular and may be either animate or inanimate, and *hii+páta* 'several, others', which is always plural and may be either animate or inanimate.

Table 4 gives paradigms of all Type III stems, some of which are irregular in inflection. The zero case form is listed first, inasmuch as for numerals it is the form used in counting and as a name-form.

*Stems.* All Type III stems are given in their inflected forms in the following table. 'Seven' through 'nine' are formed from 'two' through 'four' by addition of one of the freely variant forms of the prefix *pataa-/ta-* 'plus five'. 'Ten' is a Type IV word.

TABLE 4

*Type III Word Paradigms*

CASE	Non-pluralized	1 pl animate	2-3 pl animate
Zero	zewí/zei 'one'		
Nom	zewítá	---	---
Acc	zéime	---	---
Temp	(héiwa)		
Ext	zeΛ + káa		
Zero	huuta 'two'		
Nom	huu + táta	tahuu + táta	yuhuu + táta
Acc	huu + táme	tahuu + táme	yuhuu + táme
Temp	huu + tárieka		
Ext	huu + tákka		
Zero	haika 'three'		
Nom	hai + káta	tahai + káta	yuhai + káta
Acc	hai + káme	tahai + káme	yuhai + káme
Temp	hai + ríeka		
Ext	hai + kákka		
Zero	nauka 'four'		
Nom	nau + káta	tanau + káta	yunau + káta
Acc	nau + káme	tanau + káme	yunau + káme
Temp	náu + ríeka		
Ext	nau + kákka		
Zero	?auzáwi 'five'		
Nom	?au + záwita	ta?au + záwita	yu?au + záwita
Acc	?au + záme/ ?au + záwime	ta?au + záme/ ta?au + záwime	yu?au + záme/ yu?au + záwime
Temp	?au + záwírieka		
Ext	?au + zámeza		
Zero	?ataa + zewí 'six'		
Nom	?ataa + zewítá	---	?ata + yuu + zewítá
Acc	?ataa + zéime	---	?ata + yuu + zéwime
Temp	?ataa + zéwí + ríeka		
Ext	?ataa + zéi + méza		

CASE	Non-pluralized	1 pl animate	2-3 pl animate
Zero	ʔataa + húuta 'seven'		
Nom	ʔataa + huu + táta	---	ʔata + yuuhuu + táta
Acc	ʔataa + huu + táme	---	ʔata + yuuhuu + táme
Temp	ʔataa + huutárieke		
Ext	ʔataa + huutámeza		
Zero	ʔataa + háika 'eight'		
Nom	ʔataa + hai + káta	---	ʔata + yuhai + káta
Acc	ʔataa + hai + káme	---	ʔata + yuhai + káme
Temp	ʔataa + hái + riéke		
Ext	ʔataa + hai + kámeza		
Zero	ʔataa + náuka 'nine'		
Nom	ʔataa + náu + káta	---	ʔataa + yúnáu + káta
Acc	ʔataa + náu + káme	---	ʔataa + yúnáu + káme
Temp	ʔataa + náurieke		
Ext	ʔataa + náu + kámeza		
Zero	nái 'all, every'	---	yúnái
Nom	náita	tanáita	yunáita
Acc	náime	tanáime	yunáime
Temp	nái + cárie 'everywhere' (locative)		
Ext	---		
Zero	--- 'some, other'		
Nom	hii + páta	---	---
Acc	hii + páme	---	---
Zero	--- 'each one severally'		
Nom	zee + zúita	taazee + zúita	yuuzee + zúita
Acc	zee + zúime	taazee + zúime	yuuzee + zúime
Zero	--- 'alone, by itself'		
Nom	hakkáata	taa + hakkáata/ taa + hakkáate	yahakkáata/ yahakkáate
Acc	hakkáme	taa + hakkáme	yahakkáme
Zero	máire 'much, many in number'		
Nom	mairéeta	tamli + réeta	yumli + réeta
Acc	mli + réme	taa + mairéme	yumli + réme
Temp	---		
Ext	máiza		

CASE	Non-pluralized	1 pl animate	2-3 pl animate
Zero	wałkáwa/wałká 'much, many in quantity'		
Nom	wał + káwátł	tawał + káwátł	yuwał + káwátł
Acc	wał + káwáme	tawał + káwáme	yuwał + káwáme
Zero	--- 'how much? how many?' (interrogative)		
Nom	kee + páłme	kee + tapáł + méta/ kéé + táapáłmete	kéeyuu + páł + méta keyu + páłmete
Acc	kee + páłme	kee + tapáł + méme/ kee + tapáłme	kee + yuupáł + méme/ keyuu + páłme
	(also keepáł + méte inanimate plural, nom and acc)		
Ext	kee + páł + méza		

#### TYPE IV WORDS

Words that are not inflected are Type IV words. Most of them are monomorphemic, but a number, principally those that are substitutes, are bimorphemic.

<i>Pii-kł</i> , <i>młł-kł</i>	third person pronouns, proximal and distal
<i>Pii-me</i> , <i>młł-me</i>	third plural pronouns, proximal and distal
<i>Pi-yá</i>	third person pronoun
<i>Pé-na</i> , <i>má-na</i>	locative proadverbs, proximal and distal
<i>Pú-wa</i> , <i>mú-wa</i>	locative adverbs, proximal and distal
<i>Puu + -má</i>	locative adverb, medial

#### POSTFIXES

A number of suffixes occur with words of all classes. They follow the last suffix (if any) of the word to which they are attached. They are called POSTFIXES to distinguish them from suffixes that are specific for a particular word type. Postfixes include enclitics (Chapter 3) and emphatic postfixes.

The emphatic postfixes are quotative *-niu*, *-waaniu*, and *-zeeniu* 'the statement I am uttering originated with someone else', *-táa* 'also', and the general emphatics *-ríi*, *-cłł*, *-zł*, *-tł*, *-cłetł*, *-tłkaaku*, *-rł*. Several emphatic postfixes may occur in a word with no apparent order restrictions among them; but all follow any suffix or enclitic that is present. The emphatic postfixes differ from postposed modifiers (Chapter 3) and emphatic adverbs (Chapter 2, "Word Classes") in that they never occur as free forms.

## CHAPTER 3

### PHRASES

Grammatical forms that can be substituted for single words in clauses are PHRASES. Strictly speaking, then, a word is a minimal phrase; the term is generally used here, however, to apply to phrases of more than one word.

#### PHRASE CLASSES

Phrases are classified according to the constituent sets they belong to in clauses.

##### NOMINALS

Any grammatical form that belongs to a subject, object, or non-quotative complement constituent set in a clause is a NOMINAL. Nominals include single nouns (*téwí* 'person'), pronouns (*máaká* 'that one'), appositive phrases with nominals as constituents (*máaká téwí* 'that person'), attributive phrases with nominal heads (*téwí zeikáa*, 'just a person'), additive phrases with nominal constituents (*téwí téi + wári kawáaya* 'an Indian, a mestizo, and a horse;'), and phrasal transforms of clauses (*ziikée muu + núa* 'the one who just arrived').

##### VERBALS

Any grammatical form that belongs to a nuclear constituent set is a VERBAL. Verbals include single verbs (*nekani + núani* 'I arrived'), appositive phrases with verbals as constituents (*nekani + núani nekaníu + táa + yeráni* 'I arrived, I made my abode'), attributive phrases with preposed or postposed modifiers and verbal heads (*nekani + núani zeikáa* 'I arrived, that's all'), additive phrases with verbal constituents (*nekani + núani nekaníi + zéiya nekanée + piíwa* 'I came, I saw him, I conquered him'), and developmental phrases (*tíu + yéikaatá náayáa + ni* 'he got under way').

##### ADVERBIALS

Any grammatical form that belongs to a secondary constituent set in a clause is an ADVERBIAL. Adverbials include single adverbs (*túuka* 'at noon'), locative nouns (*tuapúri* 'in Santa Catarina'), *piwáa + tame* 'at the end of the line'), directive nouns (*tahei + máa* 'above us'), proadverbs (*mána* 'there'), appositive phrases with adverbials as con-

stituents (*mána tahei*+*máa* 'there above us'), attributive phrases with preposed or postposed modifiers and adverbial heads (*mána zeikáa* 'only there'), additive phrases with adverbial constituents (*hei*+*mána hee*+*táana* 'above and below it'), and directive phrases (*Píiká yemúri*+*heimáa* 'above this hill'). Specific secondary constituent sets include special types of phrases. Location, time, manner, and extent constituent sets include secondary relative transforms of clauses (*hakee muu*+*yéikaakai* 'where he was'). Location, time, and extent constituent sets include locative and directive nouns, or nominals with locative and directive nouns as head (*tuapúri* 'in Santa Catarina', *máaká túu*+*kári* 'on that day'). Emphasis constituent sets include additive phrases with emphatic adverbs as constituents (*táqée tizáala* 'definitely not'). Instrument-purpose and association constituent sets include only directive phrases with directors *-ká* 'by means of' and *-mátá* 'together with' respectively, or by the corresponding directive nouns *káa*+*mána* 'by means of it' and *haamaa*+*táana* 'together with it': *zéime nawázaká* 'by means of another knife'.

### QUOTATIONALS

Any grammatical form that belongs to the complement constituent set in quotative complemented or quotative transitive clauses is a QUOTATIONAL. Quotationals include any quoted utterance in the language: *káuzai niu*+*táyani* "'Boo!" he said [literally, "Fox!"]', *tákái neníi*+*zéiya Pakawáa<sup>3</sup>ya<sup>1</sup>* # *Pakíi*+*yéetáa réeyáa*+*zíme hiiká kauka múwa pehéitáa*+*zéiya niu*+*ta<sup>1</sup>yani* # "'I saw your horse yesterday. He's probably right uphill from your ranch today; perhaps you'll find him there," he said'. They also include procomplements (*mápáa niu*+*táyani* 'he said that'), appositive phrases with quotationals as constituents (*niu*+*táyani* *mápáa káuzai* 'he said this: "Boo!"'), and additive phrases with quotationals as constituents (*tízáa háa niu*+*táyani* 'he said both "yes" and "no"').

### PHRASE PATTERNS

The patterns that underlie phrases are not always restricted to phrases of a particular class. For this reason phrase patterns are described independently of phrase classes.

Most phrase patterns are CENTERED (Hockett 1958); some constituent is substitutable for the phrase in any environment. One phrase pattern, the directive, is UNCENTERED; environments exist in which no constituent is substitutable for the phrase.<sup>1</sup>

### CENTERED PHRASES

*Appositive.* Forms of the same word class or phrase class that have the same referent are placed in sequence; any constituent of the resulting appositive phrase is substitut-

<sup>1</sup> There are environments in which the axis constituent, if a locative nominal, is substitutable for the phrase: compare *yuu+kíepai pee*+*táa* and *yuu+kíe pee*+*táa*, both 'he went home'. Directive phrases are classified as uncentered because there are some environments in which substitution of this type cannot be made.

able for the whole phrase. The appositive phrase belongs to the same phrase class as any of its constituents, which may themselves be phrases of more than one word.

Later constituents of an appositive phrase make earlier constituents progressively more specific in reference.

*téwí* 'person, Indian' (singular animate noun)

*téwí wána méekaa + téi* 'the person who used to live there', adding a phrasal transform (Chapter 5)

*téwí wána méekaa + téi Paṛiwá* 'the person who used to live there; namely, your sibling'

*téwí wána méekaa + téi Paṛiwá PaíkA raa + kúucta méeku + yéizaa* 'the person who used to live there; namely, your sibling, the one who went to the coast and back last year'

*téwí wána méekaa + téi Paṛiwá PaíkA raa + kúucta méeku + yéizaa mAAkA* 'the person who used to live there; namely, your sibling, the one who went to the coast and back last year, that one'

A quantitative pronoun in an appositive phrase is either in the case in which it would ordinarily appear if it were the only constituent, or in the zero case: *1mAAkA 2míití + wéewi 3máK 4náí* or *1mAAkA 2míití + wéewi 3máK 4náita* '3that which 1he 2made, 4all of it' (as subject of clause).

A substitute at the end of an appositive phrase recapitulates the entire phrase, as in the final example of the first set of examples in this section. Such a substitute is a SUMMARIZING substitute; it is frequently preceded by a nonfinal intonation (Chapter 6), occasionally by a final intonation, or is split from the body of the main appositive phrase by the splitting transformation (Chapter 5): *téwí wána méekaa + téi teníu + zéiya mAAkA* 'we saw the person who used to live there, that one (*mAAkA*)'.

*Attributive.* In a number of phrase patterns one and only one constituent (the HEAD) can be substituted for the whole phrase. Other constituents (MODIFIERS) precede or follow the head; the entire construction is ATTRIBUTIVE. Attributive phrase patterns are distinguished by order of constituents, type of construction marker (if any), and constituent classes.

Any POSTPOSED attributive particle may occur as modifier following a head of any class or following a directive phrase. Postposed attributive particles are *Paku* 'attention, hey!', *kuzi* 'still, yet', *núcu* 'or, as an additional possibility', *pAAta* 'in contrast, on the other hand', *yakAtaA* 'more or less, so to speak', *zeikaa* 'only, just'.

*pepAka + néci + heekú + naa + kízA Paku* 'hey, you didn't meet me!'

*1hiikAA 2kúzi 3Pukaní + zuawéní* '3there is 1-2still 3some'

*1néi + káame 2núcu 3titéwaaka* '2or 3shall she be called 1Neicame 2instead?'

*1mAAkA 2pÁta 3PAAra 4múzuuri + mániri* '4he put blood on 1that 3arrow 2(rather than the other one)'

<sub>1</sub>támé <sub>2</sub>marapaa+káté <sub>3</sub>weta+téni+hāaweeni <sub>4</sub>yakātātā ‘<sub>2</sub>the chanters (religious practitioners) <sub>3</sub>tell <sub>1</sub>us (this), <sub>4</sub>more or less’  
<sub>1</sub>mpáā <sub>2</sub>táame+zeeniū <sub>3</sub>teniū+térāwa+rāwaani <sub>4</sub>zeikāā ‘<sub>1</sub>thus <sub>2</sub>we <sub>3</sub>get named; <sub>4</sub>that’s all there is to it’

Five PREPOSED attributive particles can have as head a word or phrase of any class, or an entire clause. They are *kumu* ‘about, approximately, more or less, like’ (Spanish *como*), *Pii* ‘and, for example’ (Spanish *y*; rare), *yaa* ‘or, as an added possibility’ (sometimes in a coordinating construction *yaa* X *yaa* Y ‘either X or Y’ (Spanish *ya . . . ya . . .*), *PA+luégo* ‘plus as well’ (Spanish *luego*, pronounced by most speakers with *l* and *g*, which are transliterated as *r* and *k* in most other loans by most Huichol), *mé* ‘or, on the other hand’.

<sub>1</sub>Pariké+māka <sub>2</sub>putinúiwa+rí <sub>3</sub>kúmu <sub>4</sub>tinéi+kákaku ‘<sub>2</sub>he is born <sub>1</sub>later, <sub>3</sub>about <sub>4</sub>when the maize comes up’  
<sub>1</sub>putinúiwa <sub>2</sub>Pii <sub>3</sub>Parirí <sub>4</sub>kumu <sub>5</sub>weení+káaku ‘<sub>1</sub>he is born <sub>2</sub>for example <sub>3</sub>then, <sub>4</sub>about <sub>5</sub>when the maize grows up’  
yáacā néptāa+zacúuníkā ‘or else I’m right’  
<sub>1</sub>tā+kíema+waniū <sub>2</sub>PA+lúego+waniū <sub>3</sub>wee+rémé+waniū . . . ‘(their names are) <sub>1</sub>Tüquiema, <sub>2</sub>and — let’s see — <sub>3</sub>Vereme too . . .’  
<sub>1</sub>mé+<sub>2</sub>Páana <sub>3</sub>туруима <sub>4</sub>rāyāa+nīi+waniū ‘<sub>1</sub>or else (if she is born) <sub>2</sub>then <sub>4</sub>she will be <sub>3</sub>Turuima’

Other preposed attributives are rare. *Pacta* ‘up, until’ (Spanish *hasta*) takes as head an adverbial of extent: *Pacta kumu Pauzāme+ci* ‘up to about five times’. *káci* ‘almost, more or less’ (Spanish *casi*) is attested only in the parenthetic <sub>1</sub>kúmu <sub>2</sub>káci <sub>3</sub>hikā ātaPiqáicí <sub>4</sub>tāa+niuti+téni ‘<sub>1-2</sub>at about where :we are <sub>3</sub>right now <sub>4</sub>in our agricultural cycle’. All these proposed attributives except *mé* can be linked with Spanish forms from which they may have been borrowed. It would be interesting to know to what extent these forms and others like them occur in the speech of other people. It is possible that the preposed attributives as a class are so deeply imbedded in Huichol that even the most monolingual use them as they use other assimilated loans from Spanish.

The locative adverb *múwa* ‘there’ and the temporal proadverb *Pána* ‘then’ have been observed before nouns in what is apparently a modifier-head construction analogous to the construction with preposed attributives.

*múwa wiyéte* ‘the mountain spurs that are there’  
*Pána waawaa+PAāte* ‘the temple guardians of that time’

Any member of a locative constituent set can be a preposed attributive to the noun *mieme* ‘one coming from’: *waana mieme* ‘one from there’, *tákai teméetāa+Pázāapai*

*míeme* 'one from the place where we arrived yesterday'. See also the discussion of partitive phrases below.

ALLOCATING phrases have as head a noun marked by one of the ordinary or locative possessive affixes or the specificative *-yari*, and as modifier a nominal or a number in the zero case (A number and an animate plural noun are combined into an appositive phrase rather than an allocating phrase with *-yari*:  ${}_1yu\beta au + z\lambda me\ {}_2yuniwémá$  'her five  ${}_2$ children'.) The possessive affixes stand in cross-reference with the modifying nominal; specificative *-yari* does not. The head noun is allocated to a possessor of a particular person-number category (with possessive affix), or to a characteristic, including quantity (with specificative *-yari*).

*née nePiwaama* 'my siblings'

*Peek $\lambda$  PaPiwaama* 'your siblings'

*wáni Piwaa + máama* 'John's siblings'

${}_1waa + rúpí + taari\ {}_2taPiwaama$  'the siblings of  ${}_1$ us inhabitants of Guadalupe Ocotán'

*zéeme zePiwaama* 'you-all's siblings'

${}_1téi + wáriizi\ {}_2waPiwaama$  'the siblings of  ${}_1$ the mestizos'

${}_1tee + téé\ {}_2kíi + yári$  'a house  ${}_1$ made of stone'

${}_1haika\ {}_2kíi + yári$  'three  ${}_2$ houses'

In a NUMBER-NOUN construction a number in the zero case as modifier precedes a locative noun as head in an adverb phrase that belongs to the extent constituent set: *haika mécéeri* 'during the space of three months'.

In a PARTITIVE construction a directive phrase with *-cie* 'in' as director and a nominal as axis, or an allocating phrase with the directive noun *hee + cíena* 'in it' as head, as a unit modifies a nominal as head. The modifier denotes the field from which the individual or portion denoted by the head is singled out:  ${}_1kaaká\lambda + yáriizi\ {}_2wáhee + cie\ {}_3m\lambda\lambda k\lambda$  'that particular one  ${}_2$ of  ${}_1$ the deities'. The head constituent *míeme* 'coming from' used in this construction can be partitive 'one from the field of possibilities', or it can mean idiomatically 'for, to the advantage of':  $kaaká\lambda + yáriizi\ wáhee + cie\ míeme$  'some one of the deities' or 'for the benefit of the deities'.

*Additive.* In additive phrases forms of the same word class or phrase class that have different referents are placed in sequence. Any two or more constituents of the resulting phrase are substitutable for the whole phrase. The additive phrase belongs to the same form class as any of its constituents, which may themselves be phrases. An additive phrase of singular nominals is plural, as over against an appositive phrase of singular nominals, which is grammatically singular. An additive phrase is animate in gender if one or more of its constituents is animate; otherwise it is inanimate. Additive and appositive phrases that consist of plural nominals can be distinguished only by reference to the extended context. Additive phrases are less frequent than appositives.

${}_1m\acute{a}k\lambda\alpha\ \mathbf{{}_2t\acute{a}m\alpha\alpha\mathbf{\acute{a}}\alpha + k\acute{a}m\acute{e} + y\alpha\mathbf{r}\mathbf{i}\ \mathbf{{}_3k\acute{a}u\mathbf{y}\acute{u} + m\alpha\mathbf{a}r\mathbf{i}e\ \mathbf{{}_4w\mathbf{e}y\mathbf{u}\mathbf{\acute{p}}e}n\mathbf{i}\mathbf{\acute{e}}\mathbf{\lambda}\ \mathbf{{}_5m\acute{a}k\mathbf{\lambda}\ \mathbf{{}_6m\mathbf{\acute{p}}\mathbf{\acute{a}}v\ \mathbf{{}_7w\mathbf{e}m\mathbf{\acute{t}}\mathbf{\acute{a}}t\mathbf{\acute{e}}\mathbf{\acute{p}}\mathbf{u} + t\acute{e}r\mathbf{\lambda}\mathbf{w}\mathbf{\acute{a}} + r\mathbf{\acute{i}} - \mathbf{{}_8m\acute{a}k\mathbf{\lambda}}$  'that  $\mathbf{{}_2}$ chanter of ours and  $\mathbf{{}_3}$ Cauyumarie  $\mathbf{{}_4}$ consult with each other,  $\mathbf{{}_5}$ they do, and  $\mathbf{{}_7}$ give us  $\mathbf{{}_6}$ these  $\mathbf{{}_8}$ names,  $\mathbf{{}_8}$ they do' (1-2 are a singular appositive phrase; it is itself one constituent of an additive phrase of which 3 [also singular] is the other constituent; the resulting plural additive phrase, whose number is shown by the plural subject cross-reference of verbs 4 and 7, is in an appositive construction with split summarizing substitutes 5 and 8. The entire phrase is the subject constituent; the phrase and each of its constituents are nominals.)

${}_1\mathbf{\acute{p}u\mathbf{z}\mathbf{\acute{a}}\mathbf{\acute{p}}\mathbf{\acute{a}}\ \mathbf{{}_2w\acute{a}ar\mathbf{i}e}$  'some time in the future', literally ' $\mathbf{{}_1}$ tomorrow and  $\mathbf{{}_2}$ the day after tomorrow'

Constituents of the same form class are combined in an additive type of construction into a LIST. List phrases differ from simple additive phrases in one or both of two ways: (1) The postfix *-rīi* is added to the last word of each list constituent. (2) Each list constituent is accompanied by the intonation 2 with the items when presented in rapid succession, or by 31 when they are presented with intervening pauses.

$w\acute{a}a + k\acute{a}na + r\mathbf{i}^2\ |\ \mathbf{\acute{p}\acute{a}ar\acute{u} + r\mathbf{i}^2\ \# \ \acute{p}\acute{a}atu + r\mathbf{i}^2\ \# \ t\acute{u}izu + r\mathbf{i}^2\ \# \ t\acute{u}uru + r\mathbf{i}^2\ \#}$  'a chicken, a turkey, a duck, a pig, and a bull'

Numbers from eleven up are expressed by COMPLEX NUMBER phrases. Numbers from one through nine are Type III words; *tamámata* 'ten' (possibly related to *tamaa* + *máa* 'our hands') is a Type IV word. 'Eleven' through 'nineteen' are complex number phrases with *tamámata* 'ten', the directive noun *hei* + *máná* 'on top of it', and the basic numbers inflected according to the syntactic position of the whole phrase: *tamámata heimana húuta* 'ten on top of two = twelve, zero case'. 'Twenty' is an allocating phrase (with *-yari* that has zero case *zei* 'one' as modifier and *téwí* 'person' as head; *zei téwí* + *yari* 'one person = twenty'. Higher numbers are formed within this vigesimal-decimal framework: *haika téwí* + *yari heimana tamámata heimana zewí* 'three twenties on top of ten on top of one =  $(3 \times 20) + 10 + 1 = 60 + 10 + 1 = 71$ , zero case'. *cientu* 'a hundred' (Spanish *ciento*) is used in a manner analogous to *téwí*: *haika cientú* + *yaari heimana nauka téwí* + *yari heimana tamámata heimana Patanáu* + *káme* 'three hundreds on top of four twenties on top of ten on top of nine =  $(3 \times 100) + (4 \times 20) + 10 + (5 + 4) = 300 + 80 + 10 + 9 = 399$ , accusative case'. *míiri* 'a thousand' (Spanish *mil*) is used in the same way, but is extremely rare: *zei míiri* + *yaari heimana Patanáuka cientú* + *yaari heimana huuta téwí* + *yari heimana tamámata heimana Patanáuka wíi* + *yári* 'one thousand plus nine hundred plus two twenties plus ten plus nine years = one thousand nine hundred and fifty-nine years'. A similar but highly specialized system used in counting money is described in Grimes (1960).

*Developmental.* A phrase denoting change of state or inception of action has as first constituent a verb with the conjunct mode indicator *-tA* 'proximate concurrent conjunct mode' and as second constituent a verb built on some form of the stem *-yaa*

'go'; the subjects of the two verbs agree in person and number. A developmental phrase belongs to the nuclear constituent set of a clause, and combines with any other constituents that a clause with only the first verb as nucleus would take; i. e. ,if the first verb is transitive, so is the phrase, even though *-yaa* is not itself transitive.<sup>2</sup>

*ciará + yéetá nááyá + ni* 'it turned green'

*we?i?izá + rié + taweetá mená + káane* 'they got so that they were looking intently at it'

#### DIRECTIVE (UNCENTERED) PHRASES

A single pattern underlies all uncentered phrases. There are two obligatory constituents, the *AXIS* and the *DIRECTOR*.

*Axis.* The axis constituent in a directive phrase may be any animate singular or inanimate nominal, but not an animate plural nominal. Animate plurals do, however, occur as modifiers of directive nouns in the allocation construction already described, and an allocating phrase with a directive noun as head has the same privileges of occurrence in clauses as does a directive phrase with an enclitic that matches the directive noun.

*Director.* Enclitics belong to the director constituent of directive phrases. They are always bound. They occur as the first postfix (Chapter 2), attached to the final word (or, repeated, to several words) of the axis constituent after its last suffix and before any quotative or emphatic postfixes.

*Peeci + péme kára + ráa + cie* 'in a little gourd bowl'

*Peeci + péme + cieniu kára + ráa + cie* 'in a little gourd bowl' (locative enclitic *-cie* on both words of the axis, quotative *-niu* on first occurrence of *-cie*)

Almost every enclitic matches a directive noun. The directive noun by itself or an allocating phrase of which it is the head is substitutable for a directive phrase with the corresponding enclitic as director. Two of the enclitics are matched by *LOCATIVE-DIRECTIVE* nouns (the only ones in the language), which like locative nouns may belong not only to secondary but also to primary constituent sets, and which like directive nouns are obligatorily possessed. Enclitics are listed here followed by the corresponding directive nouns; the latter are given with the third singular locative possessive *-na*, translated in the gloss as 'he' or 'him'.

<sup>2</sup> Alternatively, a clause in its proximate concurrent transform stands in a unique subordinate relationship to a main clause with *-yaa* 'go' as sole constituent. This analysis, however, does not reflect the close-knit relationship of the two verbs in the phrase as well as does the analysis given in the text; it does not distinguish a developmental phrase from an ordinary hypotactic sentence base (Chapter 6).

- +*cáata*, *wacáata* (directive noun takes plural possessives only) 'among, mixed through; among them'
- +*cíe*, *hee*+*cíena* 'on, in, at; on him'
- cAA*, *hee*+*cAana* 'where (a person) is, with (a person); where he is' (cf. French *chez*)
- +*hii*+*zAapa*, *wahii*+*zAapa* (directive noun takes plural possessives only) 'in the middle of, to the east (in ceremonial contexts); in their midst'
- hÁzi*, *hÁziena* (locative-directive noun, cf. *ne-hÁzi* 'my eye') 'in front of, before; in front of him'
- kA*, *kAA*+*mána* (but with third plural possessive the directive noun is *wáakA*, and with reflexive, *yAAkAA*+*mána*) 'by means of, on account of, during (with axis denoting a time span, cf. *tAkáarikA* 'during the night'); by means of him, through him'
- maata*, *haamaa*+*tAana* 'together with; with him'
- +*heimáa*, *hei*+*mána* 'above, over, on top of, uphill from; above him'
- pa* 'immersed in, as in a liquid', *hee*+*pána* 'toward him'
- pai* (no matching directive noun) 'at the place of, at'
- paA*, *heepáana* 'like similar to, as; like him'
- ta*, *heetáana* 'inside, on; inside it'
- téecta*, *téec*+*taana* 'along the edge of; along its edge'
- tAA/-heetAa* (free variants?), *heetAana* 'under, underneath, on the downhill side of, at the foot of, under it'
- +*PútAA*, *Puu*+*tAana* 'along the center line of, along the course or trajectory of; along it (a stream, for example, but not with reference to the banks, which would be expressed by *-téecta*)'
- +*PútAma*, *Puu*+*tAmáana* 'following along behind, but in the same group, as of a party on a trail; behind him on the trail'
- +*wári*, *wáriena* (locative-directive noun, cf. *ne-wári* 'my back') 'behind, at the back of; behind him in position'
- yee*+*táa*, *yee*+*taana* 'immediately above, immediately uphill from; just above him'

Examples of directive phrases and matching allocating phrases with directive nouns as head follow:

- <sub>1</sub>*PíikA* <sub>2</sub>*kucíirakA* 'by means of <sub>1</sub>this <sub>2</sub>machete' inanimate axis, enclitic *-kA* 'by means of'
- <sub>1</sub>*PíikA* <sub>2</sub>*tuu*+*píiri*+*ciizi* <sub>3</sub>*waakA* 'by means of <sub>1</sub>these <sub>2</sub>policemen' animate plural modifier, head 3 pl possessive form of directive noun *kAA*+*mána* 'by means of X'
- nePiwáacAA* 'at my sibling's animate singular axis, enclitic *-cAA* 'where so-and-so is'
- nePiwaama* *wahéccAA* 'at my siblings' animate plural modifier, head 3 pl possessive form of directive noun *hee*+*cAana* 'where X is'

The enclitic *-pai* 'at the place of, at' also occurs with an adverb, proadverb, or directive phrase as axis; its meaning is then redundant with that of the axis.

*mána, mána + pai* 'there'

*hákee, hákéepai* 'where?'

*hiikΛ, hiikΛ + pai* 'now, nowadays'

*Ṗáana, Ṗáanaa + pai* 'then'

*haiwii + tΛΛri + cáata, haiwii + tΛΛri + cáata + pai* 'among the clouds (*haiwii + tΛΛri*)'

#### TRANSFORMATIONALLY DERIVED PHRASES

Some of the grammatical forms that are substitutable for single words in clauses are themselves more like clauses in their internal structure than they are like phrases of the types just described. It is descriptively convenient to treat their clause-like aspects in the general description of clauses, then to consider the corresponding phrases as transforms. A phrase that has the internal structure of a clause is a PHRASAL TRANSFORM (Chapter 5). Phrasal transforms are nominals in their phrase-class membership.

## CHAPTER 4

### CLAUSES

A clause in Huichol is either (1) a constitute with a verbal NUCLEUS in construction with one or more other constituents, or (2) a grammatical form which in its privileges of occurrence is equivalent to a clause of the first kind.<sup>1</sup> Clause constructions differ from one another primarily in the constituent sets that participate in them.

Some clauses are related to others in a particular way; as Harris puts it, "the difference between any two constructions which are satisfied by the same n-tuples of their word classes comprises a transformation" (Harris, 1957.332). Only one member of a transformationally related set of clauses, therefore, need be described by its clause construction; the other members are its transforms. Because such an approach makes it simpler to describe a good many clauses, it is followed except where it leads into patterns of verb stem derivation that are outside the scope of this study. Clauses that cannot be conveniently described as transforms of other clauses are described in this chapter; in the next the rest are described by rules of transformation.

Clause constructions that consist of large, presumably limitless, classes of constituents are MAJOR clause constructions; those that consist of small, restricted classes of constituents are MINOR clause constructions. Major clauses include all that contain a member of a nuclear constituent set, and some others.

#### MAJOR CLAUSES WITH NUCLEUS

Most major clause constructions include a nuclear constituent set of verbals (Chapter 3), together with a subject constituent set of nominals (Chapter 3). Object and com-

<sup>1</sup> The clause is the descriptive starting point for most of this discussion of Huichol syntax. The sentence, however, is the analytical starting point; the sentence includes intonation. In the process of analysis some of the utterances and utterance fractions examined had as part of their total meaning something like 'grammatical closure' or 'completeness.' These utterances frequently included final intonation patterns such as 3/, which is characteristic also of the end of utterances. Any utterance marked by one final intonation (Chapter 6) was a primitive "sentence" to be analyzed. The grammatical patterns that seemed to account best for the intonationless remainders of these "sentences" turned out to be useful in explicating nearly all the utterances that could be examined (the grammatical patterns are clause constructions and the intonationless remainders, clauses). Once clause constructions were recognized it was possible to return and formalize the description of all sentences, including some that were not among the primitive "sentences" with which syntactic analysis was begun.

plement constituent sets occur in some clause constructions along with the subject and nuclear sets. On the basis of the constituent sets in them, nuclear clause constructions are classified as INTRANSITIVE (subject and nucleus), TRANSITIVE (subject, object, and nucleus), COMPLEMENTED (subject, complement, and nucleus), and COMPLEMENTED TRANSITIVE (subject, object, complement, and nucleus). Subject, object, and complement constituent sets are PRIMARY.

Subtypes of each clause construction are based on the relationships of primary constituents to the nucleus that are signaled by the particular nuclear sets that may occur in them. Grammatical relationships of this kind are VOICE relationships. The subject and nucleus denote respectively (1) performer and action, (2) thing described and description, (3) thing that exists and state of existence, (4) owner and possession, (5) undergoer and action undergone, or (5) thing identified and fact of identification. The object and nucleus denote respectively (1) undergoer and action undergone, (2) undergoer identical with the subject, and action undergone, (3) undergoer that acts on the subject while undergoing the subject's action, and action undergone, or (4) person whom the action affects and action. The complement and nucleus denote respectively (1) undergoer and action undergone, (2) thing equivalent to or identical with the subject, and type of equivalence, (3) class of which the subject is a member, and statement of membership, or (4) repetition of an utterance the subject reports, and statement that a report is made.

### INTRANSITIVE

Intransitive clauses contain subject and nuclear constituents. The subject is a nominal; the nucleus an intransitive verbal (that is, an intransitive verb or a verb phrase substitutable for an intransitive verb). The subject indicator of the verbal stands in cross-reference with the subject constituent and indicates its person and number classification (Chapter 2).

*Active intransitive.* The subject and nucleus denote performer and action. The intransitive verbal of the nucleus is a common intransitive (i. e., not built on an adjective, stative, middle, or characterizing intransitive stem; as thorough a classification of verb stems as can be given at this time appears as Appendix B).

*táame téen + yehúuni* Subject/deictic pronoun + Nucleus/common intransitive verb,  
1 pl subject<sup>2</sup> 'we are leaving'

*Puuka + ráawe + ciizi wen + tikuu + kúwee + kái + tani + waniuri* S/noun + N/com-  
mon intr vb, 3pl sbj 'women used to die off, they say'

*Adjectival intransitive.* The subject and nucleus denote the thing described and the description of it. The intransitive verbal is of the adjectival class.

<sup>2</sup> In formulaic summaries of clause structures a designation of the constituent set appears first with a capital letter and followed by a slant line, then a designation of the major class of the constituent. Plus signs separate constituents. Designations are abbreviated if the context renders the interpretation of the abbreviation reasonably clear.

*PéekΛ pemλka + Panλkλλkapeeni* S/deictic pronoun + N/adjectival intr vb, 2sg sbj  
'you will not be blind'

*kauzai páti + túzá* S/noun + N/adj intr vb, 3 sg sbj 'the fox is white around the front of the neck'

*Stative intransitive.* The subject and nucleus denote a thing that exists and the fact that it exists in a certain state, which is further specified by a secondary constituent of manner.<sup>3</sup> The intransitive verbal is built on the stative stem *-Páane* 'be in a certain condition'. The manner constituent is an adverbial or a procomplement.

*mλpáλ kapλPáane Piyá* Manner/procomplement + Nucleus/stative intransitive vb, 3sg sbj + Subject/deictic pronoun 'he is not like that'

*Pakuciira Páizλa pλPáane* S/n + M/adverb + N/stat intr vb, 3sg sbj 'your machete is a good one, is in good shape'

*Middle intransitive.* The subject and nucleus denote performer and action. The stem of the verbal is of the middle or the transitive-middle class; with the latter one of the fourth directional prefixes occurs in the base (Appendix B). The reflexive object indicator (Chapter 2, Substitution Class B) is present. The primary constituent denotes only the performer, not performer and undergoer simultaneously as in the formally similar reflexive transitive clause (q. v.).

*teλ + téri meplyuu + téemaa + máawi* S/n + N/middle vb, 3 pl sbj, reflexive object  
'the people are happy'

*teλ + téri meplatéyuka + naaki + Péeri* S/n + N/transitive-middle vb, middle base with *ka-* fourth directional, 3 pl sbj, reflx obj 'the people are a loving sort' (compare *teλ + téri meplyuu + naaki + Péeri* S/n + N/tr-mid vb, transitive base, 3 pl sbj, reflx obj 'the people like one another')

*Characterizing intransitive.* The subject and nucleus denote owner and possessions or paraphernalia. The stem of the verbal is an inanimate noun; the base (Appendix B) contains a fourth directional prefix.

*máaye níuka + túupikai* S/n + N/characterizing intr vb from *tuupí* 'bow', *ka-* fourth directional, 3sg sbj 'the mountain lion had a bow as part of his ceremonial paraphernalia'

*née neptáa + zacúunika* S/deic pron + N/char intr vb, 3 sg sbj 'I am right' (*zacúuni* from Spanish *razón* as in the loan-blend *zacúuni nepee + zéiya*, direct transitive clause, 'I have *zacúuni*,' modeled on *tengo razón* 'I am right')

## TRANSITIVE

Transitive clauses contain subject, object, and nuclear constituents. The subject and object are nominals; the nucleus a transitive verbal. The subject and object indicators

<sup>3</sup> The manner constituent defines a clause construction in this clause type only. Elsewhere manner constituents are added to basic clause structures as expansions (Chapter 4).

of the verbal stand in cross-reference with the subject and object constituents of the clause and indicate their person and number classifications. Subject and nucleus denote performer and action in all transitive clause types.

*Direct transitive.* The subject, nucleus, and object denote performer, action, and undergoer of the action.

*támé maraPaa + káté weta + téní + hlaweeni* Object/deictic pronoun + Subject/noun + Nucleus/transitive vb, 3 pl sbj, 1 pl obj 'the chanters speak to us'  
*1máaká 2Páráawé + ciizi 3zepawáa + náPáa 4zéeme 5teA + tériizi* Obj/n phrase<sub>1-2</sub> + N/tr vb, 2pl sbj, 3pl obj<sub>3</sub> + S/n phr<sub>4-5</sub> '4you 5humans 3associate with 1those 2wolves'

*Reflexive transitive.* The subject and nucleus denote performer who is simultaneously undergoer, and action. Subject and object are denoted by a single constituent, the subject-object, which is a nominal. The verbal is transitive or transitive-middle, and contains the reflexive object indicator.

*táame tentáku + náákí + kuni* Sbj-Obj/ deic pron + N/tr vb, 1 pl sbj, reflex obj 'we shall meet each other'

*taatén + táa + teukarí + táani taameri* N/tr vb, 1 pl sbj, reflex obj + Sbj-Obj/deic pron 'we bestow names on one another, act as name-giving grandparent (*teu + kári*, Grimes and Grimes 1962) for one another'

### COMPLEMENTED

Complemented clauses contain subject, complement, and nuclear constituents. The subject indicator of the verbal stands in cross-reference with the subject constituent and shows its person and number classification. The complement constituent does not stand in cross-reference with anything in the verbal; it is a member of a constituent set that is not restricted by any of the patterns of agreement between nominals and verbals discussed earlier. The subject is a nominal, the complement a nominal or quotational, and the nucleus a complemented verbal.

*Objective complemented.* The subject, nucleus, and complement denote performer, action, and undergoer. Semantically, clauses of this type are parallel to direct transitive clauses, but they lack the cross-reference tie with an object indicator in the verb that characterizes transitive clauses. The subject and complement are nominals; the nucleus an objective complemented verbal.

*1Puu + kii 2ptikúyúurie + néekai 3máaká 4náime* S/n<sub>1</sub> + N/complemented vb, 3sg sbj<sub>2</sub> + Complement/n phr<sub>3-4</sub> '1a man 2was doing 4all 3that'

*wii + záari + taari weten + tíméimani waa + zúkúuri* S/n + N/comp vb, 3 pl sbj + C/n 'the Huichols anointed their (the deities') votive bowls (with blood)'

*Equivalent complemented.* The complement denotes the same thing as the subject, or is equivalent to it in the sense denoted by the nucleus, or is the name of a class of which the subject names a member. The stem of the verbal is one of a highly restricted

class of equivalent complemented verbals. The subject and complement are nominals. The complement precedes the nucleus — one of the few cases of fixed order in clauses. The equivalence transformations of Chapter 5 apply to equivalent complemented clauses but not to objective complemented clauses.

*Píkλ Pée + ciema ptí + téwáa* S/deic pron + C/proper n + N/equivalent comp vb,  
3sg sbj ‘this person is named Esiema’

*ciinúu Puukáa náayáa + nñi* S/n + C/n + N/equiv comp vb, 3 sg sbj ‘the little dog  
turned into a woman’

*Péekλ nePiwá pekani + hλλkλ + tλni* S/deic pron + C/n + N/equiv comp vb, 2 sg  
sbj, ‘you are my sibling’

*Quotative complemented.* The subject, nucleus, and complement denote the person speaking, the mode of utterance, and the content of the utterance. The subject is a nominal, the complement a quotational, the nucleus a quotative complemented verbal.

*₁née ₂qítλ ₃nepáa + kúnúatλ ₄niú + tiyúani ₅téwi* C/quotational<sub>1-3</sub> + N/quot comp vb,  
3sg sbj<sub>4</sub> + S/n<sub>5</sub> “‘I’ll be<sub>3</sub> right<sub>3</sub> back,’” said<sub>4</sub> the man’

*₁wepáyu + Pee + rñiriya ₂λari + cieta ₃temλqíPiwa ₄mekúuri ₅teniwa + hayewákuni  
₆wekaníu + tiyúani ₇tewaa + qaPáamete + waniu* C/quotation<sub>1-5</sub> + N/quot comp vb,  
3 pl sbj<sub>6</sub> + S/n<sub>7</sub> “‘They’re dangerous; we’ll<sub>2</sub> probably<sub>3</sub> get killed; we’d<sub>5</sub> better  
leave them alone,’” said<sub>6</sub> their would-be devourers’

The quotational in a quotative complemented clause is frequently an appositive phrase with a procomplement (generally *mápáλ* ‘thus’), as one constituent and the content of the repeated utterance as the other constituent.

*₁mápáλ ₂kúu + kurúu ₃niutáyλλni ₄máza ₅tikuu + cúu* C/quot phr<sub>1, 4-5</sub> + S/n<sub>2</sub> +  
N/quot comp vb, 3sg sbj<sub>3</sub> ‘the dove said<sub>3</sub> this: “‘Is<sub>4</sub> the deer<sub>5</sub> asleep?’”

*₁Puuka + ráawé + ciizi ₂mápáλ ₃weteníu + tiPeeie + tλkλλni ₄kéerí ₅piPínλawe* S/n<sub>1</sub> +  
C/quot phr<sub>2, 4-5</sub> + N/quot comp vb, 3 pl sbj<sub>3</sub> ‘the old women began to wonder  
thus: “‘How in the world<sub>5</sub> does he gather them?’”

*Middle complemented.* The subject, nucleus, and complement denote performer, action, and undergoer, as in the objective complemented clause type. The subject and complement are nominals; the nucleus a middle complemented or a transitive-middle complemented verbal with the reflexive object indicator. As in the middle intransitive clause type, the subject constituent denotes only performer, not performer-undergoer as in the reflexive transitive clause type.

*támaaci + zλ wé + niyú + mamáate + waniu teλ + téri* C/n + N/trans-mid comp vb,  
3pl sbj, reflex obj + S/n ‘the people felt (him to be) Our Elder Brother’

*₁tiitaakλλ ₂wemté + Púyλ ₃náime ₄weteniyu + záa + tλani ₅nePiwaama* C/n phr<sub>1-3</sub> +  
N/trans-mid comp vb, mid base, 3pl sbj, reflex obj<sub>4</sub> + S/n<sub>5</sub> ‘my brethren gave  
as offerings<sub>3</sub> all<sub>1</sub> that with which<sub>2</sub> they customarily did so’

### COMPLEMENTED TRANSITIVE

Complemented transitive clauses contain subject, object, complement, and nuclear constituents. The subject and object are nominals, the complement a nominal or a quotational, the nucleus a complemented transitive verbal. The subject and object indicators of the verbal stand in cross-reference with the subject and object constituents and indicate their person and number classifications. The complement constituent does not stand in cross-reference with anything in the verbal and is unrestricted as to person and number classification.

*Double object.* The subject, nucleus, and complement denote performer, action, and undergoer. The object, generally animate, denotes whatever thereby comes into possession of the thing denoted by the complement, or in some other way benefits (or suffers) from the action. Subject, object, and complement constituents are all nominals; the nucleus a double object complemented transitive verbal.

${}_1\text{P}\lambda\text{ráawé} + \text{ciizi } {}_2\text{tumíini} + \text{zéenu } {}_3\text{menéi} + \text{kuháaniirie} + \text{t}\lambda\text{k}\lambda\lambda \text{ } {}_4\text{téwi}$  S/ $n_1$  + C/ $n_2$  + N/double obj comp trans vb, 3 pl sbj 3 sg obj<sub>3</sub> + O/ $n_4$  ‘ ${}_1$ the wolves  ${}_3$ would bring  ${}_4$ the man  ${}_2$ money’

${}_1\text{téwi } {}_2\text{kuciira } {}_3\text{kanii} + \text{géitani } {}_4\text{yuPiwá}$  S/ $n_1$  + C/ $n_2$  + N/dbl obj comp tr vb, 3 sg sbj, 3sg obj<sub>3</sub> + O/ $n_4$  ‘ ${}_1$ the man  ${}_3$ gave  ${}_4$ his brother  ${}_2$ a machete’

*Reflexive complemented.* The subject, nucleus, and complement denote performer, action, and undergoer; the performer furthermore comes into possession of the thing denoted by the complement, or in some other way benefits (or suffers) from the action; or if the subject denotes a class, then the members of that class act for their common benefit. Subject and object are denoted by a single constituent, the subject-object, which is a nominal. The complement is also a nominal. The verbal is double object complemented transitive or double object complemented transitive-middle as in the double object clause type.

${}_1\text{m}\lambda\text{k}\lambda \text{ } {}_2\text{néi} + \text{káme } {}_3\text{wéréeme } {}_4\text{hái} + \text{témai } {}_5\text{stepatépú} + \text{taa} + \text{té}\lambda\text{wa } {}_6\text{táame}$  C/ $n$  phr<sub>1-4</sub> + N/dbl obj comp tr vb, 1pl sbj, reflex obj<sub>5</sub> + S/deic pron<sub>6</sub> ‘ ${}_6$ we  ${}_5$ give one another names (such as)  ${}_2$ Neicame,  ${}_3$ Vereme, or  ${}_4$ Hai Temai’

*Quotative transitive.* The subject, nucleus, and complement denote the person speaking, the mode of utterance, and the content of the utterance; the object denotes the person spoken to. The subject and object are nominals, the complement a quotational, the nucleus a quotative transitive verbal. The quotational is most frequently an appositive phrase with a procomplement (generally *mápaλ* ‘thus’) as one constituent and the content of the repeated utterance as the other constituent, as in the quotative complemented clause type.

${}_1\text{zéwí}\lambda \text{ } {}_2\text{P}\lambda\text{ráawe } {}_3\text{m}\lambda\text{p}\lambda \text{ } {}_4\text{tinii} + \text{k}\lambda\text{h}\lambda\text{awé } {}_5\text{stéwí } {}_6\text{kenáa} + \text{yéenie} + \text{réni}$  S/ $n$  phr<sub>1-2</sub> + C/quot phr<sub>3,6</sub> + N/quot tr vb, 3sg sbj, 3sg obj<sub>4</sub> + O/ $n_5$  ‘ ${}_1$ one  ${}_2$ wolf  ${}_4$ said  ${}_3$ this to<sub>5</sub> the man: “ ${}_6$ Open your eyes!”’

## MAJOR CLAUSES WITHOUT NUCLEUS

A single clause construction that contains no nucleus is included as a major clause construction on the basis of the potentially limitless number of constituents that belong to it; its second constituent is a nominal and is therefore limitless, though its first constituent is restricted.

The major non-nuclear clause construction is called the BIPARTITE SPECIFYING construction. It includes two constituent sets, SPECIFIER (which could be considered a non-verbal nucleus) and AXIS. There are six specifiers: *káma* 'look, take note, behold, here is', *kaʔii* 'here, take', *kéna* 'give me', *háké* or *hakéewa* 'where is?' (compare the introductory particle *hákee* of the interrogative transformation, Chapter 5), *hawáika* 'there is not any', *haa+kéwaca* 'there is not any' (which may be simply an emphatic form of *háké*). The axis for all six is any nominal; with the last two, any verb, positive or negative, may occur as axis, with negative meaning.

*káma paa+páa* 'here's a tortilla'

*kaʔii paa+páa* 'here's a tortilla; take it'

*kéna paa+páa* 'give me a tortilla'

*háké paa+páa* 'where's a tortilla?'

*hawáika paa+páa* 'there aren't any tortillas'

*haawái neiʔaa+zíke* 'she did not at all catch up with him' (transitive vb, 3sg sbj, 3sg obj, positive)

*haa+kéwaca paʔée+ʔéiya* 'he did not answer' (intr vb, 3sg sbj, positive)

## MINOR CLAUSES

Minor clauses are only marginally constructions in the sense that they contain only one constituent. They may, however, occur as simple sentence bases (Chapter 6), and are therefore parallel to major clauses in their privileges of occurrence.

## VOCATIVE

Any proper noun, or any dependent noun with or without<sup>4</sup> an ordinary possessive affix, if not part of another clause, constitutes a vocative clause. Dependent nouns occur without possessive affixes only when they are vocatives.

<sup>4</sup> Klineberg (1954.51) cites Huichol data to show that "it is possible to convey an abstract notion to a member of a tribe whose language normally makes no use of it . . . among the Huichol Indians . . . words for 'my father', 'your father', 'his father', but no word for 'father'. The informant, however, was perfectly capable of understanding the idea of 'father', and supplied a word which he thought could be used with that meaning." The existence of the vocative, in which dependent nouns regularly occur unpossessed, weakens Klineberg's argument from Huichol evidence, though on the basis of experience in Bible translation I would certainly agree with his thesis.

*kuu+cée* Voc/proper n 'Joe!'

*maʔaa* Voc/dependent n, no possessive 'grandson!'

*nemáamá+ʔaama* Voc/dep n, 1sg poss 'my grandsons!'

*tewarii+címa* Voc/dep n, no poss, double plural 'grandchildren!'

### EXCLAMATIONS

Any emphatic adverb, any exclamation, or any of a group of miscellaneous words that also have other functions, if not part of another clause, is an exclamatory clause, used as a response of assent, dissent, or continued attention to something another speaker says. Emphatic adverbs used in this way include *záari* 'surely', *hárizaa* 'emphatically', *ʔau+máa* 'anyhow', *záa* 'unfortunately', *tízaa* 'no, not'. Exclamations include *néu+zéi* 'look!', *karákú* 'disgusted' (Spanish *carajo*), *kári+káate* 'all right', *qái* 'wow!', *ʔái* 'oh! ow!' (pain or disagreeable surprise, Spanish ¡ay!) *ʔéeri* 'agreed', *ʔee+ʔée* 'delighted surprise', *hau+kii* 'who knows?', *makamáa* 'of course!', *káamaa*, *hiikáamaa*, 'come on!', *hii+karii+zaa* 'finally!, at last!' *háí* 'please repeat what you said', and a number of onomatopoeic exclamations, which are frequently accompanied by recognizable though as yet unanalyzed paralinguistic phenomena: *nárara* 'sound made by a person rolling down a mountain or across a bamboo bed', *tíriri kararau* *tíriri kararau* 'sound made by the strings of human bones that Tücacame, god of death, wears over his shoulders and around his waist', *táʔaa* 'sound of stick hitting fruit', *kúuza* 'sound of fruit hitting ground', *rárararara*... 'sound of a rumble in the earth', *kéi kéi kéi* 'yelp of a dog after it is struck', *kúwawawa* 'sound of a roaring fire', *táa táa* 'sound of liquid coming out of a gourd with a narrow opening'. Miscellaneous words that have other functions include *ʔáku* 'really!' (postposed modifier), *káma* 'I told you so!' (specifier), *hawáika* 'definitely not' (specifier), *yúuri* 'true' (adverb of manner), *ʔáizaa* 'hello, fine' (adverb of manner), *kéete* 'what did you expect?' (interrogative introductory particle, emphatic), *kauka+cáa* 'maybe' (modal introductory particle, emphatic), *méete* 'possibly not' (preposed modifier), *méri+káate* 'well' (sentence connector).

### CLAUSE EXPANSIONS

To any clause may be added one or more SECONDARY constituents denoting location, time, manner, extent, emphasis, instrument-purpose, and accompaniment-association, Adverbials of various classes belong to these secondary constituent sets.

A clause that includes secondary constituents is an EXPANSION of some clause that belongs to a clause construction defined by its primary constituents.

*née neʔi+waama neniwa+ránuku+wéiya* S/deic pron + O/n + N/tr vb, 1sg sbj, 3pl obj (direct transitive clause) 'I followed my brothers'

*née néʔi + wdama neniwa + ránuku + wéiya haapa* S + O + N + Locative/directive phr (locative expansion) 'I followed my brothers to the water'

*née néʔi + wdama ʔáikΛ neniwa + ránuku + wéiya haapa* S + O + Time/loc n + N + L (temporal expansion) 'last year I followed my brothers to the water'

*née néʔi + wdama ʔáikΛ neniwa + ránuku + wéiya haapa kee nemtí + yúru + wáakai* S + O + T + N + L + Manner/relative transform (manner expansion) 'I, as used to be my custom, followed my brothers to the water last year'

## CHAPTER 5

### CLAUSE TRANSFORMATIONS

The clauses that were described in the last chapter yield by transformation still other clauses. Transformations applied to clauses fall into three groups: (1) CORE transformations that operate upon an independent clause to yield an independent clause that could otherwise be described within the framework of Chapter 5 (Householder's "single-base" transformation; Householder, 1959); (2) SHUNTING transformations that operate upon an independent clause to yield a clause that stands in a specific grammatical relationship to some other clause (Householder's "double-base" transformation); (3) ORDER transformations that order the constituents of a clause relative to one another.

Describing clause patterns in this way has two advantages: economy and the recognition of co-occurrences. Most transformations apply to clauses of any type, and so make description of many related patterns possible in short compass. Co-occurrences (Harris, 1957) of specific items as clause constituents cannot be predicted within the framework of Chapter 4, but if any sets of items do co-occur in clauses built on the patterns of Chapter 4, that co-occurrence carries through all transforms of those clauses.

#### CORE TRANSFORMATIONS

Any clause built on the patterns of Chapter 4 — i. e., any KERNEL clause — can, after undergoing some order transformation, function as the base of a simple sentence (Chapter 6); any such clause is independent. TRANSFORMATIONS that operate on an independent clause to yield an independent clause are core or single-base transformations. They describe the relationships between kernel clauses and clauses that differ from them by voice relationship, interrogation, mode, or elimination of redundant elements.

#### VOICE TRANSFORMATIONS

Transforms that differ from kernel clauses in the voice relationships of primary constituents to the nucleus are described by VOICE transformations.

*Detransitivizing transformations.* Several sets of transforms are related to kernel clauses as follows: (1) The object of the kernel clause is subject of the transform; the

bound subject indicator of the verb of the transform nucleus stands in cross-reference with it. (2) The subject of the kernel clause does not appear in the transform. (3) The verb stem of the transform nucleus is related in a formally statable way to the verb stem of the kernel nucleus.

The verb stem of the kernel nucleus plus the passive suffix (the most common allomorphs of which are *-ri*, *-ya*, *-wa*, *-ki*, depending on the kernel stem) constitutes the verb stem of the transform nucleus, the PASSIVE stem. Three types of detransitivizing transformation involve the formation of passive stems from three different types of kernel stem, together with appropriate object-subject shifts.

For a PASSIVE INTRANSITIVE TRANSFORMATION, the subject is deleted from a transitive kernel clause; the kernel object affix is deleted; the kernel object becomes the transform subject; the transform subject affix stands in cross-reference with the transform subject in person and number; the passive intransitive stem that corresponds to the transitive stem of the kernel is used as the stem of the transform nucleus. The meaning of the transform is resultative; that is, the transform subject and nucleus denote undergoer and action that affects the undergoer so that it is in a state in which it formerly was not.

*Puuki+yáari+maama núnúuci wepánú+qee+nii* (direct transitive kernel clause)

Subject/noun, animate plural, 3sg possessive + Object/noun, animate singular + Nucleus/transitive verb, 3pl sbj, 3sg obj 'its (the child's) parents will carry the child away'

*nunúuci pánú+qeiyani* (passive intransitive transform) S/n, an sg + N/intr pass vb, 3sg sbj 'the child will get carried away'

*taateu+kárima wentáci+téu+káritá táame* (kernel) S/n + N/tr vb, 3pl sbj, 1pl obj + O/deictic pronoun 'our grandfathers bestow names on us'

*temtéu+karicie táame* (transform) N/intr pass vb, 1pl sbj + S/deic pron 'we get named'

For a PASSIVE COMPLEMENTED TRANSFORMATION, the subject is deleted from a complemented transitive kernel clause; the kernel object affix is deleted; the kernel object becomes transform subject; the transform subject affix stands in cross-reference with the transform subject in person and number; the passive complemented stem that corresponds to the complemented transitive stem of the kernel nucleus is used as the stem of the transform nucleus.

*téwi kuciira kanii+qéitani témáika* (complemented transitive kernel clause) S/n + Complement/n + N/double obj vb, 3sg sbj, 3sg obj + O/n 'the man gave the boy (O) a machete (C)'

*témáika kuciira kaniu+qéi+tarieni* (passive complemented transform) S/n + C/n + N/comp pass vb, 3sg sbj 'the boy (S) was given a machete (C)'

*hai+témai tepatéú+taa+téráwa táame* (kernel) C/n + N/dbl obj vb, 1pl sbj, reflex obj + Sbj-Obj/deic pron 'we give one another names (such as) Hai Temai'

*háí+témai tepatépu+terawa+ráwa táame* (transform) C/n + N/comp pass vb,  
 1pl sbj + S/deic pron 'we get named (things like) Hai Temai'  
*Paláawe mpáá tinií+káhláawe téwí kenáa+yéenie+réni* (kernel) S/n + C/procom-  
 plement + N/quot tr vb, 3sg sbj, 3sg obj + O/n + C' (second shard)/quotational  
 'the wolf said thus to the man, "Open your eyes!"'  
*mpáá tinií+káhláawe+ráwa téwí kenáa+yéenie+réni* (transform) C/procomp +  
 N/quot comp pass vb, 3sg sbj + S/n + C'/quot 'the man got told this: "Open  
 your eyes!"'

For a PASSIVE QUOTATIVE TRANSFORMATION, the subject is deleted from a quotative complemented kernel clause; the kernel complement becomes transform subject; the transform subject is third singular; the passive quotative stem *-núwa* 'is said' is used as the stem of the transform nucleus.

*nepáa+kúnúatá niu+tiyúani téwí* (kernel) C/quot + N/quot vb, 3sg sbj + S/n "I'll  
 be back," said the man'  
*nepáa+kúnúatá nitiniúwaani* (transform) S/quot + N/pass quot vb, 3sg sbj "I'll be  
 back," was uttered'

*Equivalence transformations.* Two transformations are related to equivalent complemented kernel clauses (Chapter 4).

For an EQUATIONAL INTRANSITIVE TRANSFORMATION, the verb stem and base prefixes of the nucleus of an equivalent complemented kernel clause are replaced by a VERBALIZED (or DENOMINATIVE) stem that consists of the kernel complement followed by the derivational verbalizing suffix *-ta* if base or inflectional suffixes follow, or that consists of the kernel complement alone if no other suffixes follow. The subject, which remains constant from kernel to transform, denotes the same thing as the verbalized stem or a member of the class named by the verbalized stem. This transformation is almost always applied to clauses with one-word complements, but rarely a two-word complement forms a verbalized stem with *-ta* as though it were a single word, or else the first constituent of an appositive phrase as complement makes up the verbalized stem and the other constituents follow the nucleus as modifiers of a type peculiar to this transformation.

*Péeká háí+Puzáama peptí+téwáa* (equivalent complemented kernel clause) S/deic  
 pron + C/n + N/equiv comp vb, 2sg sbj 'you are named Hai Uxama'  
*Péeká pepa+hái+Puzáama* (equational intransitive transform) S/deic pron +  
 N/equat intr vb, 2sg sbj 'you are Hai Uxama'  
*málaká táame zeí+káa pakaháa+kátakai* (kernel) S/deic pron + C/deic pron with  
 postposed modifier + N/equiv comp vb, 3sg sbj 'that was not just us'  
*málaká paka+táamé+zéikáa+taikai* (transform) S/deic pron + N/equat intr vb,  
 3sg sbj (deic pron with post mod in stem) 'that was not just us'  
*ciínúu Puukáa málhéega náayáa+nii* (kernel) S/n + C/n phr + N/equiv comp vb,  
 3sg sbj 'the little dog turned into a young woman'

*ciinúu niʔukáa + tani mahéeqa* (transform) S/n + N/equat intr vb phr (Head/equat intr vb, 3sg subj + Mod/phrasal transform) 'the little dog is a young woman (in disguise)'

A similar transformation may be applied to a stative intransitive clause; the verbalized stem is made from the kernel manner constituent rather than from the complement, and the verbalized stem denotes the manner of existence of the thing denoted by the subject.

*zaka mpáa + tani + kee* 'if it were thus' (conditional transform of an equational intransitive transform) from *mpáa paʔáa + néeni + kee* 'it would be thus'  
*tiqíní + miemé + takaku* 'being very much so' (conjunct transform of an equational intransitive transform) from *qíní mieme patiʔáne* 'it is very much so'

For a BIPARTITE EQUATIONAL TRANSFORMATION, the nuclear constituent is deleted from an equivalent complemented kernel clause; the kernel subject becomes the first constituent of the transform; the kernel complement becomes the second constituent of the transform. The first constituent denotes the same thing as the second, or a member of the class named by the second.

*Péekʌ hái + ʔuzáama peptí + téwáa* (equivalent complemented kernel clause) S/deic pron + C/n + N(equiv comp vb, 2sg subj 'you are named Hai Uxama'  
*Péekʌ hái + ʔuzáama* (bipartite equational transform) 1/deic pron + 2/n 'you are Hai Uxama'

### INTERROGATIVE TRANSFORMATIONS

An interrogative substitute (Chapter 2) replaces one of the primary or secondary constituents of a clause, or it replaces one constituent of an appositive phrase that itself belongs to a primary or secondary constituent set in a clause. The transform is a question, with the interrogative substitute as question-word.

*Primary interrogatives.* An interrogative pronoun replaces a primary clause constituent or a constituent of an appositive phrase that belongs to a primary constituent set.

TÍITA 'what?' replaces subject, object, or complement constituents that are singular, of either gender, but that do not refer to humans.

*tiita tiyʌane ʔuumáa* S/interr + N/intr vb, 3sg subj + Loc/proadv 'what is moving over there?'  
*tiita petizéiya Péekʌ* O/interr + N/tr vb, 2sg subj, 3sg obj + S/deic pron 'what do you see?'  
*tiita peráine Péekʌ* C/interr + N/quot comp vb, 2 sg subj + S/deic pron 'what did you say?'

KEEPÁI (singular) and KEE + HÁTE (plural) 'who?' replace subject, object, or complement constituents that are animate in gender and refer principally to humans.

*keepái tiyáane puumáa* S/interr + N/intr vb, 3sg sbj + Loc/proadv 'who is moving around over there?'

*keepái petizéiya peeka* O/interr + N/tr vb, 2sg sbj, 3sg obj + S/deic pron 'who do you see?'

*kee+háté petiwáa+zéiya peeka* O + N/tr vb, 2sg sbj, 3pl obj + S 'who (plural) do you see?'

*Péeka keepái peeti+háaka* S/deic pron + C/interr + N/equivalent complemented vb, 2sg sbj 'who are you'

KEE+MA<sup>2</sup>ÁANE 'which one?' replaces subject, object, or complement constituents that are animate singular or inanimate. It differs from *keepái* 'who?' and *tiita* 'what?' in that it elicits a selection from a known field of possibilities, whereas *keepái* and *tiita* elicit a simple identification. *kee+ma<sup>2</sup>áane* is itself a relative transform (q. v.) of a stative intransitive clause with subject omitted *ma<sup>2</sup>áa pa<sup>2</sup>áane* 'it is thus', but as an interrogative it functions like a morphemically simple word such as *tiita*.

*kee+ma<sup>2</sup>áane tiyáane puumáa* S/interr + N/intr vb, 3sg sbj + Loc/proadv 'which one is moving around over there?'

*kee+ma<sup>2</sup>áane petizéiya peeka* O/interr + N/tr vb, 2sg sbj, 3sg obj + S/deic pron 'which (of them) do you see?'

*Péeka kee+ma<sup>2</sup>áane peeti+háaka* S/deic pron + C/interr + N/equiv comp vb, 2sg sbj 'which (of them) are you?'

*kee+ma<sup>2</sup>áane* 'which one?' occurs more frequently than the other interrogative pronouns as a replacement for one constituent of an appositive phrase; the inflectional marker (subject or object) that shows cross-reference between that appositive phrase and the verb is singular.

<sub>1</sub>*kee+ma<sup>2</sup>áane* <sub>2</sub>*zeeme* <sub>3</sub>*peuyei+ma<sup>2</sup>ka* S/n phr<sub>1-2</sub> + N/intr vb, 2sg sbj<sub>3</sub> 'which <sub>2</sub>of you <sub>3</sub>wants to travel?'

KEE+PÁAME 'how much? how many?' replaces subject, object, or complement constituents. A quantitative, it is inflected irregularly for gender, number, and case (Table 4).

*kee+yupááméte mepee+ka* S/interr + N/intr vb, 3pl sbj 'how many of them went away?'

*kee+páame perée+nánai peeka* O/interr + N/tr vb, 3sg sbj, 3sg obj + S/deic pron 'how much did you buy?'

<sub>1</sub>*zei* <sub>2</sub>*kaakúuni+yaari* <sub>3</sub>*kee+páame* <sub>4</sub>*ráyáa+nli* S/n phr<sub>1-2</sub> + C/interr<sub>3</sub> + N/equiv comp vb, 3sg sbj<sub>3</sub> 'how much <sub>4</sub>will <sub>1</sub>one <sub>2</sub>liter <sub>4</sub>become? how much does one liter (of seed) yield?'

*Primary-secondary interrogatives.* The interrogative procomplement *KEE* replaces manner or complement constituents that are inanimate in gender. In a few common expressions *kee* replaces a locative, equivalent to *hákee* 'where?'

*PíikΛ wáakáwa ráine* (kernel) S/deic pron + C/quant pron + N/quot comp vb,  
3sg sbj 'this one says a lot'

*PíikΛ kee—ráine* (transform) S/deic pron + C/interr + N/quot comp vb, 3sg sbj  
'what does this one say?'

*PíikΛ PáizΛ páa+Páane* (kernel) S/deic pron + M/adv + N/stat intr vb, 3sg sbj  
'this tastes good'

*PíikΛ kee—háa+Paane* (transform) S + M/interr + N 'how does this taste? what  
does this taste like?'

*mána tiuyúu+níza PíikΛ* (kernel) Loc/proadv + N/intr vb, 3sg sbj + S/deic pron  
'he went that way'

*kee tiuyúu+níza PíikΛ* (transform) L/interr + N + S 'where did he go?'

An interrogative transform with *kee* may, in certain contexts, have the force of an exclamation.

*ke—m+tiukú+Pee+káza* 'how it blew!'

*kee tiu+naawée* 'how he laughs!'

*Secondary interrogatives.* An interrogative proadverb replaces a secondary clause constituent.

*HÁKEE* 'where?' replaces a locative constituent. *haakéewa* appears to be a free alternant of *hákee*, at least in this transformation (but note the use of these forms in Chapter 4, "Exclamations").

*çΛΛκΛ mána pee+ta* (kernel) S/n + L/proadv + N/intr vb, 3sg sbj 'the dog  
went there'

*çΛΛκΛ hákee pee+ta* (transform) S + L/interr + N 'where did the dog go?'

*KEE+PÁΛQA/KEE+PÁUQA/KEE+PÁΛKA* 'when?' replaces a temporal constituent.

*çΛΛκΛ Pánaa pee+ta* (kernel) S/n + T/proadv + N/intr vb, 3sg sbj 'the dog left  
then'

*çΛΛκΛ kee+pÁΛqa pee+ta* (transform) S/n + L/interr + N 'when did the dog  
leave?'

*KEEPÁΛ* 'how?' replaces a manner constituent. It is more explicit in reference than *kee*, which also may replace a manner constituent.

*PéekΛ mapáΛ peréi+nánai kamíza* (kernel) S/deic pron + M/proadv + N/tr vb,  
2sg sbj, 3sg obj + O/n 'you bought a shirt thus (for so much, or in that way)'

*PéekΛ kee pereí+nánai kamíza* (transform) S + M/interr + N + O 'how (for  
how much) did you buy the shirt?'

*PéekΛ keepál peréi+nánai kamiíza* (transform S + M/interr + N + O 'how (by just what process, in what way) did you buy the shirt?')

KEE+PÁΛ+MÉZA 'how much time?' replaces an extent constituent. In form *kee+pál+méza* is the extensive case form of a Type III word (Table 4).

*máiza Papúu+yéikaakai Piyá* (kernel) Ex/adv + N/intr vb, 3sg sbj + S/deic pron 'he was around for a long time'

*kee+pál+méza Papúu+yéikaakai Piyá* (transform) Ex/interr + N + S 'how long was he around?'

TÍI+TÁAYAARI 'why?' replaces an instrument-purpose constituent. It is related to the interrogative pronoun *tíita* 'what?' *kée+títa* and *kee+tii+táyari* 'why?' appear to be alternate forms of it.

*mákayúu+Peení+wáakaikΛ pee+tlá téwi* (kernel) Instr/directive phr + N/intr vb, 3sg sbj + S/n 'the man left because he couldn't stand it any longer'

*tii+táyari pee+tlá téwi* (transform) Instr/interr + N + S 'why did the man leave?'

*kee+títa petiwaréu+Pénie* (transform) Instr/interr + N/tr vb, 2sg sbj, 3 pl obj 'why did you listen to them?'

TÍI+TAAKA 'by means of what?' replaces an instrument-purpose constituent. It is a directive phrase with *tíita* 'what?' as axis and *-kΛ* 'by means of' as directive enclitic.

*téwi kuciirakΛ píimi túizu* (kernel) S/n + Instr/dir phr + N/tr vb, 3sg sbj, 3sg obj + O/n 'the man killed the pig with a machete'

*téwi tii+taakΛ píimi túizu* (transform) S + Instr/interr + N + O 'what did the man kill the pig with?'

There are no interrogative substitutes that replace constituents of emphasis or of accompaniment-association.

### MODAL TRANSFORMATIONS

Modal transformations are marked by an introductory modal particle together with the absence of any modal indicator in the verb of the nucleus; in this they resemble dependent transformations.

The introductory modal particles are *tíetΛ* 'perhaps, it must be that...', *kauka* 'possibly, it seems that...', (which unlike the others occurs now and then with a general mode indicator *pΛ-C12* or *mΛ-C13-12* in the verb of the nucleus), and *zΛkaa tΛma* 'oh that, would that' (which may be split, and which always takes the desiderative *-keeQ3*). *kauka* together with the emphatic adverb *zΛari* means 'most definitely'.

*tíetΛ Páráawe ylanéekai+tani* 'it must have been a wolf doing it' (*tíetΛ* requires narrative closure *-niD5*, future durative *-kaP2*, future simple *-niP2*, or an equivalent stem)

*kauka maaKa yaane* 'maybe he is the one doing it'  
*zaka tAma maaKa yaaneeni+kee* or *zaka maaKa yaaneeni+kee tAma* 'would that  
 he might do it!'  
*kaaka zAari kaa+tízáA+cA* 'most definitely not!'

### REDUCTION TRANSFORMATIONS

Some constitutes that are more like clauses than like anything else still do not fit the preceding clause patterns because they lack one or more primary constituents, or even the nuclear constituent; yet, in accordance with the definition of a clause given in the first part of Chapter V, their privileges of occurrence are equivalent to those of a clause of the nuclear type. Most such REDUCED clauses presuppose a clause earlier in the discourse that contains a constituent or constituents which, if added to the reduced clause, would give a clause that fits the patterns already described and that is acceptable to an informant as germane to the discourse, though perhaps stylistically bad. Other clauses that lack constituents (i. e., "lack" them in terms of this descriptive order) occur in total communicative contexts in which the referents of "missing" constituents are identified nonlinguistically, as for example by gesture or by participation in the communicative process.

Any referent that has been introduced into a discourse, whether by linguistic or nonlinguistic means, is customarily not mentioned again in full form except for emphasis or to forestall ambiguity, though it may be mentioned by means of an anaphoric substitute. From the point of view of the hearer, clauses that lack primary constituents are construed as having reference to things mentioned in preceding clauses, or to obvious features of the communication situation. The relationship between clauses that lack constituents and the full form of clauses incorporating constituents repeated from earlier clauses can be summarized by means of a set of transformations of REDUCTION.

*niuhée+kAaree* *zAakíci+kaaya* *zPée<sup>3</sup>na<sup>1</sup>* # *nikúkAa+ní<sup>31</sup>* # Clause 1<sub>1-3</sub> + Clause 2<sub>4</sub>.  
 Clause 1 consists of N/intr vb, 3sg sbj<sub>1</sub> + S/inan n, 3sg poss<sub>2</sub> + Loc/proadv<sub>3</sub>;  
 Cl 2 of N/intr vb, 3sg sbj<sub>4</sub>. Cl 2 is presumably a reduced form of *nikúkAa+ni*  
*zAakíci+kaaya zPéena* N + S + L, from which the S and L constituents have been  
 eliminated by reduction. 'What he copied <sub>1</sub>has become known <sub>3</sub>here. <sub>4</sub>Here it  
 sits.'

If the verb morphology were made the basis for syntactic description, as well it might, the constituents here called "primary" would be treated as optional satellites to an obligatory verbal nucleus. In frequency of occurrence, at any rate, the primary constituents do have the appearance of being optional, though this is not the whole story. The frequency of occurrence of each primary and secondary constituent set was calculated for 66 transitive clauses comprising all the transitive clauses in six texts. Percentages of clauses that contained each constituent set were: nucleus 100, subject 26, object 48, location 23, time 9, manner 17, extent 2, emphasis 5, instrument-purpose 0, association-accompaniment 0. To test the hypothesis that the occurrence of pairs

of constituents, primary or secondary, is a matter of chance rather than of discernable constraints, the frequency of occurrence of each pair of constituents in a clause was counted and compared with the frequency for that pair that could be expected on the basis of chance, combining categories where necessary to give workable figures. The Chi Square figure resulting from this comparison was 14.6 with 25 degrees of freedom, a low figure compared with the 37.6 that would lead one not to reject the alternative hypothesis (that the frequency of occurrence of pairs is not fortuitous) at  $p \leq .05$ . It is low even compared with the 24.3 necessary if one is not to reject the alternative hypothesis at  $p \leq .5$  (Arkin and Colton 1950.121). At least in relation to their co-occurrence with constituents of other types, then, the primary constituents can appropriately be called optional if the secondary constituents can.

If, however, primary constituents are considered optional in the same sense as secondary constituents are optional, this fails to bring out the sequential relationships between clauses; the constituents are "optional" only at certain places in the discourse. Reduction transformations make it possible to subsume not only clauses that lack some primary constituents, but also equivalent grammatical forms that lack a nuclear constituent, under one category which, besides being a descriptive catchall, at the same time says something about the relationships between the things in the catchall and the clauses that precede them.

### SHUNTING TRANSFORMATIONS

Transformations that operate on an independent clause to yield a clause that stands in a specific grammatical relationship of inclusion or subordination to some other clause are SHUNTING or DOUBLE-BASE transformations.

### PHRASAL TRANSFORMATIONS

Clauses that function as constituents of other clauses (i.e., that are INCLUDED within MAIN clauses) are PHRASAL transforms of independent clauses, with one exception.<sup>1</sup> Phrasal transformations may be applied to any clause (including reduced transforms) that contains a nuclear constituent.

*Simple phrasal transformation.* Most phrasal transforms are marked as such by the occurrence of the phrasal mode indicator  $mA-C_{13-12}$  as the only mode indicator in the verb of the nucleus of the transformed clause. The occurrence of  $mA-$  is a necessary but not a sufficient requirement for construing a clause as a phrasal transform; the clause must also be in a position relative to a main clause such that it is plausible to interpret it as a constituent of the main clause, and the main clause must be one in which the

<sup>1</sup> Clauses that function as quotationals (Chapter 3) in quotative and quotative transitive clauses and their transforms occur in their independent form, not in a phrasal transform. The notion of a phrasal transform of an independent clause is similar to Bloch's "pseudo-clause" in Japanese (Bloch 1947).

transform can fit as a constituent. (Some independent clauses also have *mΛ-* as the only mode indicator in the verb, so that ambiguity is possible.)

Phrasal transforms of non-interrogative clauses usually belong to subject, object, or complement constituent sets in main clauses; that is, phrasal transforms are nominals. They sometimes belong to location or time constituent sets in a manner parallel to locative nouns (Chapter 2).

- 1téwí 2wána 3muu+yéikaakai 4kaniwámáa+téni 5nePiwáama* S/phrasal transform<sub>1-3</sub> + N/tr vb, 3sg sbj, 3pl obj<sub>4</sub> + O/n<sub>5</sub> '1the person 3who used to live 2there 4knows 5my brothers'; compare *téwí wána puu+yéikaakai* 'the person used to live there'
- 1téwí 2wána 3muu+yéikaakai 4wekaniúmáa+téni 5nePiwáama* O/phr trans<sub>1-3</sub> + N/tr vb, 3pl sbj, 3sg obj<sub>4</sub> + S/n<sub>5</sub> '5my brothers 4know 1the person 3who used to live 2there'
- 1nePiwá 2téwí 3wána 4muu+yéikaakai 5ptíu+Pée+ríiwa* S/n<sub>1</sub> + C/phr trans<sub>2-4</sub> + N/equiv comp vb, 3sg sbj<sub>5</sub> '1my brother 5is thought to be 2the person 4who used to live 3there'
- 1nePiwá 2pɣɣa+néekai 3wána 4muu+yéikaakai* S/n<sub>1</sub> + N/intr vb, 3sg sbj<sub>2</sub> + Loc/phr trans<sub>3-4</sub> '1my brother 2was doing something 3there 4where he was'
- 1weenti+Púukai+tɔni 2háa 3mwáa+yeikaakai* N/intr vb, 3 pl sbj<sub>1</sub> + Loc/phr trans<sub>2-3</sub> '1they stood 3where 2the water 3came up'; compare *háa pɔwáa+yeikaakai* 'the water came up (to the shore)'
- 1Pizaa+rári 2máa+tinéi+kaakai+níu 3wéni+Pizaa+zɔaráakai+tɔni* T/phr trans<sub>1-2</sub> + N/intr vb, 3pl sbj<sub>3</sub> '2when 1a ceremony 2came due 3they would attend'; compare *Pizaa+rári náa+tinéi+káakai+tɔni* 'a ceremony came due'

*Absolute phrasal transformation.* Some phrasal transforms are marked as such by the absolute phrasal mode indicator *-me<sub>C5</sub>* (Chapter 2), which occurs as the only mode indicator in the verb of the nuclear constituent of the transform. Absolute phrasal transforms occur only as primary constituents of main clauses.

- 1zévítɔ 2née+kuyéizɔani 3hakéewaa 4mee+kiekáme+tɔka 5taqée 6tizáɔtɔ 7Paci+-rée+timáa+tiwámé+níu* S/quant pron<sub>1</sub> + N/intr vb, 3sg sbj<sub>2</sub> + S'(second shard)/abs phr trans<sub>3-7</sub> '1one person 2made a trip, 7a person of whom it was 6not 7known 5at all 3where 4he was a citizen'; compare *hakéewaa mee+kiekáme+tɔka taqée tizáɔtɔ Paci+-rée+timáa+tiwa* 'where he is a citizen is not at all known'

*Relative phrasal transformations.* Phrasal transforms of clauses that are simultaneously interrogative transforms of independent clauses are most likely to belong to the constituent set in the main clause that the interrogative substitute belongs to in the transformed clause. They may also belong to primary constituent sets regardless of the set membership of the interrogative substitute, as in the preceding example where *hakéewa mee+kiekáme+tɔka* 'where he was a citizen' is subject of a clause (which is itself a phrasal transform). Clauses to which both interrogative and phrasal trans-

formations are applied are RELATIVE transforms; the parallelism between them and English relative clauses, and for that matter between the interrogative substitutes in them (most of which share a morph *kee-*) and corresponding English *wh-* words is apparent in the examples.

- <sup>1</sup>*tíita* <sup>2</sup>*nemáine* <sup>3</sup>*né* <sup>4</sup>*pazacúumi* S/rel trans(C/interr<sub>1</sub> + N/quot comp vb, 1sg sbj, phras mode<sub>2</sub> + S/deic pron<sub>3</sub>) + N/characterizing intr vb, 3sg sbj, assertive mode<sub>4</sub> 'what <sup>3</sup>I <sup>2</sup>am saying <sup>4</sup>is true'; compare *tíita neráine né* 'what am I saying?'  
<sup>1</sup>*tepéikáa* + *zéiya* <sup>2</sup>*kee* + *máááane* <sup>3</sup>*mááá* <sup>4</sup>*mtiyúuriene* N/tr vb, 1pl sbj, 3sg obj, assert mode<sub>1</sub> + O/rel trans(S/interr<sub>2</sub> + C/procomp<sub>3</sub> + N/comp vb, 3sg sbj, phras trans<sub>4</sub>) 'we found <sup>2</sup>the one <sup>4</sup>who is doing <sup>3</sup>that'; compare *kee* + *máááane* *mááá* *ptiyúuriene* 'which one is doing that?' (*kee* + *máááane* rather than *keepái* 'who' occurs in relative transforms that replace animate singular nominals)  
<sup>1</sup>*kee* + *pááqa* <sup>2</sup>*máníiwée* + *néeni* + *waa* + *níurí* <sup>3</sup>*mááka* <sup>4</sup>*muutáacua* + *káani* T/rel trans(T/interr<sub>1</sub> + N/intr vb, 3sg sbj, phras mode<sub>2</sub>) + S/deic pron<sub>3</sub> + N/intr vb, 3sg sbj<sub>4</sub> 'when <sup>2</sup>she is giving birth <sup>3</sup>she <sup>4</sup>will cry out'

### SUBORDINATING TRANSFORMATIONS

Clauses that are subordinate to main clauses but that do not function as constituents of the main clauses (i.e., that are subordinate to main clauses taken as units) are subordinated transforms of independent clauses.<sup>2</sup>

*Conjunct transformations.* The seven suffixes that mark the conjunct transformation also distinguish identity of the conjunct subject, relation between the time of the action of the conjunct and the time of the action of the main clause, and the state of the action of the conjunct transform at the time of utterance or of contextual reference.

The conjunct subject is either PROXIMATE, identical with the subject of the main clause (whatever its person and number), or OBLIVIOUS, not identical.<sup>3</sup> The time relation between conjunct and main clauses is either CONCURRENT, both actions taking place simultaneously, or ANTECEDENT, the conjunct action taking place before that of the main clause, or RESULTANT, the conjunct action taking place following and as a direct result of the action of the main clause. For antecedent time, the state of the conjunct action is either FACTUAL, under way or finished at the time of utterance or contextual reference, or POTENTIAL, not yet under way at the time of utterance or reference. Table 5 shows the relationships of the conjunct markers.

<sup>2</sup> A few conjunct subordinate transforms—standardized expressions all—regularly manifest constituents in main clauses. Indirect quotative transforms are parallel in form to subordinating transforms and so are discussed together with them, but by their privileges of occurrence they belong with phrasal transforms.

<sup>3</sup> "Proximate" and "oblivious" are taken from the grammatical terminology used for Algonquian languages (as for example Hockett, 1958.234), where they refer to contextual or rhetorical centrality and peripherality rather than to grammatical centrality and peripherality as here. Rarely, the conjunct subject in a proximate conjunct transform is given as 3sg even though the subject of the main clause is in some other category. In such a case the main clause subject is extended to the conjunct verb: *kárá* + *máziya* *páakáami* + *záaka* (3sg sbj, prox conj) *waanee* + *káane* (3pl sbj, main) 'after they had chewed his eyelids off, they left'.

TABLE 5

*Conjunct Transformation Markers*

Relative timing of conjunct	Subject of conjunct	
	Proximate	Obviative
Concurrent	-tΛ	-kaaku
Antecedent		
Factual	-ka	-ku
Potential	-me	-yu
Resultant	-ke	

*kúuyéi+kátΛ panéci+Puzéi* (proximate concurrent) 'as he (A) was walking along, A saw me'

*kúuyéikaa+kaaku panéci+Puzéi* (obviative concurrent) 'as A was walking along, B saw me'

*núaka panéci+Puzéi* (proximate antecedent factual) 'after A arrived, A saw me'

*núaku panéci+Puzéi* (obviative antecedent factual) 'after A arrived, B saw me'

*núame panéci+zéiyáni* (proximate antecedent potential) 'after A arrives, A will see me'

*núayu panéci+zéiyáni* (obviative antecedent potential) 'after A arrives, B will seeme'

*nePunúa+ké panéci+wíitΛ* (resultant) 'that I may arrive, A guides me'

Certain obviative conjunct transforms function idiomatically as time constituents in main clauses. They denote time of day or year.

*Páu+rákaaku puti+núíwa* T/obv concur conj trans + N/intr vb, 3sg sbj 'he was born when (the rainy season) is near'

*Dependent transformations.* Dependent transformations are marked by introductory particles, with each of which is associated a particular modal indicator (or specific lack of modal indicator) in the verb of the nuclear constituent. Dependent transforms differ from interrogative transforms, which like them contain an introductory word, in that dependent and phrasal transformations cannot both be applied to a clause simultaneously, whereas interrogative and phrasal transformations can. Furthermore, in dependent transformations each introductory particle goes with a particular verbal mode; this is not the case with interrogative transformations.

The CONDITIONAL TRANSFORMATION is marked by the introductory particle *zaka* 'if' together with the absence of any modal indicator in the verb of the nuclear constituent, or else (though practically never) it is marked by the conditional mode indicator prefix *zaka*<sub>C13-12</sub> in the verb of the nucleus with no introductory particle. The verb stem is incomplete in most cases (Appendix B).

*zaka penúani nepamáci+zéiyáni* Conditional/cond trans (Intro/particle+N/intr vb, 2sg sbj, no mode) + Main clause/dir tr clause(N/tr vb, 1sg sbj, 2sg obj) 'if you come, I will see you'  
*pezaka+núani nepamáci+zéiyáni* 'ditto'

The INDIFFERENCE TRANSFORMATION is marked by the introductory particle *céepáa* 'although, in spite of the fact that' together with the phrasal mode prefix *ma-C13-12* in the verb of its nucleus.

*tíyée+káanii céepáa máayee+házi* 'he lies there even though he has his eyes open'

The INDIRECT QUOTATIVE TRANSFORMATION is marked by the introductory particle *keenáme* 'that' together with absence of any modal indicator in the verb of the nuclear constituent, as in the conditional transformation. Because of this internal similarity to the conditional transformation the indirect quotative transformation is described as a dependent transformation, even though indirect quotative transforms belong to the complement constituent set in quotative and quotative transitive clauses and are thus better regarded as phrasal transforms.

*mpáa tiníi+táahawe keename yée+mieni+keekai* C/procomp + N/quot tr vb, 3sg sbj, 3sg obj + C'/indir quot trans 'he told him that he was going to leave'

#### ORDER TRANSFORMATIONS

Little has been said yet about either order or immediate constituent relationships. Clause constructions and their transforms are defined by selection, in terms of constituent sets, not (except in a few cases) by linear order of constituents. Clauses occur with several different orderings of what can be taken as the same constituents; yet it is convenient to recognize clauses that differ only by order as belonging to a single construction, because the differing arrangements can be subsumed under a few statements that are valid for most clause constructions.

The immediate constituent relationships within a clause are a function of the order in which constituents occur. The nuclear constituent, or the constituents that must occur in fixed order at the clause level, are first separated from all other constituents in the clause as the CENTRAL element. (In some clauses, reduced transforms of others, there may be only one constituent).<sup>4</sup> The remaining constituents are then sorted out by their position relative to the central constituent.

<sup>4</sup> Wells (1947) takes issue with Bloch's statement that Japanese sentences may consist of a solitary constituent (1946). Wells argues that a construction must have at least two constituents to be called a construction (Section 52). However, certainly for Huichol, and apparently for Japanese and Zapotec as well (Pickett 1960.13), it is useful to be able to speak of grammatical forms of one constituent at the clause level, and it is furthermore simple to do so within a framework of grammatical levels. The difference between these languages and languages like English and Chinese (Hockett 1958, *passim*) in which clauses are characteristically binary may have typological significance.

TABLE 6

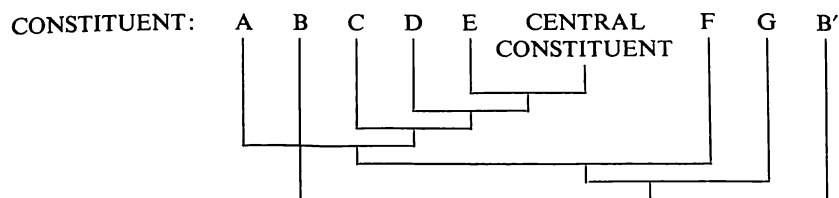
*Clauses in Which Constituent C occurs in Position P, by per cent*

Constituent <i>C</i>	Position <i>P</i>			
	Absent	Before Nucleus	After Nucleus	Before and After Nucleus
Subject	73	19	7	1
Location	84	12	3	1
Time	83	10	2	5
Manner	84	13	2	1
Other	89	8	2	1
Average	83	12	3	2

In a sample of 182 representative intransitive clauses the position of each primary and secondary constituent relative to the central constituent (but not relative to each other) was tabulated. Table 6 gives the frequency distribution of various constituents in positions relative to the nucleus by the percentage of the total number of clauses that contain each constituent in each position.

According to Table 6, primary and secondary constituents occur most frequently preceding the nucleus; they follow it about a fourth as often; and they occur with a shard preceding it and a shard following it still less often. Constituents in clauses of other types are similarly distributed.

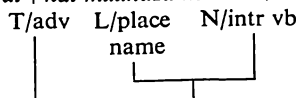
Various positions relative to the nuclear constituent rank in inverse proportion to the probability that they will be filled. Constituents that precede the nucleus are ranked closer to it than are constituents that follow, and constituents that are split are ranked as more peripheral still. In a sequence of constituents before or after the nucleus, those closer to the nucleus in order of utterance are ranked closer to it than are those further from it. For central constituents other than nuclei, such as bipartite constituents in fixed sequence, the same pattern holds. It can be represented schematically by the following diagram:



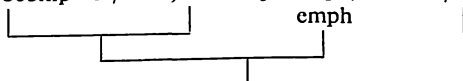
This pattern agrees with my own reaction to the grouping of constituents within clauses, especially where different orderings of the same constituents are concerned.

For each clause, defined by a list of central and primary constituents plus secondary constituents minus reductions, there is a fairly small number of ORDER transforms possible; each implies a different grouping of constituents, and some one of the number must be applied.

*tai+kái muukáza neeme+núa*



*mláánu tiyú+taapái+tázal zlarí márapaa+káameesla*  
N/procomp N/tr vb, reflex obj Emph/ L/dir phr  
emph



‘yesterday I arrived at Mojarras’

‘thus he surely arranged to have himself treated at the chanter’s’

The introductory particle in some shunting transformations is either fixed in position, as in the case of affixes, or at the beginning, as in the case of most introductory particles (though one constituent may precede an introductory particle, in which case the one that precedes ranks as more peripheral), or anywhere before the central constituent, as in the case of modal introducers.

### SPLITTING

Clause constituents that consist of more than one word are sometimes split into two SHARDS,<sup>5</sup> one of which occurs before and the other after the central constituent. Appositive phrases (Chapter 3) are most frequently split in this way, but constituents of other internal makeup may also be split.

*1zaka 2pariké+maka 3putinúwa+rí 4kúmu 5tinéi+kákaku* Intro/particle<sub>1</sub> + T/proadv<sub>2</sub> + N/intr vb, 3sg subj, no mode<sub>3</sub> + T’(second shard)/ temp phr<sub>4-5</sub> ‘if it is born<sub>2</sub> later, <sub>4</sub>about <sub>5</sub>when the maize plant breaks ground’

*1zéwíla 2mpála 3tiyáa+káhaa+wétla 4paani+yéikaa+káitani 5káamla+cála* S/quant pron, nom case<sub>1</sub> + Subordinate clause/conjunct trans<sub>2-4</sub> + N/intr vb, 3sg subj, narr mode<sub>4</sub> + Subord cl’/ complement<sub>5</sub> ‘there was <sub>1</sub>someone <sub>3</sub>who said, “<sub>5</sub>Say!”’

### AMBIGUITY

The nature of the relationship between order and constituents leads to certain ambiguities. If two constituents of the same major class occur in a clause, their place in the hierarchy of emphasis or relevance can be deduced from their position, but it is pos-

<sup>5</sup> The term was suggested by C. F. Hockett.

sible to tell which constituent set each belongs to only by the patterns of cross-reference. This may itself be insufficient; if it is, only reference to a wider context helps. For example, transitive clauses with Object + Subject + Nucleus order occur, and less frequently clauses with Subject + Object + Nucleus order. For subject and object of the same person and number (except third singular object, with which the object affix of the verb is omitted when the free object constituent precedes the nucleus directly) nothing in the clause can signal whether the first constituent is object or subject.

<i>teΛ+téri</i>	<i>Paáawé+ciizi</i>	<i>mekani+wáru+zéiya</i>
S/n	O/n	N/tr vb, 3pl sbj, 3pl obj
O/n	S/n	N/tr vb, 3pl sbj, 3pl obj

‘the people saw the wolves’ or  
‘the wolves saw the people’

## CHAPTER 6

### LARGER CONSTRUCTIONS

#### SENTENCE

Most of the syntactic patterns described earlier have the clause as their frame of reference. The clause is the intonationless skeleton of speech; it subsumes most of what needs to be accounted for in syntax. To round out the picture, however, clauses, whatever their type, should be viewed in the linguistic setting in which they are actually uttered.

Any clause that, except for intonation, forms the whole of an utterance is most likely to be accompanied by a FINAL intonation contour, one that ends on level 1 ( $\{31 \#\}$ ,  $\{1 \#\}$ ,  $\{31|\}$ ,  $\{\overline{23}1 \#\}$  in that order of likelihood). Clauses that except for intonation form whole utterances are likely to be accompanied by an ELICITING intonation contour, one that ends on a level other than 1, when followed closely by utterances of other speakers ( $\{32 \#\}$ ,  $\{2 \#\}$ ,  $\{3 \#\}$ , in that order of likelihood).<sup>1</sup>

Intonation contours similar to these are found medially in connected text. Some clauses are accompanied by final contours that coincide with the ends of the clauses. Other clauses that are followed by a change of reported speaker (as in a narrated dialogue), or by a paragraph break (to be described), are accompanied by eliciting contours. Still other clauses are accompanied by intonational features that are neither final nor eliciting—no contour,  $\{3 \#\}$  without change of speaker,  $\{2 \#\}$  without change of speaker,  $\{2|\}$ ,  $\{32 \#\}$  without change of speaker; such contours (and the absence of any contour) are LINKING.

A sentence is a constitute the constituents of which are a final or eliciting intonation on the one hand and a sentence BASE, a single clause or a constitute with two or more clauses as constituents, on the other.

#### SENTENCE BASE

The non-intonational part of a sentence may consist of a single independent clause (a SIMPLE sentence base), of two or more clauses in a hypotactic relationship, of two or more clauses in a paratactic relationship, or of some combination of these. Special sentence bases must be described for some sentences that contain a quotational.

<sup>1</sup> Intonation levels and morphemes are described in Grimes 1959 in greater detail than is pertinent here.

The examples already given of independent clauses also serve as examples of simple sentence bases.

*kauzai páti + túzá*<sup>31</sup> #. 'The fox has a white ruff.'

Clauses that include phrasal transforms of clauses are simple. Any phrasal transform is substitutable for a one-word constituent, so that the phrasal transform functions as a unit within the main clause however complex it may itself be.

*PízAA + rári máa + tinéi + káakai + níu wéni + PízAA + zAaráakai + tAni* 'when a ceremony came due they would attend' (active intransitive clause in phrasal transform is temporal constituent, substitutable for *Páana* 'at that time')

*Hypotactic bases.* Hypotactic bases consist of a single independent clause as head preceded or followed by one or more conjunct or dependent transforms as modifiers of the head clause.<sup>2</sup>

A primary constituent of the head clause that is also a primary constituent of a preceding modifying clause may occur split (Chapter 5) from the head clause, separated from it by the attributive clause.

*1téwí 2zAka 3núani 4pAnéci + zéiya* S/n<sub>1</sub> + Dep cl/conditional trans<sub>2-3</sub> + N/tr vb,  
3sg subj, 1sg obj<sub>3</sub> '1the man, 2if he 3arrives, 4will see me'

*Paratactic bases.* Paratactic bases consist of two or more simple or hypotactic bases in sequence with linking intonation where they abut. Two simple or hypotactic bases in sequence with final or eliciting intonation where they abut constitute two sentences; with linking intonation they constitute a paratactic base. In the following example sentence bases are numbered by figures in parentheses before each sentence base; each word in a base is numbered by a subscript figure before it; intonation is marked by superscript figures after the syllable whose pitch level they represent; and type of intonation is marked by a period (final or eliciting) or a semicolon (linking) at the end of the base. Some intonations represent hesitation points within sentence bases; they are syntactically irrelevant and are neither final nor linking. Editorial deletions from the original text have been made for the sake of brevity; they are indicated by ellipsis marks.

(1) *1?íkA + zéeniú 2zAka 3kee + páAqa 4mtíi + núiwa*  
*5zAka + zée<sup>3</sup>níu | 6?áu + rákaaku 7?uti + núiwa + zée<sup>3</sup>níu |*  
*8?ána . . . 9?ée + cí<sup>3</sup>za<sup>1</sup> # 10?ée + cíema 11tí + téwaataniú*  
*12máa + yáa<sup>32</sup>ní<sup>3</sup> #; (2) 1mé 2zA<sup>1</sup>ka | 3?ariké + mAka*  
*4?utinúiwa + rí 5kú<sup>3</sup>mu<sup>1</sup> | 6tinéi + ká<sup>3</sup>ka<sup>1</sup>ku # 7néi + káme*

<sup>2</sup> The concurrent conjunct transforms that manifest constituents of independent clauses as standard idioms are not attributive to the head clause as a whole (Chapter 2). They, like phrasal transforms, are commutable with substitutes, but modifying clauses in hypotactic bases, conjunct or otherwise, are not.

<sub>8</sub>ráa<sup>3</sup>yáaní #; (3) <sub>1</sub>mé <sub>2</sub>ʌkaniu <sub>3</sub>ʔariké + málka  
<sub>4</sub>ʔutinée + niríi<sup>2</sup> | . . . <sub>5</sub>wenímá <sub>6</sub>ráayáa + níi + wa<sup>1</sup>niu #.  
 (4) <sub>1</sub>mé <sub>2</sub>ʌ<sup>2</sup>ka | <sub>3</sub>ʔári + kémálka + kee — <sub>4</sub>ʔuti + núiwaniu  
<sub>5</sub>haa + túrú + kaakú <sub>6</sub>turuima <sub>7</sub>ráayáa + níi + wa<sup>1</sup>niu #.

- (1) <sub>2</sub>If <sub>1</sub>this person, <sub>3</sub>when <sub>4</sub>she is born, <sub>5</sub>if  
<sub>7</sub>she is born <sub>6</sub>when (the rains) are nearing, <sub>8</sub>then,  
<sub>9</sub>at planting time, <sub>12</sub>she will get <sub>11</sub>called <sub>10</sub>Esiema;  
 (2) <sub>1</sub>or, <sub>2</sub>if <sub>4</sub>she is born <sub>3</sub>later, <sub>5</sub>about <sub>6</sub>when  
 (the maize) rises above ground, <sub>8</sub>she will be <sub>7</sub>Neicame;  
 (3) <sub>1</sub>or, <sub>2</sub>if <sub>4</sub>she is born <sub>3</sub>later, <sub>6</sub>she will be  
<sub>5</sub>Venima. (4) <sub>1</sub>Or yet, <sub>2</sub>if <sub>4</sub>she is born <sub>3</sub>later  
<sub>5</sub>when (the maize plant) gets its first joint, <sub>7</sub>she  
 will be <sub>6</sub>Turuima.

In this example each sentence base is hypotactic with a conditional clause transform as modifier. The first three are joined by linking intonations into a single paratactic sentence base; the last sentence base is a single hypotactic base.

*Sentence bases involving quotationals.* Quotationals (Chapter 3) include sentences and sequences of sentences without theoretical limit. A quotational, however long, belongs to a single constituent set within a clause; in a clause of the form *X said "Y"* the relative lengths of *X said* and "*Y*" matter little, though a very long "*Y*" makes for an ungainly grammatical description. If a quotational comes last in its clause it may not always be clear where the quotational constituent ends and the next clause begins, especially if the quotational itself includes several sentences each with its own intonation.

A type of sentence base sometimes built from clauses that contain quotationals makes use of two semantically equivalent nuclear constituents, one before the quotational and the other after it, that act as verbal quotation marks. The quotational belongs to the complement constituent set entailed by both nuclei. (Alternatively, the two nuclei can be thought of as shards of a single split nucleus, in which case this construction has already been covered in Chapter 5 under "Splitting".)

<sub>1</sub>zéwítá <sub>2</sub>ʔaráa<sup>3</sup>we<sup>1</sup> # <sub>3</sub>mpáʌ <sub>4</sub>tiníi + kʌ + <sup>3</sup>hʌawé |  
<sub>5</sub>kenáa + yéenie + réni; <sub>6</sub>pemʌka + ʔana + kʌʌka + pee<sup>1</sup>ni #.  
<sub>7</sub>tiníi + tá<sup>3</sup>hʌa<sup>1</sup>weeni #.  
 'One <sub>2</sub>wolf <sub>4</sub>said to him, "Open your eyes;  
 you will not be blind," he said to him.'

### SENTENCE CONNECTORS

The sentence connectors *méri* + *kʌʌte* 'well, then', *ʔayumieme* 'therefore', *peru* 'but, however' (Spanish *pero*), *máaci* 'but, rather' (Spanish *mas*) occur as the first or second word in some sentences. They mark logical connection between the sentence in which

they occur and the preceding one; this dependence is not, however, of a kind that could be called grammatical in the sense of entailing restrictions on the occurrence of forms. The sentence connectors occur characteristically in dialogue at the beginning of a new speaker's speech to indicate the relationship between his statement and that of the previous speaker, and also occur throughout the dialogue to show the course of the speaker's argument.

${}_1\text{Payumíeme} + \text{níuri} \text{ } {}_2\text{káati} + \text{máawe} + \text{níu}^2 \mid$  'So, it is said, that (i.e., all I have just said) is why  ${}_2$ he does not die.'

${}_1\text{máacica} + \text{kutázi} \text{ } {}_2\text{mpáa} \text{ } {}_3\text{kapá} + \text{páa}^{23}\text{ne}^1 \#.$  'But it simply  ${}_3$ isn't  ${}_2$ like that.'

#### PERIOD

In some sequences of sentences there is an apparent sequential relationship between the modes of the verbs that manifest the nuclear constituents of the head clauses of the sentence bases. The head verb of one sentence contains the narrative mode indicator  $ni_{-D8}$  (Chapter 2), while sentences that precede or follow it have as mode indicators  $pa_{-C12}$ ,  $ma_{-C13-12}$  (in an independent clause, not a phrasal transform that is a constituent of some other clause), or they have no mode indicator but contain the distributive prefix  $ti-/te-/r_{-J9, 6}$  (Appendix B), or else they have neither mode indicator nor distributive.

It is possible that such a cluster of sentences made up of a sentence in the narrative mode surrounded by non-narrative sentences, a *period*, may constitute a relevant unit in Huichol. Further study of extended text may show such clusters to be of some use in understanding the structure of texts.

${}_1\text{túu} + \text{núiya} \text{ } {}_2\text{níu} + \text{cúutaa} + \text{níri} \text{ } {}_3\text{máa}^3\text{na}^1 \#.$   ${}_4\text{pútái}^{31} \#.$

${}_5\text{pútái} + \text{niu}; \text{ } {}_6\text{pútáiniu} \text{ } {}_7\text{pacta} \text{ } {}_8\text{héiwa} + \text{ra}^3 \#.$

Sentence  $1_{1-3}$  (verb in narrative mode) + Sen  $2_4$  (no mode) + Sen  $3_{5-8}$  (paratactic base, no modes) 'He began  ${}_1$ the chanting  ${}_3$ there.  ${}_4$ He talked (i.e., chanted).  ${}_5$ He talked and  ${}_6$ talked on  ${}_7$ until  ${}_8$ a certain time.'

#### PARAGRAPH

Most folk tales and many explanatory texts begin<sup>3</sup> with  $mérikaa + caa$  or  $mérika$  'well' or  $hiikaa$  'then'; these forms recur from time to time within texts as first or second items in sentences. They divide texts into subdivisions which can conveniently

<sup>3</sup> Folk tales frequently end with the exclamation  $yéu + paze + táa$ , which is used only in that context. Folk tales, explanations, and, since the advent of writing, letters, frequently end with  $mpáa \text{ } zeikaa$  'that's just how it is'.

be called PARAGRAPHS. Any sentence that contains either of these PARAGRAPH INTRODUCERS as first or second word of a main or dependent clause (there is a nearly homophonous temporal adverb *hiik*<sup>Λ</sup> ‘right now, today’ that may occur anywhere in a sentence but has nothing to do with the flow of narration; its time reference is specific) is the first sentence of a paragraph. The text in Appendix A is divided into paragraphs.

## APPENDIX A

### TEXT

This text was recorded on magnetic tape as narrated by Román Díaz, a Huichol born around 1900 who has lived in the Huichol area all his life except for a few years during adolescence. Sr. Díaz is the informant whose comprehension of Spanish was examined in Grimes (1957).

While working on the Huichol-Spanish dictionary (McIntosh y Grimes, 1954) Sr. Díaz and I went through Lumholtz's monograph on Huichol symbolism (1900) to check terms. Díaz had heard of Lumholtz, and knew one of his muleteers, D. Feliciano Robles, who before his death in 1958 lived in Huajimic, Nay; he also introduced me to Robles. In the process of going through the monograph Díaz learned from me more details of Lumholtz's field trip.

The first part of the text appears to reflect popular reminiscences of Lumholtz's visit. The second part (Paragraph D on) reflects what Díaz learned from me and from the monograph. I have little doubt that both parts refer to the same man. It is intriguing to speculate what sort of stories will circulate about one's own work half a century hence, after hearing what is remembered about Lumholtz.

The text consists of nine paragraphs, A through I. Each paragraph consists of one to four sentences; these are numbered consecutively through the entire text, 1 through 22. Within each sentence the words are indexed by subscript numerals. When sentence number and word number are given together they are separated by a period, the sentence number coming first; thus, 11.3 refers to the third word of Sentence 11.

All linguistic material that could be identified is transcribed using the phonemic and morphophonemic symbols adopted for the body of the grammar. In addition, a single vertical tick (') after a terminal symbol #|! indicates noticeable pause; a double tick ("), noticeable pause with intake of breath. A few slips of the tongue caught by the informant are enclosed in parentheses and not numbered.

The text is presented sentence by sentence. An English translation, indexed in the same way as many of the translations in the body of the book are indexed, follows. Then the constituents are analyzed formulaically using the terms defined for the grammar of Huichol. Formulas for complex constituents are indented so that the most inclusive forms are symbolized on lines carried to the left margin, while less inclusive forms are symbolized beginning farther to the right.

## PARAGRAPH A: Marker/1.1 + Sentence 1 + Sen 2 + Sen 3 + Sen 4

Sentence 1: <sub>1</sub>mérikaΛ + <sub>c</sub>áníu <sub>2</sub>zéwítá <sub>3</sub>née + <sub>k</sub>uyéizΛani + <sub>w</sub>aníu<sup>2</sup> | <sub>4</sub>hakéewaa <sub>5</sub>mee + <sub>k</sub>iekáme + <sub>t</sub>akai <sub>6</sub>taqée <sub>7</sub>tizáΛtΛ <sub>8</sub>?aci + <sub>r</sub>ée + <sub>t</sub>imáa + <sub>t</sub>iwámé + <sub>n</sub>íu<sup>3</sup> #''; <sub>9</sub>kie + <sub>k</sub>ári + <sub>c</sub>ieníu <sub>10</sub>níuyéi + <sub>k</sub>aakái + <sub>t</sub>áni + <sub>w</sub>aníu<sup>2</sup> #'' <sub>11</sub>yuu + <sub>n</sub>áimé <sub>12</sub>tíwáa + <sub>k</sub>u?íi + <sub>w</sub>awatΛniu <sub>13</sub>?átée + <sub>c</sub>íwaniu <sub>14</sub>?áté + <sub>t</sub>úzá + <sub>m</sub>éciwaniu <sub>15</sub>tépΛΛ + <sub>c</sub>í<sup>3</sup>wa<sup>1</sup>niu #'' <sub>16</sub>máΛkΛ + <sub>n</sub>íu <sub>17</sub>mΛΛ + <sub>k</sub>ité <sub>18</sub>wem + <sub>t</sub>éu + <sub>k</sub>étΛka <sub>19</sub>túu + <sub>n</sub>uwáamete + <sub>w</sub>aníu <sub>20</sub>mpáΛ <sub>21</sub>waaku + <sub>r</sub>énie + <sub>n</sub>étá + <sub>w</sub>aniu<sup>1</sup> #''.

<sub>1</sub>Well, <sub>2</sub>one person <sub>3</sub>made a trip in and out, <sub>8</sub>one of whom it was <sub>7</sub>not <sub>6</sub>at all <sub>8</sub>known <sub>4</sub>where <sub>5</sub>he was a citizen; <sub>10</sub>he was <sub>9</sub>in the community <sub>12</sub>asking for <sub>11</sub>everything— <sub>13</sub>lice, <sub>14</sub>white lice (laughter), <sub>15</sub>fleas— (and) <sub>21</sub>listening for <sub>16</sub>those <sub>19</sub>chanters <sub>17</sub>who were dead, <sub>18</sub>who were buried. (Lumholtz did collect some skulls from cave burials.)

Sen 1 (paratactic base): Base 1/clause <sub>12-8</sub> + Base 2/hypotactic base<sub>9-21</sub>

Cl 1: Subject/quantitative pronoun, animate singular nominative<sub>2</sub> + Nucleus/intransitive verb, third person singular sbj, narrative mode<sub>3</sub> + Sbj'(second shard)/included clause 1a, absolute phrasal transform<sub>4-8</sub>

Inclcl 1a: Complement/inclcl 1aa, relative transform<sub>4-5</sub> + Emphasis/emph phrase<sub>6-7</sub> + Nuc/objective complemented vb, 3sg sbj<sub>8</sub>

Inclcl 1aa: Location/interrogative<sub>4</sub> + N/equational intr vb, 3sg sbj<sub>5</sub>

Emph phr: 1/emph adverb<sub>6</sub> + 2/emph adv<sub>7</sub> (appositive)

Hypotactic base: Head/main cl <sub>29-10</sub> + Modifier/dependent cl 2a, conjunct trans<sub>11-15</sub> + Mod/dep cl 2b, conj trans<sub>16-21</sub>

Main cl 2: Loc/directive phr<sub>9</sub> + N/intr vb, 3sg sbj, narr mode<sub>10</sub>

Dir phr: Axis/noun, inan sg + Director/enclitic<sub>9</sub>

Dep cl 2a: Object/quant pron, anim sg acc<sub>11</sub> + N/transitive vb, 3sg sbj, 3pl obj, proximate concurrent conj mode<sub>12</sub> + Obj'/n phr<sub>13-15</sub>

N phr: 1/n, anim pl<sub>13</sub> + 2/n, anim pl<sub>14</sub> + 3/n, anim pl<sub>15</sub> (appositive)

Dep cl 2b: Obj'/n phr<sub>16-19</sub> + Manner/procomplement<sub>20</sub> + N/tr vb, 3sg sbj, 3pl obj, prox concur conj mode<sub>21</sub>

N phr: 1/deictic pron, distal<sub>16</sub> + 2/n, anim pl <sub>17</sub> + 3/incl cl 2ba, phras trans<sub>18</sub> + 4/n, anim pl<sub>19</sub> (appos)

Inclcl 2ba: N/passive intr vb, 3pl sbj, phras mode<sub>18</sub>

Sentence 2: <sub>1</sub>nái<sup>43</sup> | (?uka + <sub>n</sub>étí + <sub>n</sub>ei<sup>2</sup>)' <sub>2</sub>paΛrii + <sub>n</sub>íu<sup>31</sup> #' <sub>3</sub>cái + <sub>w</sub>aníu<sup>31</sup> |' <sub>4</sub>wiiwíe + <sub>r</sub>eeeme + <sub>w</sub>aniu<sup>1</sup> |' <sub>5</sub>púutí + <sub>t</sub>ee + <sub>w</sub>aniu<sup>1</sup> #' <sub>6</sub>nái<sup>4</sup> + <sub>w</sub>aniu <sub>7</sub>máΛkΛ <sub>8</sub>tíní + <sub>y</sub>é?u + <sub>t</sub>áa + <sub>t</sub>ayaan; <sub>9</sub>tíní + <sub>y</sub>é?áΛ + <sub>k</sub>étΛyaa + <sub>n</sub>í + <sub>w</sub>aníu <sub>10</sub>máΛkΛ <sub>11</sub>nái<sup>3</sup>me<sup>1</sup> #''.

<sub>8</sub>He wrote down <sub>1</sub>everything— <sub>2</sub>whatchamacallits, <sub>3</sub>agave (or perhaps also the liquor distilled from a thin-bladed agave by a crude method described by Lumholtz), <sub>4</sub>bag straps, <sub>5</sub>containers, <sub>6</sub>all <sub>7</sub>that; <sub>9</sub>he copied <sub>11</sub>all <sub>10</sub>that.

Sen 2 (paratactic base): Base 1/cl 1<sub>1-8</sub> + Base 2/cl 2<sub>9-11</sub>

Cl 1: Obj/n phr<sub>1-7</sub> + N/tr vb, 3sg sbj, 3sg obj, narr mode<sub>8</sub>

N phr: 1/quant pron, zero case<sub>1</sub> + 2/n, inan sg<sub>2</sub> + 3/n, inan sg<sub>3</sub> + 4/n, inan sg<sub>4</sub> + 5/n, inan pl(?)<sub>5</sub> + 6/quant pron, zero case<sub>6</sub> + Summarizer/deic pron, dist<sub>7</sub> (additive, list intonation on some items)

Cl 2: N/tr vb, 3sg sbj, 3sg obj, narr mode<sub>9</sub> + Obj/n phr<sub>10-11</sub>

N phr: 1/deic pron, dist<sub>10</sub> + 2/quant pron, sg acc<sub>11</sub> (appos)

Sentence 3: <sub>1</sub>kanée + kuyéizlaniniu <sub>2</sub>má<sup>23</sup>na<sup>1</sup> #’.

<sub>1</sub>He made a trip <sub>2</sub>there <sub>1</sub>and back.

Sen 3 (simple base): Base/clause<sub>1-2</sub>

Cl: N/intr vb, 3sg sbj, narr mode<sub>1</sub> + Loc/proadverb<sub>2</sub>

PARAGRAPH B: Marker/4.2-3 + Sen 4 + Sen 5

Sentence 4: <sub>1</sub>téewapai + niu <sub>2</sub>hiiká <sub>3</sub>méri + kaniu <sub>4</sub>néeyáani<sup>3</sup> #’ <sub>5</sub>mpál <sub>6</sub>tiu + yúu<sup>3</sup>-rie<sup>1</sup>ka|’’.

<sub>4</sub>He went <sub>1</sub>far away <sub>5</sub>after he had done <sub>5</sub>this.

Sen 4 (hypotactic base): Head/main cl 1<sub>1-4</sub> + Mod/dep cl 1a, conj trans<sub>5-6</sub>

Main cl 1: Loc/dir phr<sub>1</sub> + N/intr vb, 3sg sbj, narr mode<sub>4</sub>

Dir phr: Ax/adv + Dir/encl<sub>1</sub>

Dep cl 1a: Comp/procomp<sub>5</sub> + N/obj comp vb, 3sg sbj, prox antecedent factual conj mode<sub>6</sub>

Sentence 5: <sub>1</sub>mpál <sub>2</sub>putaa + yálkaniu <sub>3</sub>née<sup>3</sup>yáani #; <sub>4</sub>hai + kaa <sub>5</sub>wíi + yári <sub>6</sub>?anye + yáa<sup>3</sup>yu<sup>2</sup> #’ <sub>7</sub>zem + táa + ?eenáanáa<sup>3</sup>ka<sup>1</sup> #. <sub>8</sub>táa + c’arí <sub>9</sub>z<sup>3</sup>ka<sup>2</sup>! <sub>10</sub>née + tá?aa <sub>11</sub>níhée-kla <sub>12</sub>?éna <sub>13</sub>wiyemá <sub>14</sub>zéméu + tinee + nie<sup>3</sup>ree<sup>1</sup>ni #’. <sub>15</sub>tíwárú + taahlaká <sub>16</sub>néeyáa<sup>31</sup>-ni #’. (possibly tíwárú + taahla; kánéeyáa<sup>31</sup>ni #’.)

<sub>3</sub>He left <sub>2</sub>after saying, “<sub>6</sub>After <sub>4</sub>three <sub>5</sub>years <sub>6</sub>pass by <sub>7</sub>you-all listen. <sub>8</sub>Surely <sub>9</sub>if <sub>10</sub>I arrive there <sub>11</sub>it will be plain <sub>12</sub>here <sub>13</sub>on the mountain spur <sub>14</sub>where you are,” (which) <sub>15</sub>when he had said it, <sub>16</sub>he left. (possibly . . . ,” <sub>15</sub>he said, <sub>16</sub>and left.)

Sen 5 (quotative base): Base 1/hypotactic base 1<sub>1-14</sub> +

Base 2/hypo base 2<sub>4-16</sub> (the quotational is shared by both bases)

Hypo base 1: Mod/dep cl 1a, conj trans<sub>1-2</sub>, <sub>4-14</sub> + H/main cl 1<sub>3</sub>

Dep cl 1a: Comp/proc<sub>1</sub> + N/quot comp vb, 3sg sbj, prox ant fact mode<sub>2</sub> + C’/-quotational<sub>4-14</sub>

Quotational: Sen 1aa<sub>4-7</sub> + Sen 1ab<sub>8-14</sub>

Sen 1aa (hypo base): Mod/dep cl 1aaa, conj trans<sub>4-6</sub> + H/main cl 1aab

Dep cl 1aaa: Sbj/n phr<sub>4-5</sub> + N/intr vb, 3sg sbj, obviative antecedent potential conj mode<sub>6</sub>

N phr: Mod/quant pron, number, zero case<sub>4</sub> + H/n, inan sg, specificative<sub>5</sub> (allocating)

Main cl 1aab: N/intr vb, 2pl sbj, phras mode<sub>7</sub>

Sen 1ab (hypo base): Mod/dep cl 1aba, conditional trans<sub>9-10</sub> + H/main cl 1abb<sub>8, 11-14</sub>

Dep cl 1aba: Intro/particle<sub>9</sub> + N/intr vb, 1sg sbj, no mode<sub>10</sub>

Main cl 1abb: Emph/emph adv<sub>8</sub> + N/intr vb, 3sg sbj, narr mode<sub>11</sub> + Loc/loc phr<sub>12-14</sub>

Loc phr: 1/proadv<sub>12</sub> + 2/loc n(?)<sub>13</sub> + 3/incl cl 1abc, phras trans<sub>14</sub> (appos)

Incl cl 1abc: N/intr vb, 2pl sbj, phras mode<sub>14</sub>

Main cl 1: N/intr vb, 3sg sbj, narr mode<sub>3</sub>

Hypo base 2: Mod/dep cl 2a, conj trans<sub>4-15</sub> + H/main cl 2<sub>16</sub>

Dep cl 2a: Comp/quot<sub>4-14</sub> + N/quot tr vb, 3sg sbj, 3pl obj, prox antec fact conj mode<sub>15</sub>

Quot: see under Dependent Clause 1a of this sentence. The quotational is shared by both bases.

Main cl 2: N/intr vb, 3sg sbj, narr mode<sub>16</sub>

(Alternatively, the part analyzed here as Hypotactic Base 2 could [transcription of the juncture was not clear at this point] be considered part of a paratactic sentence base:

Base 2: Comp/quot<sub>4-14</sub> + N/quot tr vb, 3sg sbj, 3pl obj, no mode<sub>15</sub>

Quot: see under Dependent Clause 1a of this sentence. The quotational is shared by both bases.

Base 3: N/intr vb, 3sg sbj, narr mode<sub>16</sub>

(The phonological material, being ambiguous at this point, leaves the grammatical structure of the sentence ambiguous as well, with the possibilities given.)

#### PARAGRAPH C. Marker/6.4 + Sen 6

Sentence 6: <sub>1</sub>hai + <sub>kaa</sub> <sub>2</sub>wíi + <sub>yári</sub> <sub>3</sub>?uuti + <sub>zΛΛku</sub> <sub>4</sub>méri + <sub>kΛΛniu</sub> <sub>5</sub>?éena <sub>6</sub>wahéimá <sub>7</sub>tíniú + <sub>taa</sub> + <sub>tÁráarΛkaa</sub> + <sub>káitÁni</sub>; <sub>8</sub>?áana + <sub>waníu</sub> <sub>9</sub>rée + <sub>tá?ákú</sub> <sub>10</sub>tinéuyΛΛ + <sub>néekai</sub> + <sub>-tΛ<sup>1</sup>ni</sub> #’.

<sub>4</sub>So <sub>3</sub>when <sub>1</sub>three <sub>2</sub>years <sub>3</sub>had passed <sub>5</sub>here, <sub>6</sub>above them <sub>7</sub>it thundered; <sub>10</sub>it happened <sub>8</sub>then <sub>9</sub>after he arrived at his destination.

Sen 6 (para base): Base 1/hypo base 1<sub>1-7</sub> + Base 2/hypo base 2<sub>8-10</sub>

Hypo base 1: Mod/dep cl 1a, conj trans 1-3 + H/main cl 1<sub>5-7</sub>

Dep cl 1a: Sbj/n phr<sub>1-2</sub> + N/intr vb, 3sg sbj, obv antec fact conj mode<sub>3</sub>

N phr: Mod/quant pron, num, zero case<sub>1</sub> + H/n, inan sg, specif<sub>2</sub> (allocating)

Main cl 1: L/loc phr<sub>5-6</sub> + N/intr vb, 3sg sbj, narr mode<sub>7</sub>

Loc phr: 1/proadv<sub>5</sub> + 2/dir n, 3pl poss<sub>6</sub> (appos)

Hypo base 2: Mod/dep cl 2a, conj trans<sub>8-9</sub> + H/main cl 2<sub>10</sub>

Dep cl 2a: Time/proadv<sub>8</sub> + N/intr vb, 3sg sbj, obv antec fact conj mode<sub>9</sub>

Main cl 2: N/intr vb, 3sg sbj, narr mode<sub>10</sub>

PARAGRAPH D. Marker/7.1 + Sen 7 + Sen 8 + Sen 9 + Sen 10

(Period. Sen 7(narr mode) + Sen 8(non-narr) + Sen 9(non-narr))

Sentence 7: <sub>1</sub>hii<sup>3</sup>kΛΛ<sup>4</sup> | <sub>2</sub>mána <sub>3</sub>tineu + ye?aa + táyaaani <sub>4</sub>máΛkΛ + niu<sup>1</sup> #’.

<sub>1</sub>So then <sub>4</sub>that <sub>3</sub>happened <sub>2</sub>there.

Sen 7 (simple base): Clause<sub>2-4</sub>

Cl: Loc/proadv<sub>2</sub> + N/intr vb, 3sg sbj, narr mode<sub>3</sub> + Sbj/ deic pron, dist<sub>4</sub>

Sentence 8: <sub>1</sub>húu + tárieKa + niutáa <sub>2</sub>máΛkΛ <sub>3</sub>zewitΛ <sub>4</sub>tíwáa + tÁa<sup>31</sup> #’.

<sub>1</sub>A second time <sub>2-3</sub>somebody <sub>4</sub>went in.

Sen 8 (simple base): Clause<sub>1-4</sub>

Cl: T/quant, temporal case<sub>1</sub> + Sbj/n phr<sub>2-3</sub> + N/intr vb, 3sg sbj, no mode, distributive base prefix<sub>4</sub>

N phr: 1/deic pron, dist<sub>2</sub> + 2/quant pron, nom<sub>3</sub> (appos)

Sentence 9: <sub>1</sub>mΛkΛniu <sub>2</sub>túa + purfi <sub>3</sub>tinúa<sup>31</sup> #’.

<sub>1</sub>He <sub>3</sub>arrived <sub>2</sub>at Santa Catarina, Jalisco.

Sen 9 (simple base): Clause<sub>1-3</sub>

Cl: Sbj/deic pron, dist<sub>1</sub> + L/loc n, place name<sub>2</sub> + N/intr vb, 3sg sbj, no mode, distrib base pref<sub>3</sub>

Sentence 10: <sub>1</sub>?aa + kúzi + cΛ — <sub>2</sub>hii + páta <sub>3</sub>hiikΛ (we<sup>1</sup>?u|’) <sub>4</sub>wekanánu + téé<sup>3</sup>ni<sup>1</sup> | <sub>5</sub>wem-témaa + ri<sup>2</sup>wa #’; <sub>6</sub>néetá <sub>7</sub>mpáΛ <sub>8</sub>netiní + máari + wáa<sup>3</sup>ni<sup>1</sup> #’.

<sub>4</sub>There are <sub>1</sub>still <sub>2</sub>some <sub>3</sub>today <sub>5</sub>who know of him; <sub>6</sub>I too <sub>8</sub>know of him <sub>7</sub>in the same way.

Sen 10 (para base): Base 1/cl 1<sub>1-5</sub> + Base 2/cl 2<sub>6-8</sub>

Cl 1: T/adv<sub>1</sub> + Sbj/quant pron, pl nom<sub>2</sub> + T'/proadv<sub>3</sub> + N/intr vb, 3pl sbj, narr mode<sub>4</sub> + Sbj'/incl cl 1a, phras trans<sub>5</sub>

Incl cl 1a: N/intr vb, 3pl sbj, phras mode<sub>5</sub>

Cl 2: Sbj/deic pron<sub>6</sub> + Manner/procomp<sub>7</sub> + N/intr vb, 1sg sbj, narr mode<sub>8</sub>

PARAGRAPH E: Marker/11.1 + Sen 11 + Sen 12

(Period. Sen 11(narr mode) + Sen 12(non-narr)

Sentence 11: <sub>1</sub>méri + <sub>2</sub>κáníu <sub>3</sub>mána <sub>4</sub>nínúan <sub>5</sub>tua + <sub>6</sub>pú<sup>3</sup>rii<sup>1</sup> # <sub>7</sub>wá<sup>1</sup> + <sub>8</sub>táa<sup>2</sup> #''; <sub>9</sub>nái<sup>4</sup>me + <sub>10</sub>waaniú <sub>11</sub>?iik<sup>1</sup> <sub>12</sub>keepá<sup>1</sup>mete <sub>13</sub>?úwa <sub>14</sub>mtíyée + <sub>15</sub>píine <sub>16</sub>?ái + <sub>17</sub>cá<sup>1</sup> <sub>18</sub>kuu + <sub>19</sub>cá<sup>1</sup>rá<sup>1</sup>te + <sub>20</sub>waníu <sub>21</sub>má<sup>1</sup>á<sup>3</sup>ka<sup>1</sup> # <sub>22</sub>nieri + <sub>23</sub>káate + <sub>24</sub>waníu<sup>3</sup> # <sub>25</sub>námáate + <sub>26</sub>waniú <sub>27</sub>muwíerite + <sub>28</sub>waa<sup>1</sup>niu # <sub>29</sub>túu + <sub>30</sub>cima + <sub>31</sub>rízí <sub>32</sub>kaa + <sub>33</sub>ká<sup>1</sup>ma<sup>1</sup> (túi + wa<sup>2</sup>we|') <sub>34</sub>wáa + <sub>35</sub>páz<sup>1</sup>á<sup>1</sup> + <sub>36</sub>kii<sup>1</sup>zi # <sub>37</sub>mázá + <sub>38</sub>yua <sub>39</sub>mázá + <sub>40</sub>tuzámé + <sub>41</sub>waaniú<sup>3</sup> # <sub>42</sub>yúunáime <sub>43</sub>ká<sup>1</sup>mú + <sub>44</sub>kite + <sub>45</sub>waaníu<sup>2</sup> # <sub>46</sub>wáawáa + <sub>47</sub>caa<sup>1</sup>ri # <sub>48</sub>háaraa + <sub>49</sub>máa<sup>3</sup>ra<sup>1</sup> # <sub>50</sub>kéewíi + <sub>51</sub>múu<sup>3</sup>ka<sup>1</sup> # <sub>52</sub>wá + <sub>53</sub>zée<sup>3</sup>we<sup>1</sup>waniú # <sub>54</sub>zápá-wiye <sub>55</sub>caakái + <sub>56</sub>múu<sup>3</sup>ka<sup>1</sup> # <sub>57</sub>ná<sup>1</sup>?aríi + <sub>58</sub>wáa<sup>3</sup>me<sup>1</sup> # <sub>59</sub>túra + <sub>60</sub>múu + <sub>61</sub>ká<sup>3</sup>me<sup>1</sup> # <sub>62</sub>yuu-náime <sub>63</sub>niwaa + <sub>64</sub>zéya <sub>65</sub>?áá<sup>1</sup>ra<sup>1</sup> #''.

<sub>1</sub>Well, <sub>2</sub>he arrived <sub>3</sub>there <sub>4</sub>at Santa Catarina <sub>5</sub>and San Sebastián, and <sub>6</sub>saw <sub>7</sub>all <sub>8</sub>that <sub>9</sub>which (how much) <sub>10</sub>is <sub>11</sub>here— <sub>12</sub>the sacred canyon, <sub>13</sub>the sacred pools, and <sub>14</sub>that; <sub>15</sub>votive disks (which Lumholtz 1900 erroneously called “shields”), <sub>16</sub>votive mats (Lumholtz’s “back-shields”, also mistakenly named), <sub>17</sub>plumes; <sub>18</sub>the Great-Grand-fathers (Grimes and Grimes 1962), <sub>19</sub>the gods— <sub>20</sub>Vapaxüqui (plural), <sub>21</sub>Blue Deer, <sub>22</sub>White Deer, <sub>23</sub>all of them, <sub>24</sub>Cümüquite, <sub>25</sub>Vavasari, <sub>26</sub>Haramara (sea god), <sub>27</sub>Quevi-muca (rain god who lives in the sea and sends out-of-season rain), <sub>28</sub>Vaxieve (deity who lives in a white rock off the coast at San Blas, Nayarit), Xapaviye (rain god who lives in the south, in Lake Magdalena, Jalisco, or in Lake Pátzcuaro, Michoacán), <sub>29</sub>Sacaimuca (rain god who lives in Cora territory), <sub>30</sub>Nü’arivame (rain god who sends storms from the east), <sub>31</sub>Turamucame, <sub>32</sub>all of them (Lumholtz recorded ceremonial objects dedicated to all of these; he did not visit all the sites mentioned) — <sub>33</sub>votive arrows too.

Sen 11 (paratactic base): Base 1/clause 1<sub>2-5</sub> + Base 2/cl 2<sub>6-34</sub>

Cl 1: Loc/proadv<sub>2</sub> + Nucleus/intransitive verb, 3sg sbj, narrative mode<sub>3</sub> + L'/n phr<sub>4-5</sub>

N phr: 1/place name<sub>4</sub> + 2/place name<sub>5</sub> (additive)

Cl 2: Obj/n phr<sub>6-32</sub> + N/tr vb, 3sg sbj, 3pl obj, narr mode<sub>33</sub> + Obj'/n<sub>34</sub>

N phr: 1/n phr<sub>6-10</sub> + 2/place name, sg<sub>11</sub> + 3/n, inan pl<sub>12</sub> + 4/deic pron, distal<sub>13</sub> + 5/n, inan pl<sub>14</sub> + 6/n, inan pl<sub>15</sub> + 7/n, inan pl<sub>16</sub> + 8/n, anim pl<sub>17</sub> + 9/n, anim pl<sub>18</sub> + 10/proper noun<sub>19</sub> + 11/prop n<sub>20</sub> + 12/prop n<sub>21</sub> + 13/quant pron, anim pl acc<sub>22</sub> + 14/prop n<sub>23</sub> + 15/prop n<sub>24</sub> + 16/prop n<sub>25</sub> + 17/prop n<sub>26</sub> + 18/prop

$n_{27} + 19/\text{prop } n_{28} + 20/\text{prop } n_{29} + 21/\text{prop } n_{30} + 22/\text{prop } n_{31} + \text{Summarizer/quantitative pronoun, anim pl acc}_{32}$  (additive except for summarizer, which is in apposition with the rest of the phrase)

N  $\text{phr}_{6-10}$ :  $1/\text{quant pron, sg acc}_6 + 2/\text{deic pron, prox}_7 + 3/\text{incl cl } 2a, \text{ relative trans}_{8-10}$  (appositive)

Incl cl 2a: Sbj/interr pron, inan pl<sub>8</sub> + L/proadv<sub>9</sub> + N/intr vb, 3sg sbj, phras mode<sub>10</sub>

Sentence 12:  ${}_1\text{waazuu} + {}_2\text{kúri} + {}_3\text{waaniu } {}_4\text{wáanie} + {}_5\text{ríká } {}_6\text{wamaa} + {}_7\text{cállwa } {}_8\text{waná} + {}_9\text{tuupi } {}_{10}\text{wa?áááá} + {}_{11}\text{waa}^1\text{niu} \#^1 \quad {}_{12}\text{nái}^4\text{me} + {}_{13}\text{waaniu } {}_{14}\text{máááá } {}_{15}\text{máááá} + {}_{16}\text{ká?áá} + {}_{17}\text{kízáa} + {}_{18}\text{wáníu}^3 \#^2$ .

${}_8$ He copied down  ${}_1$ their votive bowls,  ${}_2$ their votive disks,  ${}_3$ their wristlets,  ${}_4$ their bows (?),  ${}_5$ their arrows,  ${}_6$ all<sub>7</sub>that.

Sen 12 (simple base): Clause<sub>1-8</sub>

Cl: Obj/n  $\text{phr}_{1-7} + \text{N/tr vb, 3sg sbj, 3sg obj, phras mode}_8$

N  $\text{phr}$ :  $1/\text{n, inan sg}_1 + 2/\text{n, inan sg}_2 + 3/\text{n, inan sg}_3 + 4/\text{n, inan sg}_4 + 5/\text{n, inan sg}_5 + 6/\text{quant pron, sg acc}_6 + \text{Summ/deic pron, dist}_7$  (additive through Element 5; that portion in apposition with 6 and Summarizer)

PARAGRAPH F. Marker/13. 1-2 + Sen 13 + Sen 14 + Sen 15

Sentence 13:  ${}_1\text{hiika } {}_2\text{méri} + {}_3\text{ká} - {}_4\text{húu} + {}_5\text{táriea } {}_6\text{ciem} + {}_7\text{páree}^1 | {}_8\text{níuhée} + {}_9\text{káareeri } {}_{10}\text{máááá } {}_{11}\text{yakáááá } {}_{12}\text{?ákíci} + {}_{13}\text{kaaya } {}_{14}\text{?éé}^3\text{na}^1 \#$ .

${}_{1-2}$ And then  ${}_3$ again  ${}_6$ that  ${}_8$ copying of his  ${}_4$ actually  ${}_5$ came to light  ${}_9$ here.

Sen 13 (simple base): Clause<sub>3-9</sub>

Cl: T/quant, temp case<sub>3</sub> + Emph/emph adv<sub>4</sub> + N/intr vb, 3sg sbj, narr mode<sub>5</sub> + Sbj/n  $\text{phr}_{6-8} + \text{L/proadv}_9$

N  $\text{phr}$ :  $1/\text{n } \text{phr}_{6-7} + 2/\text{n, inan sg}_8$  (appos)

N  $\text{phr}_{6-7}$ : H/deic pron, dist<sub>6</sub> + Mod/postposed attributive<sub>7</sub> (The noun phrase 6-8 can also be construed as an allocating phrase with the attributive phrase 6-7 as modifier, denoting possessor, and the inanimate singular noun 8 with 3sg possessive as head: 'his<sub>6-7</sub> copying<sub>8</sub>.')

Sentence 14:  ${}_1\text{nikúkáa} + {}_2\text{ní}^3 \#^1 \quad {}_3\text{?iika} \text{ (kee}^1) | {}_4\text{táqée } {}_5\text{kúzi } {}_6\text{?ánaa } {}_7\text{máááá } {}_8\text{náime } {}_9\text{tíu} + {}_{10}\text{?áazé}^3\text{me}^1 \#^2$ .

${}_1$ It remains,  ${}_2$ this thing  ${}_8$ that  ${}_3$ really  ${}_4$ about  ${}_8$ took in  ${}_6-7$ everything  ${}_5$ then.

Sen 14 (simple base): Clause<sub>1-8</sub>

Cl: N/intr vb, 3sg sbj, narr mode<sub>1</sub> + Sbj/n phr<sub>2-8</sub>

N phr: 1/deic pron, prox<sub>2</sub> + 2/incl cl 1a, absol phras trans<sub>3-8</sub> (appos)

Included cl 1a: Emph/emph phr<sub>3-4</sub> + T/proadv<sub>5</sub> + Obj/n phr<sub>6-7</sub> + N/tr vb,  
3sg sbj, 3sg obj, absol phras mode<sub>8</sub>

Emph phr: H/emph adv<sub>3</sub> + Mod/postposed attrib<sub>4</sub>

N phr: 1/deic pron, dist<sub>6</sub> + 2/quant pron, sg acc<sub>7</sub> (appos)

Sentence 15: <sub>1</sub>mée <sub>2</sub>káriká <sub>3</sub>ciempare <sub>4</sub>heu + yéweetá <sub>5</sub>náayáani <sub>6</sub>kú<sup>3</sup>mu<sup>1</sup> | <sub>7</sub>tamáiná + -  
taa<sup>2</sup> | <sub>8</sub>mécá + yari; — <sub>9</sub>wana <sub>10</sub>kaniuyéi + kaakaitáni <sub>10</sub>máyáa <sub>12</sub>tíyúurie + né<sup>3</sup>tá #;  
<sub>13</sub>kapá + tíunáa + kíctáacá <sub>14</sub>máláka <sub>15</sub>mpáa; <sub>16</sub>yáapáa <sub>17</sub>zeikáa <sub>18</sub>tiníu<sup>3</sup>?áazé #;  
(ciem + páree ka<sup>1</sup>pá #) <sub>19</sub>héu + yéwetá <sub>20</sub>kanaa + yéi<sup>3</sup>zla<sup>1</sup>ni #''.

<sub>1</sub>Or else, <sub>2-3</sub>really, <sub>5</sub>it got <sub>4</sub>lost <sub>6</sub>about <sub>7</sub>ten <sub>8</sub>months; (4–5 he disappeared from sight?);  
<sub>10</sub>he was <sub>9</sub>there <sub>12</sub>doing <sub>11</sub>that; <sub>14</sub>it <sub>13</sub>did not suit him (?) <sub>15</sub>that way; <sub>18</sub>he achieved  
<sub>17</sub>only <sub>16</sub>so much; <sub>20</sub>he got <sub>19</sub>lost (dropped out of sight?). (Though this sentence is  
syntactically transparent, I have not yet discovered what it is talking about.)

Sen 15 (para base): Base 1/clause 1<sub>1-8</sub> + Base 2/hypo base<sub>9-12</sub> + Base 3/cl 3<sub>13-15</sub> +  
Base 4/cl 4<sub>16-18</sub> + Base 5/cl 5<sub>19-20</sub>

Cl 1: Mod/preposed attrib<sub>1</sub> + H/remainder<sub>2-8</sub>

Remainder: Emph/emph phr<sub>2-3</sub> + N/developmental phr<sub>4-5</sub> + Extent/ext phr<sub>6-8</sub>

Emph phr: 1/emph adv<sub>2</sub> + 2/emph adv<sub>3</sub> (additive?)

Dev phr: 1/intr vb, 3sg sbj, prox concur conj mode<sub>4</sub> + 2/intr vb -yaa, 3sg sbj,  
narr mode<sub>5</sub>

Ext phr: Mod/preposed attrib<sub>6</sub> + H/number phr<sub>7-8</sub> (attrib)

Num phr: Mod/num particle<sub>7</sub> + H/n, specif<sub>8</sub> (allocating)

Hypo base: H/main cl 2<sub>9-10</sub> + Mod/dep cl 2a<sub>11-12</sub>

Main cl 2: L/proadv<sub>9</sub> + N/intr vb, 3sg sbj, narr mode<sub>10</sub>

Dep cl 2a: Comp/proc<sub>11</sub> + N/obj comp vb, 3sg sbj, prox concur conj mode<sub>12</sub>

Cl 3: N/intr vb, 3sg sbj, assertive mode<sub>13</sub> + Sbj/deic pron, dist<sub>14</sub> + Manner/proc<sub>15</sub>

Cl 4: Manner/m phr<sub>16-17</sub> + N/intr vb, 3sg sbj, narr mode<sub>18</sub> (or possibly C<sub>16-17</sub>  
+ N/obj comp vb<sub>18</sub>)

Manner phr: H/m adv(?)<sub>16</sub> + Mod/postposed attrib<sub>17</sub>

Cl 5: N/develop phr<sub>19-20</sub>

Devel phr: 1/intr vb, 3sg sbj, prox concur conj mode<sub>19</sub> + 2/intr vb -yaa, 3sg  
sbj, narr mode<sub>20</sub>

PARAGRAPH G: Marker/16.2 + Sen 16 + Sen 17 + Sen 18

Sentence 16: <sub>1</sub>peeru <sub>2</sub>hii<sup>1</sup>ka<sup>1</sup> | <sub>3</sub>húu + tárieka <sub>4</sub>hí<sup>3</sup>ka<sup>1</sup> | <sub>5</sub>yaká + tá<sup>3</sup>táa<sup>1</sup> | <sub>6</sub>híká <sub>7</sub>nái<sup>4</sup>tá  
<sub>8</sub>mátiú + ?úcie + táya; <sub>9</sub>má <sub>10</sub>kanééhée + káa<sup>3</sup>ka<sup>1</sup> |.

<sub>1</sub>But <sub>4</sub>now <sub>3</sub>again, <sub>6</sub>now <sub>7</sub>everything <sub>8</sub>is put in its place; <sub>10</sub>it is clear.

Sen 16 (para base): Marker/sen connector<sub>1-2</sub> + Base 1/cl <sub>1-8</sub> + Base 2/cl <sub>2-10</sub>

Cl 1: Time/temp phr<sub>3-6</sub> + Sbj/quant pron, sg nom<sub>7</sub> + N/intr passive vb, 3sg sbj, phras mode<sub>8</sub>

Temp Phr: 1/temp proadv<sub>3</sub> + 2/temp phr<sub>4-5</sub> + Summ/proadv<sub>6</sub> (appos)

Temp phr<sub>4-5</sub>: H/proadv<sub>4</sub> + Mod/post attrib<sub>5</sub>

Cl 2: Emph/emph adv<sub>9</sub> + N/intr vb, 3sg sbj, narr mode<sub>10</sub>

Sentence 17: <sub>1</sub>?éná <sub>2</sub>piinieya <sub>3</sub>katíníku + pii<sup>1</sup>ka #'' <sub>4</sub>keepáλ + mé —<sub>5</sub>mti + yúurie + —  
néni <sub>6</sub>keepáλ <sub>7</sub>mtiwa?u + táa + neekai <sub>8</sub>máλka + zee<sup>1</sup>niu #'.

<sub>1</sub>Here <sub>2</sub>his possessions <sub>3</sub>are displayed, <sub>4</sub>whatever <sub>5</sub>he was doing <sub>6</sub>in the way <sub>8</sub>he <sub>7</sub>was writing them down.

Sen 17 (simple base): Clause<sub>1-8</sub>

Cl: L/proadv<sub>1</sub> + Sbj/n, 3sg poss<sub>2</sub> + N/intr vb, 3sg sbj, narr mode<sub>3</sub> + Sbj'/incl cl 1a, rel trans<sub>4-8</sub>

Incl cl 1a: Complement/interr<sub>4</sub> + N/obj comp vb, 3sg sbj, phras mode<sub>5</sub> + Man/incl cl 1aa, rel trans<sub>6-8</sub>

Incl cl 1aa: Man/interr<sub>6</sub> + N/tr vb, 3sg sbj, 3pl obj, phras mode<sub>7</sub> + Sbj/deic pron, distal<sub>8</sub>

Sentence 18: <sub>1</sub>tepá + riite + waanú<sup>2</sup> #' <sub>2</sub>háu + ríte + waniu<sup>1</sup> # <sub>3</sub>zúkúuri + te<sup>1</sup>waniu #''  
<sub>4</sub>kúruu + náte + níu<sup>2</sup> # <sub>5</sub>niwe + táríte <sub>6</sub>nie + táríi<sup>3</sup>te<sup>1</sup>waniu # <sub>7</sub>?íteλ + kızı <sub>8</sub>?λrλλ + téé<sup>3</sup>-  
zi<sup>2</sup> #' <sub>9</sub>yuu + náí<sup>4</sup>meniu <sub>10</sub>máλka <sub>11</sub>waazu + kúuriwaniu <sub>12</sub>wa?ítári (wa?ii + wá<sup>3</sup> #)  
<sub>13</sub>wa?ínλari + yári <sub>14</sub>máλka <sub>15</sub>yunái <sub>16</sub>mtiyee + ?utáa<sup>3</sup>ta<sup>2</sup>ya #'; <sub>17</sub>mλka + rikλ <sub>18</sub>?íkλ  
<sub>19</sub>ciem<sup>3</sup>pλ<sup>2</sup>re #' <sub>20</sub>naayé + ?aani; <sub>21</sub>nánú + yéyáa + ní<sup>3</sup>wánú #''; <sub>22</sub>?auzλ<sup>3</sup>me<sup>1</sup>|' <sub>23</sub>téwiyari  
(heimá<sup>3</sup>ná|'' ?aa<sup>1</sup>| ?ataa + náuká ?au<sup>1</sup>!' ?atanáuka) <sub>24</sub>heimána <sub>25</sub>tahai + káme<sup>1</sup>|'  
<sub>26</sub>wíiyáa<sup>3</sup>ri<sup>2</sup> # <sub>27</sub>kanánú + yéyáa + níwánú <sub>28</sub>máλka <sub>29</sub>meeku + yéi<sup>3</sup>zλa<sup>1</sup> #'.

<sub>16</sub>He copied down <sub>1</sub>stone disks, <sub>2</sub>candles, <sub>3</sub>votive bowls, <sub>4</sub>wreaths, <sub>5</sub>altars, <sub>6</sub>(?), <sub>7</sub>arrows for transmitting curses, <sub>8</sub>bundles containing rock crystals said to be the spirits of deceased parents, bound to arrows, <sub>11</sub>the votive bowls <sub>9</sub>of all <sub>10</sub>those, <sub>12</sub>their mats, <sub>13</sub>their symbols, <sub>15</sub>of all <sub>14</sub>of them; <sub>17-19</sub>indeed <sub>18</sub>this one <sub>20</sub>came; <sub>21</sub>he left; <sub>22</sub>five times <sub>23</sub>twenty (plus—ah—nine—nine) <sub>24</sub>plus <sub>25</sub>eight <sub>26</sub>years <sub>27</sub>have gone past <sub>29</sub>since <sub>28</sub>he <sub>29</sub>made his trip. (Note interference between vigesimal and decimal systems; the informant intended 'five times ten = 50' but said the more usual type of form 'five times twenty = 100'. This text was uttered in 1953; Lumholtz did his field work in 1895 and 1896. The lapse of time referred to was something the informant and I had worked out, otherwise he would not have mentioned it.)

Sen 18 (para base): Base 1/cl 1<sub>1-13</sub> + Base 2/cl 2<sub>14-17</sub> + Base 3/cl 3<sub>18</sub> + Base 4/cl 4<sub>19-26</sub>

Cl 1: Obj/n phr<sub>1-12</sub> + N/tr vb, 3sg subj, 3sg obj, phras mode<sub>13</sub>

N phr: 1/n, inan pl<sub>1</sub> + 2/n, inan pl<sub>2</sub> + 3/n, inan pl<sub>3</sub> + 4/n, inan pl<sub>4</sub> + 5/n, inan pl<sub>5</sub> + 6/n phr<sub>6-12</sub> (additive)

N phr<sub>6-12</sub>: Mod/n phr<sub>6-7</sub> + H/n phr<sub>8-10</sub> + Mod'/n phr<sub>11-12</sub> (allocating)

N phr<sub>6-7</sub>: 1/quant pron, anim pl acc<sub>6</sub> + 2/deic pron, dist<sub>7</sub> (appositive)

N phr<sub>8-10</sub>: 1/n, inan sg, 3pl poss<sub>8</sub> + 2/n, inan sg, 3pl poss<sub>9</sub> + 3/n, inan sag, 3pl poss<sub>10</sub> (additive)

N phr<sub>11-12</sub>: 1/deic pron, dist<sub>11</sub> + 2/quant pron, anim pl zero case<sub>12</sub> (appositive)

Cl 2: Emph/emph adv<sub>14</sub> + Sbj/deic pron, prox<sub>15</sub> + Emph/emph adv<sub>16</sub> + N/intr vb, 3sg subj, narr mode<sub>17</sub>

Cl 3: N/intr vb, 3sg subj, narr mode<sub>18</sub>

Cl 4: Sbj/n phr<sub>19-23</sub> + N/intr vb, 3sg subj, narr mode<sub>24</sub> + T/incl cl 4a, phras trans<sub>25-26</sub>

N phr: Mod/complx num phr<sub>19-22</sub> + H/n, specif<sub>23</sub> (alloc)

Complx num phr: Vigess/viges phr<sub>19-20</sub> + Connector/directive n<sub>21</sub> + Unit/quant pron, acc sg<sub>22</sub>

Viges phr: Mod/num, acc 59<sub>19</sub> + H/n, specif<sub>20</sub> (alloc)

Incl cl 4a: Sbj/deic pron, dist<sub>25</sub> + N/intr vb, 3sg subj, phras mode<sub>26</sub>

PARAGRAPH H: Marker/19.1 + Sen 19 + Sen 20 + Sen 21

(Period. Sen 19 (no mode, distrib pref) + Sen 20 (narr))

Sentence 19: <sub>1</sub>méri + <sub>k</sub>λ <sub>2</sub>taqée <sub>3</sub>fiika <sub>4</sub>zaka — <sub>5</sub>ʔu + <sub>ʔ</sub>ée + <sub>yéikaani</sub> <sub>6</sub>yáari <sub>7</sub>parée + <sub>m</sub>λλ<sup>3</sup> # <sub>8</sub>taqe <sub>9</sub>ʔáciraa + <sub>m</sub>áaciλ + <sub>k</sub>λλ<sup>1</sup>kai #''.

<sub>1</sub>So <sub>9</sub>it was not <sub>2</sub>, <sub>8</sub>at all <sub>9</sub>known <sub>4</sub>if <sub>3</sub>this one <sub>5</sub>was still alive <sub>6</sub>or <sub>7</sub>had died.

Sen 19 (hypo base): H/main cl 1<sub>2-3, 8-9</sub> + Mod/dep cl 1a<sub>3-7</sub>

Main cl 1: Emph/emph adv<sub>2</sub> + Sbj/deic pron, prox<sub>3</sub> + Emph'/emph adv<sub>8</sub> + N/intr vb, 3sg subj, no mode, distrib pref<sub>9</sub>

Dep cl 1a: Intro/cond part<sub>4</sub> + N/vb phr<sub>5-7</sub>

Vb phr: 1/intr vb, 3sg subj, no mode<sub>5</sub> + 2/vb phr<sub>6-7</sub> (add)

Vb phr<sub>6-7</sub>: Mod/preposed attrib<sub>6</sub> + H/intr vb, 3sg subj, assert mode<sub>7</sub> (attributive. A conditional transform or at least a modeless verb would be more normal in this position.)

Sentence 20: <sub>1</sub>perucá <sub>2</sub>máλkλ <sub>3</sub>míiti + <sub>wée</sub><sup>3</sup>wi<sup>2</sup> <sub>4</sub>máκλ <sub>5</sub>nái <sub>6</sub>kan + <sub>tíkáani</sub> <sub>7</sub>kúzi <sub>8</sub>hii<sup>1</sup>kλ #' <sub>9</sub>máλkλari <sub>10</sub>ʔénáa <sub>11</sub>míiʔuu + <sub>táataya</sub> <sub>12</sub>ʔána + <sub>paitλ</sub> <sub>13</sub>má<sup>3</sup>kλ<sup>1</sup> #.

<sub>1</sub>But <sub>3</sub>the thing <sub>2</sub>he <sub>3</sub>made, <sub>5</sub>all <sub>4</sub>that, <sub>7</sub>still <sub>6</sub>remains <sub>8</sub>today, <sub>9</sub>that thing <sub>10</sub>he <sub>11</sub>wrote down <sub>10</sub>here <sub>12</sub>at that time.

Sen 20 (simple base): Clause<sub>1-13</sub>

Cl: Marker/sen conn<sub>1</sub> + Sbj/n phr<sub>2-5</sub> + N/vb phr<sub>6-7</sub> + T/proadv<sub>8</sub> + Sbj'/n phr<sub>9-13</sub>

N phr<sub>2-5</sub>: 1/incl cl 1a, phras trans<sub>2-3</sub> + 2/deic pron, dist<sub>4</sub> + 3/quant pron, zero case<sub>5</sub> (appos)

Incl cl 1a: Sbj/deic pron, dist<sub>2</sub> + N/tr vb, 3sg sbj, 3sg obj, phras mode<sub>3</sub>

V phr: H/ntr vb, 3sg sbj, narr mode<sub>6</sub> + Mod/postpoded attrib<sub>7</sub> (attributive)

N phr<sub>9-13</sub>: 1/incl cl 1b, phras trans<sub>9-12</sub> + 2/deic pron, dist<sub>13</sub> (appos)

Incl cl 1b: Obj/deic pron, dist<sub>9</sub> + L/proadv<sub>10</sub> + N/tr vb, 3sg sbj, 3sg obj, phras mode<sub>11</sub> + T/dir phr<sub>12</sub> (The deictic pronoun 13 could alternatively be construed as Sbj/deic pron, distal, in which case the noun phrase 9-13 would consist of a single phrasal transform.)

Dir phr: Ax/proadv + Dir/encl<sub>12</sub>

Sentence 21: <sub>1</sub>ʔaa + kúzi <sub>2</sub>máka <sub>3</sub>kii + zée<sup>3</sup>níu #’ <sub>4</sub>túki <sub>5</sub>mánú + weetáka <sub>6</sub>mú<sup>3</sup>wa<sup>2</sup> #’’  
<sub>7</sub>máka <sub>8</sub>nái <sub>9</sub>keépáa <sub>10</sub>múu + ʔínari + tázá <sub>11</sub>múwa (kan + yeʔú) <sub>12</sub>kanyéehée + káaka  
<sub>13</sub>kúzi <sub>14</sub>máka<sup>3</sup>ka #’’; <sub>15</sub>tekaníizée + yáni; <sub>16</sub>ʔaa + kúzi <sub>17</sub>kán + tiʔúu<sup>3</sup>ka #; <sub>18</sub>máka<sup>3</sup>ka<sup>1</sup>  
 (—waʔu #’’) <sub>19</sub>ʔána <sub>20</sub>waawaa + ʔáate <sub>21</sub>múwa <sub>22</sub>wiyetée <sub>23</sub>kuu + cáráate <sub>24</sub>máka  
<sub>25</sub>yunái<sup>4</sup>ta <sub>26</sub>kúzi (wen<sup>1</sup>yu!’’) <sub>27</sub>weniimáaci + kání; <sub>28</sub>wenihee + káaka <sub>29</sub>wemii + háka<sup>3</sup>-  
 kái #.

<sub>2</sub>Those <sub>3</sub>houses, <sub>4</sub>the temples <sub>5</sub>that stood <sub>6</sub>there, <sub>8</sub>all <sub>7</sub>that <sub>9</sub>as <sub>10</sub>he laid it out (measured off?) <sub>11</sub>there, <sub>14</sub>that <sub>1,13</sub>still <sub>12</sub>is visible; <sub>15</sub>we have seen it; <sub>17</sub>it <sub>16</sub>still <sub>17</sub>exists; <sub>18</sub>those <sub>20</sub>temple guardians <sub>19</sub>of that time, <sub>22</sub>the mountain spurs <sub>21</sub>there, <sub>23</sub>the sacred pools, and <sub>25</sub>all <sub>24</sub>those <sub>26</sub>still <sub>27</sub>are visible; <sub>29</sub>the ones who attended him <sub>28</sub>are visible.

Sen 21 (para base): Base 1/cl 1<sub>1-14</sub> + Base 2/cl 2<sub>15</sub> + Base 3/cl 3<sub>16-17</sub> + Base 4/cl 4<sub>18-27</sub> + Base 5/cl 5<sub>28-29</sub>

Cl 1: T/adv<sub>1</sub> + Sbj/n phr<sub>2-8</sub> + M/incl cl 1a, rel trans<sub>9-10</sub> + L/adv<sub>11</sub> + N/vb phr<sub>12-13</sub> + Sbj’(summ)/deic pron, distal<sub>14</sub>

N phr: 1/incl cl 1b, phras trans<sub>2-6</sub> + 2/deic pron, dist<sub>7</sub> + 3/quant pron, zero case<sub>8</sub> (appos)

Incl cl 1b: Sbj/n phr<sub>2-4</sub> + N/intr vb, 3sg sbj, phras mode<sub>5</sub> + L/adv<sub>6</sub>

N phr<sub>2-4</sub>: 1/n phr<sub>2-3</sub> + 2/n, inan sg<sub>4</sub> (additive)

N phr<sub>2-3</sub>: 1/deic pron, dist<sub>2</sub> + 2/n, inan sg<sub>3</sub> (appositive)

Incl cl 1a: M/interr<sub>9</sub> + N/intr (?) vb, 3sg sbj, phras mode<sub>10</sub>

V phr: H/intr vb, 3sg sbj, narr mode<sub>12</sub> + Mod/post attrib<sub>13</sub> (attrib)

Cl 2: N/tr vb, 3sg sbj, 3sg obj, narr mode<sub>15</sub>

Cl 3: T/adv<sub>16</sub> + N/intr vb, 3sg sbj, narr mode<sub>17</sub>

Cl 4: Sbj/n phr<sub>18-26</sub> + N/intr vb, 3pl sbj, narr mode<sub>27</sub>

N phr: 1/deic pron, dist<sub>18</sub> + 2/n phr<sub>19-20</sub> + 3/n phr<sub>21-22</sub> + 4/n, inan pl<sub>23</sub> + 5/deic pron, dist<sub>24</sub> + 6/n phr<sub>25-26</sub> (appos)

N phr<sub>19-20</sub>: Mod/proadv<sub>19</sub> + H/n, anim pl<sub>20</sub> (attrib)

N phr<sub>21-22</sub>: Mod/adv<sub>21</sub> + H/n, inan pl<sub>22</sub> (attrib)

N phr<sub>25-26</sub>: H/quant pron, anim pl nom<sub>25</sub> + Mod/post attrib<sub>26</sub> (attrib)

Cl 5: N/intr vb, 3pl sbj, narr mode<sub>28</sub> + Sbj/incl cl 5a, phras trans<sub>29</sub>

Incl cl 5a: N/tr vb, 3pl sbj, 3sg obj, phras mode<sub>29</sub>

# PARAGRAPH I: Marker/22.1 + Sen 22

Sentence 22: <sub>1</sub>mérika <sub>2</sub>mpáa <sub>3</sub>tiníuyá + ní<sup>3</sup> #’ <sub>4</sub>’ána + pai’ta #’.

<sub>2</sub>Thus <sub>3</sub>it happened <sub>4</sub>then.

Sen 22 (simple base): Clause<sub>1-4</sub>

Cl: Manner/procomp<sub>2</sub> + N/intr vb, 3sg sbj, narr mode<sub>3</sub> + Time/dir phr<sub>4</sub>

Dir phr: Ax/proadv + Dir/encl<sub>4</sub>

(1) Someone made a trip (to Huichol territory); no one knew where he was from. He was in the community for a while looking for lice, white lice, and fleas, and listening for deceased chanters who had been buried. (2) He made pictures of everything — agave (or agave distillation), bag straps, containers; he copied them down. (3) He went there and left.

(4) After he did that he went far away. (5) Before he left he said, “At the end of three years, listen. If I arrive (home) it will be evident here where you live on the mountain.”

(6) So after three years there was a roll of thunder overhead; that happened after he arrived home.

(7) Now that happened there. (8) Another time someone made a trip. (9) He went to Santa Catarina. (10) There are some people yet who knew of it; I knew of it (from my father).

(11) He went to Santa Catarina and San Sebastián; he saw everything there is there — the sacred canyon, the sacred pools, votive disks, votive mats, ceremonial plumes, the Great-Grandfathers, the deities, Vapaxüqui, Blue Deer, White Deer, Cümüquite, Vavasari, Haramara, Quevimuca, Vaxieve, Xapaviye, Sacaimuca, Nü’arivame, Turamucame, all of them; votive arrows too. (12) He copied down their votive bowls, their votive disks, their wristlets, their bows, their arrows, everything.

(13) Now once more what he copied down has come to light here. (14) Here it is, this thing that includes just about everything from that time. (15) Or else it dropped out of sight for about ten months; he was there doing that; it did not suit him that way; he achieved only so much; he got lost. (This sentence is completely obscure. It may refer to a period of time Lumholtz spent in Mexquitic, Jalisco, outside the Huichol area, before returning for the second part of his field trip.)

(16) But now again everything is in its place; it is there to be seen. (17) His possessions (that he collected) are laid out here, everything he was doing in the way he copied

them down. (18) Stone disks, candles, votive bowls, wreaths, altar shelves, arrows, arrows for sorcery, ancestral crystals, the votive bowls of all (the deities), their mats, their signs, everything — he wrote it down; yet he left, and time passed: one hundred (actually fifty; decimal-vigesimal interference) and nine — eight, I mean — years passed since he made his trip.

(19) So nobody knew if he was alive or dead. (20) But the things he made are all here now still, the things he copied down here at that time. (21) Those houses and temples that stood there, as he indicated there, are still visible, and we see it all; it is still extant; those temple guardians of that time, the mountain spurs there, the sacred pools, all are still visible; even the people who were with him are still visible (in the book).

(22) That is what took place then.

## APPENDIX B

### NOTES ON VERB MORPHOLOGY

In this appendix various observations on the internal organization of Type I words (verbs) are brought together. The framework for a systematic presentation of all parts of the verb morphology has yet to be worked out.

#### BASE AFFIXES

Affixes that are not inflectional, but yet are not part of the stem layer of the morphology (Chapter 2), are listed together with the inflectional affixes in Tables 1 and 2 in order to present a full picture of the position classes of affixes. In this section reference to the position classes of Tables 1 and 2 is made with subscript numerals, and to the substitution class membership of base affixes with subscript capital letters.

(G) *Extension*. Fifteenth position prefixes. Most members of this class denote some type of spatial or temporal limitation on the extent of what the stem denotes. *Paci*- 'absent' usually occurs with negative (H, I) affixes, occasionally without them, still with negative meaning: *Paci*+*pakatímáa*+*té* 'he knows nothing'. *Pe-/Pa-* (alternation according to stem) 'augmented', usually has reference to physical dimensions: *Pepa*+*téewi* 'it is long'. *Peci-* 'diminished' is the opposite of *Pe-*: *Peci*+*pátéewi* 'it is short'. *Pu-* 'invisible, fixed' with verbs of motion denotes action out of sight of the speaker: *Puu*+*kanáa*+*mieni* 'he is coming this way but is still out of sight'. With verbs of position *Pu-* denotes limitation to a fixed or circumscribed area: *Puu*+*kaniúkáa*+*ní* 'he stays right at that spot'. *ya-* 'customarily, thus' is at least with some stems interchangeable with a manner procomplement such as *mápaal* 'thus': *yaa*+*pápaáne* 'it is customarily thus', equivalent to *mápaal pápaáne*.

(H) *Mild negative*. Thirteenth position prefix. *ka-* 'mild negative' is a very weak, tentative negative that occurs before *pA-C12*, assertive mode: *Pee*+*kapatéewi* 'it is not long'. With *ni-D8*, narrative mode, *ka-* denotes no negation at all; it is semantically insignificant, but appears to serve to fill out a rhythmic pattern: *Pee*+*kanitée*+*wini* 'it is long', equivalent to *Pée*+*nitée*+*wini*. When *ka-I11*, strong negative, occurs in the narrative mode, however, the weak negative must occur with it: *Pee*+*kakani*+*téewini* 'it is not long'.

The sequence  $ka_{-H13}$  weak negative +  $pa_{-C12}$  assertive mode +  $ka_{-I11}$  strong negative, is equivalent to the introductory particle of the modal transformation *kauka* 'possibly, it seems that': *pekapa<sub>ka</sub> + héeyáa + nii* or *kauka pehéeyáa + nii* 'it is possible that you might leave'.

(I) *Strong negative*. Eleventh position prefix.  $ka_{-}$  'strong negative' denotes outright denial of a proposition. It occurs in all modes, and is probably obligatory with the supplicative  $na_{-C13-12}$ . When the strong negative occurs in the narrative mode the weak negative  $ka_{-H13}$  must precede it.

*pa<sub>ka</sub>hee + t<sub>la</sub>* 'he did not leave' assertive, strong negative  
*kakanéeyáa + nii* 'he did not leave' narrative, both negatives

(J) *Distributive*. Ninth and sixth position prefixes. Three morphs are almost in complementary distribution.  $te_{-J9}$  occurs with plural subject, or in nominalized forms (Chapters 2, 5) with the noun plural affix  $-te$ , but occasionally it does duty for what appears to be an elided subject: *tenii + ka<sub>hla</sub> + weeni* for the usual *wetenii + ka<sub>hla</sub> + weeni* 'they said to him'.  $ti_{-J9}$  occurs with singular subjects before consonant initial morphs and before  $i_{-B4}$  3sg obj and  $u_{-L4}$  restrictive; in nominalized forms it occurs in the singular.  $r_{-J6}$  occurs with singular subjects before vowel initial morphs except  $i_{-}$  and  $u_{-}$ . In addition,  $r_{-}$  occurs automatically between  $wa_{-B7}$  'them' 3pl obj and any vowel initial morph including  $u_{-}$ ; in this environment the subject may be singular or plural, and  $te_{-}$  or  $ti_{-}$  may also occur in the same word. Where the distributive prefix is not wholly determined it appears to denote that the action of the stem is carried out in various places or in various ways, or iteratively; however, no really good examples of contrast of the distributive with its own absence, or with other morphemes, have turned up.

*meptéku + záata* 'they are chatting' plural subject  
*tézaazaa + támete* 'speakers' plural nominalized form  
*neptiku + záata* 'I am talking' singular subject  
*tízaazaa + táame* 'speaker' singular nominalized form  
*pa<sub>la</sub>áa + záata* 'he talks on and on (?)' before  $a_{-}$   
*pa<sub>la</sub>wáru<sub>ti</sub> + záazáata* 'he lectures them (?)' between 3pl obj and  $u_{-}$   
*yaa + pa<sub>ti</sub>waru + táah<sub>la</sub>awe* 'he tells them so' singular subject, 3pl obj, before  $u_{-}$ ,  
 two occurrences in one word

(K) *First directional*. Fifth position prefixes. Four classes of base affixes form a subsystem, the directional system, that denotes location or direction of motion.  $a_{-}$  'toward, on the surface of' (allative) does not occur before fourth position prefixes  $i_{-B4}$  and  $u_{-L4}$ ; it does occur before third-and-fourth position prefixes  $na_{-M4-3}$  and  $nu_{-M4-3}$ .  $e_{-}$  'away from, out of sight' (ablative) occurs before  $i_{-}$  and  $u_{-}$ , but occurs before  $na_{-}$  and  $nu_{-}$  only when it denotes the third singular object (Chapter 2). Examples of all the directionals are given after all four classes have been described.

(L) *Second directional*. Fourth position prefix. *u-* 'restrictive' appears to denote some specificity such as occurrence in a particular location or at a particular time; its function is not at all clear. In a paradigm, *i-B4* has priority over *u-*: *pawáru + zéi* 'he saw them', but *píi + zéi* 'he saw him'.

(M) *Third directional*. Third-and-fourth position prefixes (i.e., they may follow fifth position prefixes and precede second position prefixes). *wa-* 'related to a cavity' occurs in the third prefix position and may follow *i-B4* and *u-L4*; other members of the class may not. *na-* 'on the speaker's side of a reference line' (cislocative) and *nu-* 'on the other side of a reference line from the speaker' (translocative) both require either allative *a-K5-4* or, when third singular object is also indicated, *e-K5*, preceding them.

(N) *Fourth directional*. First position prefixes. *ka-* 'down'. *ku-* 'around, back and forth'. *ta-* 'through, straight ahead, all the way', also used to limit action to a single object or to a totally effective action: *pítáa + wéewi* 'he made it (one thing)', *píi + táqai* 'he ate it up completely'. *ti-* 'up', is also used to denote action on a number of objects or partial action on a single object, in contrast with *ta-*: *pítíi + wéewi* 'he made them (several things of the same kind)', *píi + tíqai* 'he nibbled at it'. *ye-* 'related to a circumscribed area'.

The directional system denotes location on the earth's surface, on a human or animal body, or on an object, or direction of motion, depending on the stem and the context. The following examples give an idea of the type of reference for which the directional system is used. They are not exhaustive.

*a-K* allative

*páa + mie* 'he is coming this way'

*páa + zúure* 'it has a red spot on it, he is red around the eyes'

*e-K* ablative

*pée + taa* 'he went away'

*pée + yéika* 'he is walking (or living) elsewhere, out of sight'

*a-Kka-N* allative, down

*páakáa + mie* 'he is coming down the hill this way'

*páakáa + téi* 'he was sitting down on something'

*a-Kku-N* allative, around

*kenáakú + ye?áa* 'come here!' (necessitating travel around a bend or corner)

*paaku + Pítíeni* 'he is going to sweep around in an area on the ground'

*a-Kta-N* allative, straight

*páa + táazuu + nii* 'she will embroider a straight strip'

*Pepáatáa + yéewa* '(the road) is wide'

*nepáatáa + ziténi* 'I am going to shave (cut something in the area of the beard)'

*páatáa + zúure* 'he has red stuff smeared from ear to ear'

*a-Kti-N* allative, up

*kenáatí + ye?áa* 'come up here!'

*páati + tékai* 'he lived up on top of a flat-surfaced hill'

*páati + zúure* 'he has red around his throat, around his neck'

*a<sub>K</sub>ye-N* allative, area

*páayé + Púza* 'it has marks on its (bounded) surface' (said of paper or cloth, for example)

*páa + yéma* '(a liquid) is inside a vessel'

*páayée + zúure* 'he has red stuff all over his face'

*e<sub>K</sub>ka-N* ablative, down

*péi + káħħa* 'he threw it down and away from himself'

*péikáa + zéi* 'he found it down on the ground'

*e<sub>K</sub>ku-N* ablative, around

*pée + kuyéizħa* 'he went there and came back'

*tepéeku + háréeni* 'we are going to get a drink of water and then come back'

*e<sub>K</sub>ta-N* ablative, straight

*pée + táħħa* 'he reached his goal, which is out of sight'

*péitáa + zéi* 'he found it' (what he was looking for)

*e<sub>K</sub>ti-N* ablative, up

*péeti + yeu + ríwa* '(a liquid) is spilling up over the edge of a vessel'

*e<sub>K</sub>ye-N* ablative, area

*péeyée + tħa* 'he is leaving a bounded area (one where the speaker himself is not located)'

*péeyée + híiwa* 'he shouts from within'

*ħatáci + heeyee + nħħa* 'he sent us away (from the area where he is to where we are now)'

*e<sub>K</sub>u-L* ablative, restrictive

*péu + tħa* 'he is in motion (direction unspecified)'

*péu + zúure* 'he is red all over'

*péu + níere* 'he possesses the sense of sight'

*péu + Pěna* 'he possesses the sense of hearing'

*e<sub>K</sub>u<sub>L</sub>ka-N* ablative, restrictive, down

*péukáa + mée* 'he is going off that way and down'

*e<sub>K</sub>u<sub>L</sub>ta-N* ablative, restrictive, straight

*péutáa + mée* 'he is going straight ahead, straight through'

*wepéutáa + yéizħa* 'each went his own way'

*péutáa + Pěe + káa* '(the wind) blows straight into (the house)' (spoken while out-doors)

*e<sub>K</sub>u<sub>L</sub>ti-N* ablative, restrictive, up

*péu + timée* 'he is going off that way and up'

*péu + tizúure* 'he has red along his forearm'

*e<sub>K</sub>u<sub>L</sub>ye-N* ablative, restrictive, area

*péu + yéwe* 'he is disoriented, lost'

wa-M cavity

*pawaa + taa* 'he went into (the area)'

*weptéwa + waa + malwátá* 'they seduced them (literally, touched them inside)

wa-Mka-N cavity, down

*pawáká + húuzá + tákáa* '(a mestizo's nose) has hairs protruding downward out of the nostril'

wa-Mku-N cavity, around

*pawáaku + qíema* 'it is dirty around the inside of the cavity from one end to the other (rifle bore)'

wa-Mti-N cavity, up

*teniwátí + haaní + kuni* 'we shall pull him up out of the hole'

wa-Mye-N cavity, area

*nepawáyé + zimáni* 'the inside of my mouth feels furry (as the result of a scorpion sting)'

na-M (a-K or e-K obligatory) cislocative

*péná + háana* 'she kneads it (dough)'

na-Mka-N cislocative, down

*kanánaka + kii + tenieka* 'there is a pass (on a road that runs this way and down from a mountain divide)'

*pánaka + zúure* 'he has red on the seat of his pants'

na-Mku-N cislocative, around

*wemánaku + néezáa* 'they came around the bend'

na-Mta-N cislocative, straight

*ránata + taa + tákai + ta* 'wearing many small objects dangling around his waist'

*pánata + heekáa* '(the view of the foot of a mountain as seen from the peak) is clear'

na-Mti-N cislocative, up

*pána + títaa* 'he came up here (on the promontory where I am standing)'

*nepánátí + wáki* 'my throat is dry'

*zekenánati + haayázáa* 'you-all vomit it up and out'

na-Mye-N cislocative, area

*nepáná + yéyáa + níi* 'I'll get out!' (said while still outside)

*páná + yéwée + ní* 'he will get well (he will get cleansed so that whatever is inside him will come out)'

nu-M translocative

*pánu + taa* 'he is going away from inside this area; he will pass to the far side of its boundary'

*pánu + zúure* 'it is red on its top surface'

nu-Mka-N translocative, down

*pánuka + taa* 'he passed by going downwards' (also said of an event that happens, then takes its place in the past, or of a period of time that has elapsed)

nu-Mku-N translocative, around

*pénuku + wéiya* 'he followed him around'

nu<sub>M</sub>ta-<sub>N</sub> translocative, straight

pánú + taa + taa 'he went across at a right angle'

pánú + taa + kurúuzi 'it has a cross on it' (Spanish *cruz*)

nu<sub>M</sub>ti-<sub>N</sub> translocative, up

pánuti + taa 'he went off and up past something'

pénúti + hánázal 'he took it off up over his head' (a shirt)

pánúti + zúure 'it is red on the peak'

pénúti + zíte 'he cut his head off'

nu<sub>M</sub>ye-<sub>N</sub> translocative, area

pánú + yeetaa 'he passed by here on his way neither uphill nor downhill'

pánúyé + maa 'it is sharp on the point'

pánúyé + zúure 'it is red on the point; he has a red nose'

When the directional system has been checked systematically through a number of verb stem classes, a clearer picture of its semantics should emerge. Not all combinations of directionals are given in the preceding list; those with *u*-<sub>L4</sub> are especially hard to pin down: compare *púuzaa + káa* '(the weather) is hot', *paazaa + káa* '(the object) is hot'.

*Prefix transitions.* When morphs listed in the preceding paragraphs or in the lists of inflectional prefixes (Chapter 2) follow one another within a word, certain features of transition are predictably present.

*i*-<sub>B4</sub> and *u*-<sub>L4</sub> are preceded directly by *e*-<sub>K5</sub>, *ni*-<sub>D8</sub>, and *ti*-<sub>J9</sub>. They are preceded by *p* after any other vowel-final morph except *wa*-<sub>B7</sub>, after which *i*- does not occur and *u*-<sub>L4</sub> is preceded by *r*-<sub>J6</sub>. *pa*-<sub>C12</sub> and *ma*-<sub>C13-12</sub> have allomorphs *p*- and *m*- when they precede *i*- and *u*-.

After a vowel-final morph the verb stem *-aine* 'say' and the prefix *e*-<sub>K5</sub> are preceded by *h*, except that if *wa*-<sub>B7</sub> precedes them, they are preceded by *r*-<sub>J6</sub> instead of *h*. *a*-<sub>K5</sub> is preceded by *p* except after *wa*-<sub>B7</sub>, with which it is preceded by *r*-<sub>J6</sub>. *pa*-<sub>C12</sub>, *ma*-<sub>C13-12</sub>, and *ni*-<sub>D8</sub> have allomorphs *p*-, *m*-, and *n*- when they occur before *-aine*, *e*-, and *a*-.

(O) *First aspect.* The base suffixes denote various types of aspect or tense-aspect. They are divided according to position classes. First aspect (O) suffixes occur in the first position after the stem. *-we/-wawe* (alternation according to singular or plural number of subject) 'can, knows how to, has experience in' (capacitative): *puuyei + wé* 'he can walk' (said of an infant who has just learned). *-zime/-rame* (alternation according to the stem) 'engaged in an action, occupied in carrying out an action' (progressive); *péetáa + páazi + rame* 'he is on the point of arriving at his destination'

(P) *Second aspect.* Second position suffixes. *-ka* future durative: *mepalyúu + naaki + Péerieka* 'they will love each other (till death do them part)'. *-ni* future simple: *mepalyútáa + naaki + Péeriení* 'they will fall in love' (with different base). The future simple occurs in the narrative mode only when followed by the contrary-to-fact

*-ke*<sub>Q3</sub>: *yaa+nekaka+tíni+waránuku+wíit<sub>ΛΛ</sub>+táyéikaani+kéekái+táni+ciét<sub>Λ</sub>* 'I was not going to be guiding them all over the place (but I did it anyway)'.

(Q) *Third aspect*. Third position suffixes. *-m<sub>Λ</sub>/-m<sub>Λ</sub>k<sub>Λ</sub>/-ku* 'want to' (desiderative) has alternation as follows: with singular subject, *-m<sub>Λ</sub>* before conjunct mode markers *-t<sub>Λ</sub>*<sub>E4-5</sub> (proximate concurrent) and *-m<sub>E4-5</sub>* (proximate antecedent potential), *-m<sub>Λ</sub>k<sub>Λ</sub>* elsewhere; *-ku* with plural subject.

*héu+háarii+m<sub>Λ</sub>t<sub>Λ</sub>* 'wanting to drink water'

*péu+háarii+m<sub>Λ</sub>k<sub>Λ</sub>* 'he wants to drink water'

*wepéu+háarii<sub>ku</sub>* 'they want to drink water'

*-ke* 'contrary to fact, or in the future possibly contrary to fact' (irrealis); with the future desiderative *-yu<sub>s4</sub>*, *-ke* is obligatory.

*nepéuháa+ríini+keekai* 'I was going to drink some water but didn't'

*nepéuháa+ríini+keeyu* 'I would like to drink some water but might not get to'

or as a polite form 'I would like to drink some water, please'

(R) *Fourth aspect*. First-to-third position suffixes. *-mie/-yu* (alternation according to number of subject, singular or plural) 'go somewhere to do something' (mobile): *nepéuháa+rímie* 'I am going off to get a drink of water'. *-ne/-t<sub>Λ</sub>w<sub>e</sub>* (alternation according to number of subject, singular or plural) 'go around doing in various places, be engaged in doing' (peripatetic): *paku+Píene* 'he is going from place to place drinking liquor'. *-n<sub>ΛΛ</sub>* (permissive) always takes the reflexive object indicator and a transitive stem: *pakayúu+zéiyán<sub>ΛΛ</sub>* 'he does not allow himself to be seen'. *-wa* 'do something as part of a genetic or role behavior pattern' (habitutive): *túuru páa+múuwa cikéeru ráa+méewa* 'a bull says "Moo" and a calf says "Maa"'.<sup>1</sup>

(S) *Fifth aspect*. Fourth position suffixes. *-kai/-kait<sub>Λ</sub>* (past durative); the two-syllable allomorph occurs with *-ni<sub>D5</sub>* (narrative closure), the one-syllable allomorph elsewhere. Alternatively, the syllable *t<sub>Λ</sub>* could be assigned to the narrative closure morpheme, giving *-ni/t<sub>Λ</sub>ni*.<sup>1</sup>

*mepayúu+naaki+Péeríekai* 'they used to love each other' (non-narrative mode)

*meniyúu+náaki+Péeríekai+táni* 'they used to love each other' (narrative mode)

(T) *Sixth aspect*. First-through-fifth order suffix. *-z<sub>Λ</sub>* (past simple): *púuwíi+yé<sub>zΛ</sub>* 'it rained.'

<sup>1</sup> The syllable *t<sub>Λ</sub>* was assigned to *-kai* by oversight, a mistake that was not caught in time to revise the appropriate section of Chapter 2. There is a stem *-ka* 'sit, be in a place' that has an associated form *-kaa+téi* that is best considered a portmanteau of *-ka* and past durative *-kai*, which is also followed by *-táni*: *mána niukaa+téi+táni* 'he lived there'. In this form it makes little sense to assign *t<sub>Λ</sub>* to *-kai*.

## STEM CLASSES

Each clause type has a list of verb stems that can occur in verbs of the nuclear constituent. The total list of stem classes includes at least one class for each clause construction named, one for each core transformation, and one for each group of stems that can occur in more than one clause construction. Stem classes are listed here by voice: intransitive (subject only), transitive (subject and object), complemented (subject and complement), and complemented transitive (subject, object, and complement).

## INTRANSITIVE STEMS

*Active intransitive.* Most intransitive stems are active intransitives. They have no special selection, inflection, or derivation, as do other intransitive stems. *-mie* 'go', *-pa* 'arrive', *-pu* 'bear markings', *-pa* 'have an odor'.

*Adjectival intransitive.* Adjectival stems are reduplicated to show multiple number of the subject. A verb with singular subject may be UNITARY or MULTIPLE, depending on whether the subject is animate singular (unitary), inanimate considered as a unit, mass, or aggregate (unitary), or inanimate considered as composed of individuals or parts (multiple). An adjectival verb with a plural subject is multiple.

*pa*zúure 'it (a single thing or an aggregate of inanimate things) is red' singular, unitary

*pa*zúu + zúure 'they (a group of inanimate things taken as individuals) are red' singular, multiple

*wepa* + zúu + zúure 'they (animate) are red' plural, multiple

*Stative intransitive.* *-paane* (unitary), *-pa* + *néne* (multiple) 'be in a condition' are the only stative stems.

*pa*izaa *pa*paane 'it is good' singular, unitary

*pa*izaa *pa*pa + *néne* 'they are good' singular, multiple

*pa*izaa *wepa*pa + *néne* 'they are good' plural, multiple

*Middle intransitive.* These stems occur only with the reflexive object indicator, never with other objects.

*pa*yúu + *temdawi* 'he is happy'

*Characterizing intransitive.* The stem consists of any inanimate noun, and is invariably preceded by some directional base prefix.

*níukaa* + *túupi* 'he has a bow as part of his paraphernalia' (*tuupí* 'bow')

*pa*rda + *nawdaza* 'he owns a knife' (*nawdaza*, Spanish *navaja*)

## TRANSITIVE STEMS

*Active transitive.* Most transitive stems have no special pattern of selection, derivation, or inflection: *-zéiya* 'see, have, find', *-qaa* 'eat', *-zeari* 'gather together'.

*Transitive-middle.* A few stems that are ordinarily inflected like other transitives, including inflection with reflexive object, also occur in a middle intransitive construction. In the middle construction they are accompanied by one of the directional prefixes, which is not the case when they occur as transitives; in this construction they also take the reflexive object, and frequently a distributive prefix of Substitution Class J: *wep+téyuka+naaki+Péeri* 'they love' (middle, directional *ka-* 'down', distributive *te-*, reflexive *yu-*), *weplyúu+naaki+Péeri* 'they love one another' (transitive, reflexive *yu-*).

### COMPLEMENTED STEMS

*Objective complemented.* These stems show no special characteristics; they are the largest class of complemented stems: *-yuuri* 'do something', *-méima* 'anoint something'.

*Equivalent complemented.* The stems *-háakA* (sg sbj), *-háame* (pl sbj) 'be equal to, the same as', *-teewáa* 'be named', *-yaa* 'go, become (in this construction)', and perhaps *-Peeríwa* 'be considered as' occur in this construction.<sup>2</sup>

*Quotative complemented.* The stems *-yua* 'say', *-aine* 'say', *-yAA* 'say' occur in this construction.

*Middle complemented.* These stems occur only with the reflexive object indicator: *-záatAA* 'make an offering of something'.

### COMPLEMENTED TRANSITIVE STEMS

*Double object.* APPLICATIVE stems are formed from transitive stems by means of the applicative suffix *-ri/-ya*, the allomorph depending on the stem. They denote that the action of the transitive stem is performed for the benefit or detriment of the person denoted by the object: *-haaníiri* 'bring something for someone' from *-háana* 'bring something'. CAUSATIVE stems are formed from transitive stems by means of the first causative suffix *taa*: *-qéitAA* 'cause someone to carry something in his hand; give someone something' from *-qéi* 'carry something in the hand'.<sup>3</sup> Other double object stems are related to stems of other classes: *-terAWA* 'bestow a name, read' may be related to *-teewáa* 'be named', equivalent complemented. Some may not be related to stems of other classes.

<sup>2</sup> The formal parallelism of *-háakA*, *-háame* to deictics like *máakA*, *máame* 'that, those' and *Piika*, *Piime* 'this, these' is striking. Furthermore, with *-kai* past durative, *-háakA*, *-háame* takes the derivational verbalizing suffix *-ta* of the equational intransitive transformation, just as either deictic or any noun would take. No other verb has these properties. Oddly enough, this was the verb picked by Diguet (1911) to present in a complete Latin paradigm, as mentioned in Chapter 1.

<sup>3</sup> There are three suffixes in the causative group: *-taa* 'cause someone to do something', *-ta* 'cause something to be done', *-ci* 'get caused to be done': *píi+PáitAA* 'he ordered him (to do something)', *píi+Páita* 'he orders that (something) be done', *píu+Páici* 'it was ordered done'. Distribution of causatives with various roots is complex, and the combinations of causatives in forms like *palyúuqee+táatAA* 'he charges for his services' (literally, perhaps, 'he causes himself to be caused to carry in the hand') even more so; I have not attempted to cover them there.

*Quotative transitive.* -*haawe* 'say', -*Piwá*+*wiia* 'ask', -*Péiya* 'answer' belong to this class.

### STEMS IN TRANSFORMS

**PASSIVE** (or developmental) stems are derived from other stems by means of the passive suffix -*ri/-ya/-wa/-ki*, depending on the stem. The passive causative -*ci* (see footnote 3) is related to this morpheme.

*Passive intransitive.* The underlying stem is transitive: -*qéiya* 'get carried off in the hand' from -*qéi* 'carry something in the hand', -*téu*+*karíci* (passive causative) 'be given a name', from -*téu*+*kárita* (second causative) 'act as name-giver for someone'.

*Passive complemented.* The underlying stem is double transitive: -*qéitAari* 'be caused to carry something in the hand, be given something' (in turn from causative of -*qéi* 'carry something in the hand' plus first causative), -*qéitAi*+*yári* 'have something given one for somebody' (from applicative), -*terAwa*+*rAwa* 'have such-and-such bestowed as a name' from -*terAwa* 'bestow a name', -*haawa*+*rAwa* 'be told something' from -*haawe* 'tell someone something'.

*Passive quotative.* -*níuwa* 'be uttered' appears to be the only member of this class.

*Equational intransitive.* Stem formation is described in Chapter 5, and examples are given.

### MULTICONSTRUCTIONAL CLASSES

Some verb stems can appear in more than one construction. These will ultimately be assigned to separate classes depending on the sets of constructions in which they occur, but at present there is evidence in hand that would lead to setting up only a few *ad hoc* multiconstructional classes. For example, -*yuuri* 'do' can be a transitive stem as in *Páizaa nepii+yúuri* 'I did him good', or a complemented stem as in *Páizaa neptíu+yúuri* 'I did a good deed'. How many other stems share this distribution is yet to be determined. Transitive-middle stems, already mentioned in this section, may constitute a relevant multiconstructional class.

### PATTERNS OF DERIVATION

A few regular patterns of derivation in polymorphemic stems have been recognized.

*Derivational suffix.* The passive, applicative, and causative derivational suffixes have already been mentioned. A multiple (as opposed to unitary) suffix -*zaa* occurs with some non-adjectival verbs: *wepéutaa+yéizaa* 'they went off, each in his own direction.'

*Reduplication.* In adjectival verbs there are two principal patterns of stem reduplication:  $C_1V_1C_1V_1$ - *-kaAa+kaApe* 'be blind in both eyes' from -*kaApe* 'be blind (general), be blind in one eye (in specific contexts)', and  $C_1V_1C_2V_2C_2V_2$ - *-ziká+káuni* 'be sharp on both edges' from -*zikáuni* 'be sharp along the edge'. Reduplicated verbs are generally multiple and their unreduplicated counterparts unitary.

*Compounds.* There are three principal types of verb stem compound: LINKED, UNLINKED, and INCORPORATING. Linked compounds have as second member a stem of the same set as *-yaa* 'go', or of the same set as *-ka* 'be in a place, sit', preceded by the linking morpheme *-tA-*. Compounds with *-yaa* are inceptive, compounds with *-ka* iterative or distributive, sometimes multiple. Not all verbs can be first in a compound, but the exact restrictions are not known: *-yéi+ké+tAya* 'begin to trail someone' from *-yéiké* 'trail someone', *-huzá+tAkáa* 'have hairs sticking out in various places' from *-huza* 'be hairy'. Unlinked compounds have as second member *-Péeri* 'think, feel', and refer to psychological states *-naaki+Péeri* 'love, like much' from *-naake* 'like, fit', *-zaani+Péeri* 'despise', *-hiiwee+Péeri* 'desire madly'. Incorporating compounds consist of a noun that is semantically equivalent to the object of the verb, followed by a verb: *nepéu+waa+kázi+naa+náimie* 'I'm going off to buy a cow', (*waa+kázi*, Spanish *vaca*), with verb stem *-náandai* 'buy something'.

#### STEM SYSTEMS

Certain verb stems belong together in an as yet undefined way. Stems that belong together are most easily grouped by their association with the same infinitival nominal derivative (Chapter 2). Thus, corresponding to the infinitive *yéi+yáa* 'journey, way of life, a walk, to go' are the following stems (with such differentiae as have been identified):

- mie sg sbj, intrans, potential
- húu pl sbj, intrans, potential
- tAa sg sbj, intrans, factual
- kAA pl sbj, intrans, factual
- kAAne pl sbj, intrans
- yéi intrans
- yéika intrans
- yéizAA intrans, multiple
- yaa sg sbj, intrans, antecedent conjunct
- yéitAa trans, causative

It is possible, on grouping stems in this way, to recognize certain relationships, such as those having to do with number of the subject (*-mie* sg, *-húu* pl 'go'), number of the object (*-mie* sg, *-qii* pl 'kill'), unitary or multiple nature of the subject (*-kAApé* uni, *-kAA+kApe* mult 'be blind'), factual or potential aspect of the action in some modes (*-tAa* factual 'be under way or gone', *-mie* potential 'be going to go'), voice (*-Péna* intr, *-Pénie* tr 'hear'), and others. The next stage of grammatical analysis in Huichol will consist largely of tracking down the relationships among forms in such sets and systematizing the whole. The present syntactic analysis makes it possible to control syntactic context and inflection; base affixes and stem sets next need to be examined minutely for stem-affix and stem-stem relationships.

*mApáa zeí+kAa*

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