A
LINGUISTIC SKETCH
OF
JICALTEPEC MIXTEC

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by

C. Henry Bradley

EDITOR'S NOTE

This sketch of Jicaltepec Mixtec was submitted in 1965 as a thesis to the faculty of the Graduate School of Cornell University in partial fulfillment of the requirements for the degree of Doctor of Philosophy. It is published here in essentially its original form with the conviction that it contributes significantly to our knowledge of the Mixtecan languages of Mexico, and is a worthy addition to the growing body of modern descriptive and comparative studies dealing with these languages dating back to the pioneering efforts of Kenneth L. Pike a quarter of a century ago.

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Irvine Davis

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O. INTRODUCTION

The Mixtec language is spoken by approximately 250,000 people in the western half of the state of Oaxaca, in the neighboring portion of Guerrero further to the west, and to the north in a small part of southern Puebla, Mexico. Its closest congeners are Cuicateco and Trique which, together with Mixtec, form the Mixtecan language family. At an early stage Mixtecan separated from Popolocan, thus splitting one of the main branches of the Otomanguean family. Later, the other three Mixtecan languages, in turn, became differentiated from each other.[1]

Mixtec itself is not the monolithic unity that its name suggests. On the contrary, a number of mutually unintelligible dialects (probably about two dozen) constitute the language. Those that have been studied are Xayacatlán and Huajuapan (northern); Peñoles and Tilantongo (eastern); Yosondúa, San Miguel, Molinos, San Esteban, Santo Tomás, and Mixtepec (central); Metlatonoc (western); Ayutla (southwestern); Jicaltepec and Chayuco (southern); and Apoala and San Juan Coatzospan and Cuyamecalco (northeastern)--a Mixteco speaking island completely surrounded by speakers of Mazatec and Cuicatec. Very likely these two villages have descended from a Mixtec outpost in alien territory dating from the time of Mixtec domination several centuries before the coming of Cortez. Still to be studied are: Chigmecatitlán (northern); Huitepec (eastern); Amoltepec (east central); Nuyoo-Yucuite and Itundujia (south central); Silacoyoapan-Juxtlahuaca (west central); Coicoyán (western); Tututepec (southeastern); and Zacatepec (southern).

Shortly after the conquest several Spanish friars studied the Mixtec spoken in the east-central region; two published works resulted. Fray Francisco de Alvarado's dictionary with grammatical notes (1593) was the first published. Dating from the same early period, the grammar--in the Latin mold--by Fray Antonio de los Reyes was reissued in 1888. There may be other and valuable contributions from this early post-conquest period hidden in the various uncatalogued collections of manuscripts in different places, one of which is the Brown University collection.

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[1] This picture of the development of the Mixtecan languages comes from Robert E. Longacre, Proto-Mixtecan and "Swadesh's Macro-Mixtecan Hypothesis." For a different view of the positions of Trique and Amuzgo within the Mixtecan family, see E. Arana's Relaciones Internas del Mixteco-Trique and M. Swadesh's "The Oto-Manguean Hypothesis and Macro Mixtecan." Sarah Gudschinsky (in Proto-Popotecan) discusses Popolocan, its relationship to Mixtecan, and the position of both in the Otomanguean family.

Earlier, less detailed studies dealing with Mixteco and its relation to other members of the Otomanguean family include Pimentel's Cuadro Descriptivo y Comparativo de las Lenguas Indígenas de Mexico, Seler's "Notice sur les langues Zapotèque et Mixtèque," L. Ecker's "Relationship of Mixtec to the Otomian Languages," L. Schultze-Jena's Indiana III: Bei den azteken, mixteken und tlapaneken der Sierra Madre del Sur von Mexiko, and N. McQuown, "The Indigenous Languages of Latin America." W. Jiménez Moreno summarizes most of this work in "Diversidad Interna del Mixteco y su Afiliación al Macro-Otomangue."

Recent publications by various members of the Summer Institute of Linguistics have concentrated on the central area, specifically with the language as it is spoken in San Miguel, and have dealt with questions of phonology, principally tone, (Mak 1950, 1953, 1958; K. L. Pike 1945a, 1946, 1947b, 1948, 1953; and Stark 1947). A part of the phonological system of the southern dialect is described by Bradley (1957) and the tone system of the western dialect by Overholt (1961). Phonological studies in other dialects are: Hunter and E. V. Pike, 1969 (Molinos); Pankratz and E. V. Pike, 1967 (Ayutla); and E. V. Pike and Cowan, 1967 (Huajuapan). K. L. Pike (1945b, 1947a) describes two interesting results of contact with Spanish, and Dyk has completed the survey of San Miguel Mixtec with a dictionary (1951, updated with Stoudt, 1965) and a collection of texts (1959). Some aspects of the grammar appear in K. L. Pike (1944 and 1949) and Merrifield and Stoudt (1967), but no systematic and complete grammatical description has been published for any of the dialects. (For an unpublished description see Daly, 1966.) The comparative study of Mixtec itself (Longacre and Mak, 1960) as well as further investigation into variations among the dialects (Holland, 1959; and Bradley, 1967 and 1968) has begun.

The main purpose of this study is to fill the one major gap in the literature on the Mixtec language by describing the grammar of one important dialect of that language-- that of Jicaltepec (hereinafter abbreviated JM)--systematically and completely. It also has the subsidiary aim of collecting in one place and within a unified theoretical framework phonological information about Mixtec that previously has been available only in a number of diverse publications. In brief, it is a sketch. As such it outlines the major aspects of the language, giving a picture of the whole but without complete details.

The theoretical orientation within which JM is described is that language struc- ture is dual and that it is hierarchical.[2]

All languages have two strata: a phonological one and a grammatical one. Morphophonemics is the way in which elements of the grammatical stratum are repre- sented by those of the phonological one.

Each of these strata is hierarchical in nature, containing, at its smallest size- level, basic elements that combine with each other to form units at the next larger size-level. For JM, then, phonological constituents combine to form phonemes which, in turn, combine to form syllables which combine to form microsegments which com- bine to form macrosegments in the phonological stratum, and morphemes combine to form words which combine to form phrases which combine to form clauses which com- bine to form sentences in the grammatical stratum. Although macrosegments and sentences may not be the largest size-level for each stratum respectively, they repre- sent the top levels described here.

There seem to be two possible approaches in describing the hierarchical structure of a language. In one, small-size forms are combined to build larger ones. This approach appears to favor the speaker and is mildly generative in emphasis. In the other, larger forms are broken into smaller constituents until the elementary forms

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[2]Charles F. Hockett, "Linguistic Elements and their Relations," Language 37 (1961), 42-48.

are reached. It appears, therefore, to favor the hearer by the introduction of parsing. The approach taken here is to classify the basic elements first and then to describe the patterns--constructions or rules--required for building larger composite units until all such forms are fully described. In one sense this order of presentation can be called predictive. By applying the patterns, forms of ever larger size are built so that at the larger size-levels representations of whole utterances are found.

In describing the grammatical stratum, constituent phrase structure is supplemented by the use of transformations. Although in the original formulation, N. Chomsky considered transformations as a separate entity, they are here considered as a kind of construction. According to Hockett a construction is a "pattern for building composite forms of a specific form class out of ICs of specific form classes." (1958:164) Some of Chomsky's transformations build larger forms from smaller ones; others rearrange the constituents of a composite form; and still others change the class of a form. It appears, therefore, that transformations differ from other constructions only slightly.

At the beginning of this decade the theoretical viewpoint represented here is not as acceptable as it was at the beginning of the last. Linguistic theory has developed in some very interesting and important ways in the five years since this sketch was written. Nevertheless, it is presented not so much as a contribution to general linguistic theory as a contribution to knowledge of the Mixtec languages.

The corpus of data upon which this study was made has been collected over the period of time from 1949 to the present, first by my colleague, Howard Klassen (1949-1955), and later by me (1956-1964). This corpus now contains some 15,000 lines of running text consisting of folklore, explanatory narrative, history, current beliefs and practices, and conversation; elicited utterances that were responses to directed questions phrased in Spanish during informant sessions; and non-elicited, disconnected expressions written down at the various times they were uttered, either because of their novelty to me or my wife or because we did not understand them. Over this period of more than fifteen years a number of informants have contributed not only of their time and wisdom but also of their ingenuity and patience in passing on the intricacies of their language to foreign ears. Those worthy of special mention are the late Julio García Hernández, Norberto García García, Porfirio García Zamora, the brothers López--Higinio, Luís, and Pascual, Agustín Hernández, and Anatolio Torres Torres. Not to be excluded, though, are the rest of the 300 or so adult inhabitants of Jicaltepec who have been, to slow students, patient teachers of their language and way of life.

1. PHONOLOGY

The phonemes of JM are represented by the following symbols:

consonants:

voiceless stops:	p	t	ṭ	č	k	q
prenasalized stops:	b	d	ḍ		g	
spirants:	ᵽ	s	ṣ	š	h	
nasals:		m	n	ñ		
nonnasal sonorants:	w	y	l	r		

semiconsonant: ʔ

vowels:

oral:	a	i	e	o	u
nasal:	ą	į	ę	ǫ	ų
checked:	aʔ	iʔ	eʔ	oʔ	uʔ

tones: high ´, mid ⁻, low ` or unmarked

stresses: microstress ', macrostress "

terminal contours: nonfinal |, final ↓.

1.1 <u>Phonological Constituents</u>. The forty-five phonemes of JM listed above are composed of one or more of the following twenty-eight ultimate phonological constituents (UPCs):

labial, apical, laminal, dorsal, labiovelar;

released, nonreleased;

velic open, closed, open then closed;

oral closure, local friction;

lateral;

flap;

short, nonshort;

tongue front, central, back;

tongue high, low;

glottis closed, open;

pitch high, mid, low;

stress loud, nonloud;

fade, sustain.

Note that:

1.   With apical articulation release is nonspirantal and palatal, but with dorsal articulation it is labial,

2.   Not only does the velic open or close for the duration of certain consonants but it also opens and closes within the span of other consoants, and

3.   Tongue advancement correlates with degree of lip-rounding, i.e. backness is associated with lip-rounding and nonbackness with lip-spreading.

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These constituents combine to form phonemes in the configurations shown in Table 1a and Table 1b. Bundles of up to five constituents form the phonemes of JM. Most frequently phonemes with a single UPC are nonsegmental, and those with two or more are segmental, but as the tables show, this generalization is not always the case.

1.2.   Phonemes. In the following sections the phonemes of JM are (1) described, (2) contrasted, and (3) classified according to their distribution in larger-size phonological forms.

1.21. Consonants precede vowels within the syllable. They are syllable onsets and contrast with syllable peaks, and nonsegmental phonemes that occur at larger size-levels. Except for unassimilated borrowings from Spanish, consonant clusters are not found in JM. Although consonants do precede vowels, every consonant does not precede every vowel. Limitations are given in ɤ1.32.

(1)   Description of Consonants. The stops /p t t̪ č k q / are, for the most part, voiceless and always initiated with the velic closed. In tonic syllables they are always voiceless, but /q/, in pretonic syllables, and /č k q /, in posttonic syllables, are voiced on occasion.

/p / is voiceless and bilabial with very slight aspiration: / 'pa̱a̱ / 'bread', / 'kapá / 'jump', /pe'lota̅ / 'ball'.

/t / is voiceless and postdental with the tip of the tongue barely in contact with the back of the teeth and with very slight aspiration: / 'titá / 'banana tree', /ta'witḭ / 'and now?', / 'qa̱ʔa̱rátara̅ / 'they are going', /tañáqá'kič̣ira̅ / 'and he won't come'.

/t̪ / is a voiceless postdental stop that releases through a lamino-palatal [y]: / 't̪óko̅ / 'wasp', / 'takat̪ó / 'is that so! '.

/č / is a lamino-palatal stop that releases through a homorganic palatal spirant [š]: / 'čačiña / 'she is eating', / 'kúʔwač̣í / 'give it to me! ', / 'qa̱ʔa̱ráčira̅ / 'he went with him', /čáčá'qaa / 'it's night'.

/k / is dorso-velar: / 'ka̅a̅ / 'can', / 'čikara̅ / 'he is walking', / 'ñáʔnika̅ / 'there isn't any more', /kaká'tenira̅ / 'he is joking'.

/q / is a dorso-velar [kw] with simultaneous lip-rounding; the lip-rounding is voiceless at the moment of closure but becomes voiced following closure. When voiceless and stressed, /q / has slight aspiration: / 'qa̱ʔa̱rá / 'he has gone', / 'taqa/ 'like, as', /qá'kú̱ʔú̱rá / 'he will go'.

The prenasalized stops, /b / [ᵐb], /d / [ⁿd], /ḍ / [ⁿdʸ ñy], and /g / [ᵑg], are always initiated with the velic open and in nontonic syllables all but /g / may be devoiced occasionally.

/b / is bilabial: / 'be̅e̅ / 'sheep', / 'tibo̅ / 'lizard'.

/d/ is postdental and apical-alveolar: / 'dee / 'strong', / 'kúdá / 'sit-down! ', / 'wač̣ídí̅ / 'we are coming', /dá'isa̅ / 'until the day after tomorrow'.

Table 1a. Clustering of UPCs into Phonemes--Consonants.

	p	ț	č	k	q	b	d	d̦	g	m	n	ñ	ɓ	s	ș	š	h	l	r	ʔ	w	y
Position	b	a	l	d	d	b	a	a	d	b	a	l	b	a	a	l	d					
Release: released (+), nonreleased (−)		+		+			−	+							+							
Velic: open (+), closed (−), open then closed (±)	−	−	−	−	−	±	±	±	±	+	+	+									−	−
Oral: closure (+), friction (−)	+	+	+	+	+	+	+	+	+	+	+	+	+	−	−	−	−					
Lateral																		+				
Flap																			+			
Timing: short (+), nonshort (−)																			+		+	+
Tongue Advancement: front (+), central (+), back (−)																			−		−	+
Tongue Height: high (+), low (−)																			+		+	+
Glottis: closed (+), open (−)																				+		
Pitch: high (+), mid (±), low (−)																						
Stress: loud (+), nonloud (−)																						
TC: fade (+), sustain (−)																						

Table 1b.   Clustering of UPCs into Phonemes--Vowels and Nonsegmentals.

	i	i̤	iʔ	e	e̤	eʔ	a	a̤	aʔ	o	o̤	oʔ	u	ṳ	uʔ	´	`	ˉ	´	'	"	|	→
Position																							
Release: released (+), nonreleased (−)																							
Velic: open (+), closed (−), open then closed (+)	−	+	−	+	−	−	+	−	−	+	−	−	+	−	−								
Oral: closure (+), friction (−)																							
Lateral																							
Flap																							
Timing: short (+), nonshort (−)																							
Tongue Advancement: front (+), central (+), back (−)	+	+	+	+	+	+	+	+	+	−	−	−	−	−	−								
Tongue Height: high (+), low (−)	+	+	+	−	−	−	−	−	−	−	−	−	+	+	+								
Glottis: closed (+), open (−)	−	−	+	−	−	+	−	−	+	−	−	+	−	−	+								
Pitch: high (+), mid (+), low (−)																+	+	−					
Stress: loud (+), nonloud (−)																			−	+			
TC: fade (+), sustain (−)																						−	+

/d̦/ is postdental and releases through a lamino-palatal [y] in tonic syllables. In posttonic syllables immediately following the tonic one it is [ⁿʲ], a lamino-palatal that releases through a homorganic voiced palatal spirant [ž]: /ˈd̦oō/ 'god', /čá̦ʔá̦túd̦ō/ 'you went, too', and /ˈted̦ū/ 'goat', /ˈkad̦ū/ 'hook'.

/g/ is dorso-velar: /ˈígá/ 'another', /ˈlígí/ 'twisted'.

The spirants /ƀ s ș š h/ are always voiceless and are produced with a great deal of local friction except for /h/.

/ƀ/ is found only in words borrowed from Spanish. It varies from a bilabial flat spirant to a bilabial grooved spirant. This variation depends on the speaker's relative sophistication in Spanish. Those with less skill use the grooved variant while those with more fluency use the flat one. It occurs only in tonic syllables: /ˈƀaā̦/ 'John', /kaˈƀeē/ 'coffee'.

/s/ is apico-alveolar: /ˈsaā/ 'bird', /ˈkasa/ 'son-in-law', /sáˈkete/ 'I just arrived', /soñáq̦áˈsátarā/ 'but he won't buy (it)'.

/ș/ is apico-alveolar and releases through a lamino-palatal [y]. It is found only in tonic position in words borrowed from Spanish: /ˈședū/ 'hundred', /oraˈșoō̦/ 'prayer'.

/š/ is lamino-palatal: /ˈšaa/ 'buddy (vocative)', /ˈkaša/ 'sneezing', /šíˈñáʔñú/ 'ghost'.

/h/ is dorso-velar. Apart from its use in the diminutive speech style (§1.27), /h/ occurs in only a few words borrowed from Spanish: /kaˈhoō̦/ 'box', /ˈkahā/ 'box', /ˈluhū/ 'Adolfo', /haˈkowō/ 'Jacob'.

The nasals /m n ñ/ are always voiced.

/m/ is bilabial: /ˈmaa̦/ 'this', /ˈsama/ 'changing', /ˈsikimarā/ 'he, in particular, is playing', /maˈriā/ 'Mary'.

/n/ is postdental: /ˈnaa̦/ 'dark', /ˈsānā/ 'domesticated animal', /ˈyukuni/ 'just a mountain', /náˈkóʔó/ 'let's go'.

/ñ/ is lamino-palatal: /ˈñáá̦/ 'ashes', /ˈsaña/ 'let go!', /ñátáˈkúu/ 'it isn't possible yet'.

The nonnasal sonorants /w y l r/ are also always voiced.

/w/ is a bilabial flat spirant in tonic syllables and either this or a high, back, rounded nonsyllabic vocoid in nontonic ones: /ˈwáʔá/ 'good', /ˈkawa/ 'boulder', /aˈsikiu̦wā/ 'will you play?', /wáˈkúu/ 'it will be possible'.

/y/ is a high, front, unrounded, nonsyllabic vocoid, sometimes with slight lamino-palatal friction in tonic syllables: /ˈyaa/ 'tongue', /ˈsāyū/ 'cold', /ˈkayūyú/ 'I am getting burned', /yúráˈdaʔwī/ 'poor me'.

/l/ is a postdental lateral: /ˈluʔu/ 'little', /ˈweli/ 'little one (vocative)', /laˈkoo/ 'offering to the dead'.

/r/ is a postdental flap: /'ráí/ 'man', /'arū/ 'rice', /čǎcírātarā/ 'they are eating', /rátí'waa/ 'young man'.

(2) Consonant contrasts are:

/p/:/b/ /'pe?e/ 'skinny' : /'bē͡e/ 'sheep'
         /'kapū/ 'gelding' : /'tabū/ 'drum'
/p/:/ƥ/ /'paā̖/ 'bread' : /'ƥaā̖/ 'John'
/t/:/d/ /'to?o/ 'town elder' : /'do?o/ 'braids'
/t/:/r/ /'tika̖/ 'over there' : /'rika̖/ 'that animal'
/t/:/t̖/ /'ta?wí/ 'breaking' : /'t̖a?wí/ 'paying'
/t/:/č/ /'taa/ 'writing' : /'čaa/ 'new'
/t̖/:/d̖/ /'t̖óó/ 'crab' : /doō/ 'god'
/t̖/:/č/ /'t̖á?a/ 'bedbug' : /'čá?a/ 'time'
/č/:/d/ /'ačā̖/ 'axe' : /'tedū/ 'goat'
/č/:/š̖/ /'čaa/ 'new' : /'šaa/ 'buddy'
/k/:/g/ /'ika/ 'touchy' : /'ígá/ 'another'
/k/:/q/ /'kátí/ 'cotton' : /'qátí/ 'war'
/b/:/m/ /'bā͡s̖á/ 'balloon' : /'maa̖/ 'this'
         /'tabū/ 'drum' : /'támá/ 'famine'
/b/:/w/ /'bē͡e/ 'sheep' : /'wéé/ 'heavy'
/d/:/d̖/ /'do?o/ 'braid' : /'d̖o?o/ 'hummingbird'
         /'nadū/ 'Hernando' : /'kad̖ū/ 'forked stick'
/d/:/n/ /'duní/ 'all three' : /'núní/ 'corn'
/d/:/r/ /'dai/ 'rough' : /'ráí/ 'man'
/d̖/:/y/ /'d̖o?o/ 'hummingbird' : /'yo?o/ 'vine'
         /'kad̖ū/ 'hook' : /'kayū/ 'burning'
/s/:/s̖/ /'sedū/ 'Rosendo' : /'s̖edū/ 'hundred'
/s/:/š̖/ /'sā?wā/ 'frog' : /'š̖á?wá/ 'ravine'
/s/:/h/ /'kasa/ 'male-in-law' : /'kahā/ 'box'
/š̖/:/h/ /'kaša/ 'urine' : /'kahā/ 'box'
/š̖/:/s̖/ /'še?e/ 'ring' : /'s̖edū/ 'hundred'
/n/:/ñ̖/ /'na?a̖/ 'roof support' : /'ña?a̖/ 'woman'
/l/:/r/ /'likū/ 'dove' : /'rikū/ 'rich'
/š̖/:/y/ /'šaa/ 'buddy' : /'yaa/ 'tongue'
/ƥ/:/w/ /'ƥaā̖/ 'John' : /'waa/ 'uproar'.

(3) JM consonants fall into seventeen distribution classes (c.f. Table 2). These classes are defined by the occurrence of their members within microsegments and macrosegments. General environments in pretonic syllables are marked by subscript letters; those in posttonic syllables are marked by subscript numbers; and the one in tonic syllables is marked by a prime. The environment following a checked syllable is marked by C_1 ?. For the relation between the environments specified by subscripts and specific syllables compare Table 2 with Tables 5 and 6.

1.22. The semiconsonant /?/ is defined by its occurrence as onset of a post-tonic syllable when intervocalic and by its occurrence as satellite to the preceding stressed nucleus when followed by a consonant:

/'ka?ā/ 'cheap', /'ka?da/ 'will cut'.

Table 2. Classes of Consonants.

Classes / Environments	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII
Ca		t									s						
Cb		t									s			n			
Cc		t									s			n	ñ		
Cd		t		č,k	q		d				s			n	ñ	w	
Ce		t		č,k	q		d				s		m,y,l	n	ñ	w	r
Cf	p	t		č,k	q		d				s	š,h	m,y,l	n	ñ	w	r
C'	p	t	t̨	č,k	q	b	d	d̨		ᵭ,s̨	s	š,h	m,y,l	n	ñ	w	r
C₁	p	t		č,k	q	b	d		g		s	š,h	m,y,l	n	ñ	w	r
C₁?		t					d						m,y,l	n	ñ	w	
C₂		t	t̨	č,k			d					š,h	m,y,l	n	ñ	w	r
C₃		t	t̨									š,h		n		w	

As a satellite it contrasts with its own absence:
/'tá?má/ 'dented', /'támá/ 'famine'.

As an onset it contrasts with all members of the classes that occur in C_1: /'ka?ā/ 'cheap', /'kapa/ 'will jump', /'kātā/ 'spindle', /'tača/ 'lightning', /'taqa/ 'thus', etc.

1.23. Vowels are defined by their occurrence as syllable peaks, some of which are simple (oral) and others complex (nasal and checked). They are perceptibly longer in tonic syllables than in nontonic ones and have a nasalized onglide or off-glide when preceded by a nasal, or followed by a nasal or prenasalized stop: /'yayā/ 'mother (vocative)', /'titi/ 'iguana', /'tūtū/ 'paper' (in which the first vowel is perceptibly longer than the second), and /'masū/ 'gentle', /'sānā/ 'domesticated animal', /'tá?dá/ 'broke', /'ma?ñu/ 'in-between' (in which one or both vowels have a nasalized onglide or offglide).

(1) Description of Vowels.

Oral Vowels.

/i/ is high, front, and unrounded: /'kísí/ 'cooking pot', /'tašinití/ 'be quiet! he said', /tí'yuwiri/ 'because it licked (it)'.

/e/ is mid, front, and unrounded; it is lower, [ɛ], when the tonic syllable is followed by a syllable with an onset, otherwise it is higher, [e]. In nontonic syl-lables with an onset other than the glottal semiconsonant the vowel is higher; without an onset or with the glottal onset it is the same as the preceding vowel: /'keta/ ['kɛta] 'arriving', /'té?é/ ['té?ɛ́] 'shell', /'kee/ ['kee] 'going out', and /'satē/ ['satē] 'I am buying (it)', /'qisočiwē/ ['kwisočiwē] 'carry the baby!', /pe'lota/ [pe'lotā] 'ball'.

/a/ is low, central, and unrounded: /'kasa/ 'male-in-law', /'kú?úwā/ 'wilt thou go?', /ta'ta?dāčí/ 'and it broke'.

/o/ is mid, back, and rounded: /'koko/ 'thick', /'takató/ 'like that, you say', /so'kunĩñá/ 'but she wants to'.

/u/ is high, back, and rounded: /'tūtū/ 'paper', /'wačíyū/ 'I am coming', /tuwá'sĩkiturā/ 'if he is going to play again'.

Nasal Vowels.

/i̧/ is high, front, unrounded, and nasalized: /'ti̧i̧/ 'holding', /či̧?i̧/ 'to', /'si̧?i̧/ 'crotch', /'mi̧i̧/ 'Fermín'.

/ȩ/ is lower mid, front, unrounded, and nasalized: /'tȩ?ȩ/ ['tɛ̧?ɛ̧] 'thus'.

/a̧/ is low, central, unrounded, and nasalized: /'ka̧?a̧/ 'speaking', /'sá̧?á̧/ 'language', /'ñá̧á̧/ 'ashes', /'bã̧sá̧/ 'balloon'.

/o̧/ is mid, back, rounded, and nasalized: /'kotō̧/ 'shirt', /'sa?mo̧/ 'your clothes'.

/u̧/ is high, back, rounded, and nasalized: /'tú̧?ú̧/ 'word', /'yutu̧/ 'tree', /'katū̧/ 'you pat (tortillas)', /tuwá'sĩkiku̧/ 'if you are going to play'.

Checked Vowels.

/i?/ is high, front, unrounded, and checked: /'ti?wi/ 'sweep', /'tí?yá/ 'here', and /'i?ni/ 'hot'.

/e?/ is lower mid, front, unrounded, and checked: /'té?wā/ ['té?wā] 'praying mantis'.

/a?/ is low, central, unrounded, and checked: /'tá̰?wá/ 'temporary shelter', /'ka?dá/ 'will explode', /'ka?yu/ 'painting'.

/u?/ is high, back, rounded, and checked: /'tṵ́?wa/ 'hammock', /čú?ni/ 'tied', /ču?du/ 'short'.

(2)   Vowel contrasts are:

/'sítā/	'will throw out',	/kákī̄/	'put down'
/'sétā/	'will throw out',	/kákē̄/	'I will walk'
/'sátā/	'will cut',	/káká/	'walk!'
/'súta/	'will swim',	/kákú/	'will escape'
/'sodi/	'setting',	/koko/	'thick'
/'tḭ́?ų̰/	'puttest it in',	/'ta̰?ị̰/	'my friend'
/'tḛ?ḛ/	'thus',	/'tḛ?ḛ/	'thus'
/'ta̰?ų̰/	'your friend',	/ba̰s̰á̰/	'balloon'
		/koto̰/	'shirt'
/'tṵ́?ų̰/	'word',	/'yutų̰/	'tree'
/'ti?wi/	'sweeping'		
/'té?wā/	'praying mantis'		
/'ta?wi/	'break'		
/'yo?di/	'colored'		
/'tu?wa/	'come near'.		

(3)   Vowels fall into eight distribution classes defined by the occurrence of their members in tonic, pretonic, and posttonic syllables (c.f. Table 3).

Table 3.   Classes of Vowels.

Classes / Environments	I	II	III	IV	V	VI	VII	VIII
V$_a$	i,a,o		u					
V$_b$	i,a,o	e	u					
V'	i,a,o	e	u	ḭ,e	a̰		ų̰	i?,e?,a?,o?,u?
V$_1$	i,a,o	e	u	ḭ,e	a̰	o̰	ų̰	
V$_2$	i,a,o	e	u		a̰		ų̰	
V$_3$	i,a,o				a̰			

Tables 5 and 6 give more specific details of their occurrence in larger-size forms.

1.24. Tones are distinctive relative levels of pitch simultaneous with syllable peaks. Each tone has a higher and a lower allophone: /⁷/ [⁶ ⁵], /⁷/ [⁴ ³], and /⁷/ [² ¹].

The lower allophone of /⁷/ immediately precedes a tonic syllable: /qá῭kú῭ú́rá/ [qa⁵῭ku⁶῭u⁶ra⁶] 'he is about to go'. The higher one occurs everywhere else: /῭qá῭á/ [῭qa⁶῭a⁶] 'go! ', /῭káyúrá/ 'he will burn', /῭yu῭wĩkú́/ 'thou art afraid', /῭súkuyú/ 'I picked (it)'.

The lower allophone of both /⁷/ and /᷅/ immediately follows a tonic syllable with low tone, while the higher one occurs everywhere else: /῭sāā/ [῭sa⁴a⁴] 'bird', /῭dó῭ō/ [ᵐdo⁶῭o⁴] 'adobe', /῭doō/ [ᵐdyo²o³] 'god', and /῭we῭e/ [῭be²῭e¹] 'house', /ma῭we῭e/ [ma²῭we²῭e¹] 'this particular house'.

Tone contrasts are:

/῭dó῭ōrā/ 'his basket'
/῭dó῭ōrā/ 'his adobe'
/῭dó῭orā/ 'he got spanked'.

JM has two distribution classes of tones. High tone and low tone fall into one class and occur in any (tonic or nontonic) syllable; mid tone comprises the second class and occurs in tonic and certain nontonic syllables. More specific details of distribution are shown in Tables 5 and 6.

1.25. JM has two stresses: microstress /῭/ marks the center of a microsegment by means of its intensity and duration; macrostress /῭῭/ frequently occurs instead of microstress in one microsegment of a macrosegment, has greater intensity, and marks the center of the macrosegment.

The following macrosegment contains a single macrostress followed by three microstresses:

/῭῭takí῭ṣą́ą́῭ítaͨíní῭kána/ 'the flower which sprouted forth from it was very pretty'.

1.26. The two terminal contours (TCs) of JM are nonfinal and final. The nonfinal TC is marked by a general diminuendo following stress, sustention of the final unstressed vowel, and the immediate initiation of a new crescendo. The break between diminuendo and crescendo is either with or without pause (and without breath). A final TC has neither of the last two characteristics. Its positive marks are decay of final unstressed vowel and pause (mostly with breath). For example: /῭῭qą́῭ɨ | ta῭῭waͨɨ↓/ [῭῭qą́῭ɨ: ta῭῭waͨɨ] 'I am going. . .but I will come back.' contains a diminuendo, crescendo, and a second diminuendo with no pause for breath; /῭῭qą́῭ɨ↓ ta῭῭waͨɨ↓/ [῭῭qą́῭ɨ ta῭῭waͨɨ] 'I am going. But I will come back.' contains a diminuendo, pause with breath, a crescendo leading up to a second macrostress, and a second diminuendo; and /῭῭qą́῭ɨtá῭waͨɨ↓/ [῭῭qą́῭ɨtá῭waͨɨ] 'I am going but I will come back.' contains a single diminuendo following macrostress. The domain of these TCs is the macrosegment. Correlated with macrostress and the two TCs is a general lowering of tone register as the macrosegment progresses after macrostress so that a tone, other than high, later in the macrosegment is generally lower in pitch than it would be if it had occurred earlier.

1.27.   Not to be confused with intonation are the various <u>speech styles</u> of JM.
These speech styles differ from intonation by the way in which they serve to keep
utterances apart. In intonation "the difference in sound which keeps them apart lies
in the changing pitch of the voice." (Hockett 1958:33) On the other hand, speech
styles serve to keep utterances apart by use of paralinguistic phenomena as well as
linguistic. In JM these phenomena serve to distinguish in a systematic and finite way
at least five styles, e.g.

/ˈdaā ˈqá̰ʔútáˈšaaↆ/	(E1)
/ˈdaā ˈpá̰ʔútáˈčaaↆ/	(E2)
/ˈdaā ˈqá̰ʔútá̰saˈaā↓/	(E3)
/ₒˈdaā ˈqá̰ʔútáˈšaaↆ/	(E4)
/₊ˈdaā ˈqá̰ʔútáˈšaaↆ/	(E5)
ˈWhere are you going, man?ˈ	

(In E4 the subscript ₒ indicates lip rounding throughout, and in E5 the + indicates
extreme speed, staccato rhythm, and compression of pitch levels.) The character-
istics of final TC are shown by all five utterances. They, therefore, differ from each
other in other definable ways. Diminutive speech, E2, differs from the norm, E1,
by the replacement of the consonants (p for q, and č for š) in the middle and last
stressed syllables; emphatic speech, E3, differs from the norm by the delaying of
the last stress one syllable and the addition of a syllable by lengthening the last vowel
that, in this case, carries mid tone; rhetorical speech, E4, differs from the norm by
continuous lip rounding throughout the form, oversoft voice qualifier and loose artic-
ulation; and animated speech, E5, differs from the norm by extreme speed, staccato
rhythm, and compression of pitch levels. Each style, therefore, has its own unique
phonological characteristics which serve to distinguish it from each of the others.
The last four are variants or derivatives of the norm, and, as such, are not describ-
ed here.

1.3.   <u>Syllable</u> <u>Patterns</u>. The phonemes described in the preceding sections
combine according to several well-defined patterns to form syllables. The syllables
built by these patterns may not have an onset buy always have a nucleus. Each nu-
cleus, in turn, always has a peak that is either simple or complex (i.e., it has a
satellite). The onset is one of the stock of consonants, the peak is one of the vowels
and one of the tones, and the satellite, if the peak is complex, is either nasalization
or the semiconsonant /ʔ/, but not both. Syllables with no onset occur about as fre-
quently as those with any given onset consonant.

Syllables, in terms of their constituency, are oral, nasal, or checked. Cutting
across this classification is one based on distribution in which syllables are pretonic,
tonic, or posttonic. Thus, nonpretonic syllables are characterized by the presence
or absence of nasalization, and tonic syllables only by the presence or absence of
/ʔ/ in addition:

/ˈiku/	ˈyesterdayˈ
/ˈketo̰/	ˈthou hast arrivedˈ
/ˈnúḭ/	ˈmy faceˈ
/ˈñá̰ʔni/	ˈnoneˈ
/núˈwatĩ/	ˈshadeˈ.

1.31. In the formation of peaks all oral vowels occur with all tones in both tonic and posttonic syllables:

	/ ´/		/ ¯/		/ `/	
/a/	/'támá/	'famine'	/'yāā/	'music'	/'tača/	'lightning'
/i/	/'nǐñí/	'blood'	/'ǐǐ/	'badger'	/'iti/	'road'
/e/	/'séʔé/	'child'	/'bēē/	'sheep'	/'weʔe/	'house'
/o/	/'ókó/	'twenty'	/'kōlō/	'turkey'	/'soko/	'well'
/u/	/'sútú/	'father'	/'tūtū/	'paper'	/'yunu/	'net bag'.

Furthermore, all five oral vowels occur with or without either satellite. Vowel peaks are, therefore, oral (V), nasal (Ỵ), or checked (Vʔ):

	V		**Ỵ**		**Vʔ**	
/a/	/'yáwá/	'plant'	/'ñáá/	'ashes'	/'láʔdā/	'palate'
/i/	/'qǐñǐ/	'lion'	/'ñǐǐ/	'salt'	/'sǐʔyū/	'my mother'
/e/	/'qetē/	'fire-cracker'	/'teʔe/	'thus'	/'téʔwā/	'praying mantis'
/o/	/'yóó/	'moon'	/'kotǫ/	'shirt'	/'yoʔdi/	'colored'
/u/	/'lúkū/	'dove'	/'ñuʔu/	'dirt'	/'yūʔwā/	'string'.

Finally, all tones occur in all three types of peaks:

	V		**Ỵ**		**Vʔ**	
/ ´/	/'yáwá/	'plant'	/'túú/	'charcoal'	/'šáʔwá/	'ravine'
/ ¯/	/'yākā/	'storage bin'	/'ñūū/	'town'	/'yūʔwā/	'thread'
/ `/	/'yuwi/	'mat'	/'ñii/	'skin'	/'saʔma/	'cloth'.

1.32. Onset consonants combine with vowels with both systematic and non-systematic limitations. The nonsystematic limitations (except for the failure of /d/ to precede /a/, /p/ to precede /i/, and /s/ to precede /u/) are shown in Table 4. The systematic limitations are such that the palatals /t d s y/ do not precede /i/, and the labials /q p w/ do not precede /o u/, e.g.

Table 4. Nonsystematic Limitations of
Consonant-Vowel Sequences.

	/a/	/i/	/e/	/o/	/u/
/p/	/'papā/ 'potato'	/'pitū/ 'flute'	/'peʔē/ 'thin'		/'pudū/ 'point'
/t/	/'tatā/ 'daddy'	/'tǐtí/ 'iguana'	/'téʔé/ 'shell'	/'toto/ 'stacked'	/'tūtū/ 'paper'
/č/	/'čátá/ 'back'	/'čǐtǐ/ 'seed'	/'čeʔē/ 'skirt'		/'ču/ 'to thee'
/k/	/'kākā/ 'lime'	/'kikǐ/ 'Kiko'	/'kéʔé/ 'outside'	/'koko/ 'thick'	/'kukā/ 'rich'

/b/	/ˈbã́sá/		/ˈbēe/	/ˈtibō/	/ˈtabū/
	'balloon'		'sheep'	'lizard'	'drum'
/d/	/ˈdaʔa/	/ˈdíʔí/	/ˈdeʔe/	/ˈdoʔo/	/ˈdūkū/
	'hand'	'little'	'looking'	'braids'	'firewood'
/g/	/ˈígá/	/ˈlígí/			/ˈmagū/
	'another'	'twisted'			'mango'
/s/	/ˈsāa/	/ˈsíí/	/ˈséʔé/	/ˈsóó/	/ˈsusu/
	'bird'	'happy'	'child'	'peeling'	'brains'
/š/	/ˈšaa/	/ˈšíí/	/ˈšeʔe/	/ˈkašǫ/	/ˈšúú/
	'buddy'	'tough'	'ring'	'thou sneezest'	'genitalia'
/h/	/ˈkahā/		/ˈkahē/	/kaˈhǫǭ/	/ˈluhū/
	'box'		'my box'	'box'	'Adolph'
/m/	/ˈmaa/	/ˈmiḭ/	/ˈmeō/	/ˈmǫǭ/	/ˈmudū/
	'this'	'Fermín'	'Romeo'	'Simon'	'pile'
/n/	/ˈnaa/	/ˈnini/	/ˈsānē/	/ˈsānǫ/	/ˈnuna/
	'dark'	'must'	'my animal'	'thy animal'	'open'
/ñ/	/ˈñaña/	/ˈñíí/	/ˈsañē/	/ˈsañǫ/	/ˈñúñú/
	'grave'	'salt'	'I let go'	'let go'	'bee'
/r/	/ˈráí/	/ˈriʔya/	/ˈreḭ/		/ˈruʔwa/
	'man'	'this animal'	'king'		'this thing'
/l/	/ˈlaʔdá/	/ˈlili/	/ˈkalē/	/ˈlodo/	/ˈluʔu/
	'torn'	'insect'	'judge'	'turtle'	'little'
/t̜/	/ˈt̜áʔa/		/ˈt̜edā/	/ˈt̜óó/	/ˈt̜úʔu/
	'bedbug'		'store'	'crab'	'lice'
/d̜/				/ˈd̜oʔō/	/ˈd̜úʔú/
				'you'	'we (ex.)'
/s̜/			/ˈs̜edū/	/oraˈs̜oō/	
			'hundred'	'prayer'	
/y/	/ˈyayā/		/ˈtiyē/	/ˈyoʔō/	/ˈyúʔú/
	'mommy'		'my tile'	'thou'	'I' ; and
/q/	/ˈqaa/	/ˈqii/	/ˈqeē/		
	'dark'	'green'	'slow'		
/ᵽ/	/ˈᵽaā/		/kaˈᵽeē/		
	'John'		'coffee'		
/w/	/ˈwáʔá/	/ˈwiʔi/	/ˈweʔe/		
	'good'	(intensive)	'house'.		

1.33.   In the recent past some words have been borrowed from Spanish that have not yet been completely assimilated into JM. These words have introduced consonant clusters resulting in complex onsets and closed syllables. Because the words are borrowed and not completely modified, the clusters introduced by them are not systematic, e.g.

pr				
tr		st	rt	lt
kr	kl	sk		
br				
			rl	
			rn.	

These clusters are illustrated in the following list of examples:

/ˈkruū/	(Sp. cruz)	ˈcrossˈ
/ˈprudū/	(Sp. trompa)	ˈtopˈ
/séˈstiyā/	(Sp. Castilla)	ˈSpanishˈ
/maˈrtiyū/	(Sp. martillo)	ˈhammerˈ
/ˈkloriyā/	(Sp. gloria)	ˈgloryˈ
/sekreˈtariyū/	(Sp. secretario)	ˈsecretaryˈ
/proˈpetā/	(Sp. profeta)	ˈprophetˈ
/weˈqartē/	(Sp. cuartel)	ˈtown hallˈ
/ˈwaltē/	(Sp. balde)	ˈbucketˈ
/ˈpebrū/	(Sp. Pedro)	ˈPeterˈ
/ˈpetrā/	(Sp. Petra)	ˈPetraˈ
/ˈwiskā/	(Sp. fiscal)	(leading administrative official of the local Roman Catholic church)
/kaˈrlopā/	(Sp. garlopa)	ˈwood planeˈ
/ˈsakramedū/	(Sp. sacramento)	ˈsacramentsˈ
/maˈdı̃l/	(Sp. mandil)	ˈscarfˈ
/wiˈyarnĩ/	(Sp. viernes)	ˈFridayˈ.

1.4.   Microsegment Patterns. The syllables just described cluster together according to several well-defined patterns to form microsegments. Microsegments built according to these patterns always have a center followed by one postcenter satellite. The center consists of a tonic syllable that is oral, nasal, or checked; it must be followed by one posttonic syllable that is oral or nasal. (Such a two-syllable configuration has been called a "couplet" by Pike and associates.[1])

Microsegments are centers or noncenters depending on their distribution in a macrosegment. In either case, they are oral, nasal, mixed (an oral syllable followed by a nasal one), or checked according to their internal makeup:

/ˈli/	ˈhusbandˈ
/ˈli̦/	ˈoneˈ
/ˈlu̦/	ˈyour husbandˈ
/ˈlʔni/	ˈhotˈ.

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[1]Kenneth L. Pike (1948:79-81), Cornelia Mak (1953:87-88), and Robert E. Longacre (1957:11-13).

1.41.   Both tonic and posttonic syllables within the microsegment always have peaks. The peak of the tonic syllable contains one of the vowels from any class except class VI (see Table 3), and the posttonic peak contains one of the vowels from any class except class VIII.

When the posttonic syllable contains no onset or the semiconsonant as onset, there are certain limitations on the selection of a peak vowel across syllable borders. More frequently than not both vowels are identical. In addition any stressed oral vowel can be followed by /i a̦ u̦/. If the stressed vowel is nasal, then the posttonic one is nasal also. These systematic limitations are characterized in the following diagram (subscript ᵢ indicates <u>identical</u> vowels):

$$'V_iV_i \qquad {}_i'V_1?V_1 \qquad 'Ṽ_iṼ_i \qquad 'Ṽ_1?Ṽ_i$$
$$'Vi \qquad 'V?i \qquad 'Ṽị \qquad 'Ṽ?ị$$
$$'Va̦ \qquad ('V?a̦) \qquad 'Ṽạ \qquad 'Ṽ?ạ$$
$$'Vu̦ \qquad 'V?u̦ \qquad 'Ṽụ \qquad 'Ṽ?ụ.$$

Examples showing, in addition, limitations of vowel sequences are:

(1) Identical Vowels: /'kīī/ 'jug', /'kee/ 'going out', /'káā/ 'can', /'kóó/ 'snake', /'yúú/ 'stone'; /'sĪ?Ī/ 'mother', /'sé?é/ 'child', /'sa?a/ 'making', /'so?o/ 'ear', /'su?u/ 'stealing'; /'číị̃/ 'field', /'taa/ 'earthquake', /ka'hoō/ 'box', /'túú̃/ 'charcoal'; /'mị̃?ị̃/ 'trash', /'te̦?e/ 'thus'; /'ta̦?a/ 'companion', /'tu̦?u̦/ 'pulling up';

(2) Vowel + /i/: /'keĪ/ 'I am going out', /'káĪ/ 'my can', /'doĪ/ 'my cane', /'yúĪ/ 'my stone'; /'sé?Ī/ 'my child', /'sa?í/ 'I am making', /'só?Ī/ 'my ear', /'su?Ī/ 'I am stealing'; /nú'tá̦Ī/ 'my forehead', /ka'ho̦í/ 'my box', /'tú̦Ī/ 'my charcoal', /'ta̦?Ī/ 'my companion', /'tu̦?Ī/ 'I pull up';

(3) Vowel + /a̦/: /'kĪa̦/ 'that jug', /'bēa̦/ 'that sheep', /'káā/ 'that can', /'kóa̦/ 'that snake', /'yúá̦/ 'that stone'; /'čía̦/ 'that field', /ka'hoa̦/ 'that box', /'tú̦á̦/ 'that charcoal'; /'mị̃?a̦/ 'that trash', /'sụ́?ạ́/ 'that money'; and

(4) Vowel + /u̦/: /'kĪu̦/ 'thy jug', /'keu̦/ 'thou art going out', /'ká̦u̦/ 'thy can', /'do̦u̦/ 'thy cane', /'yúú̦/ 'thy stone'; /'sĪ?ụ̃/ 'thy mother', /'sé?ú̦/ 'thy child', /'sa?u̦/ 'thou makest', /'só?ú̦/ 'thy ear', /'su?u̦/ 'thou stealest'; /'čiu̦/ 'thy field', /nú'tá̦u̦/ 'thy forehead', /ka'ho̦u̦/ 'thy box'; /'mị̃?u̦/ 'thy trash', /'ta̦?u̦/ 'thy companion', /'tu̦?u̦/ 'thou pullest up'.

1.42.   Although both tonic and posttonic syllables of a microsegment generally have onsets, in some cases they may not. If the tonic syllable has an onset, it contains a consonant from any class except Class IX (see Table 2); but if the posttonic syllable has an onset, it contains either a consonant from any class except classes III, VIII, and X or the semiconsonant /?/ provided that the peak of the preceding syllable is not checked:

/'patū/	'steppingstone'	/'kapa/	'will jump'
/'tača/	'lightning'	/'čátá/	'back'
/'tedā/	'store'		
/'čati/	'spilling'	/'kači/	'will eat'
/'kātā/	'spindle'	/'tākā/	'nest'
/'qati/	'small'	/'suqā/	'eave'
/'bãsá̦/	'balloon'	/'tabū/	'drum'

/ˈdata/	'splitting'	/ˈk͟udā/	'was sitting'
/ˈd̬oō/	'god'	/ˈkad̬ū/	'hook'
		/ˈyaga/	'slow'
/ˈb̬elĭ/	'Felix'		
/ˈsútú/	'father'	/ˈk͟úsú/	'will sleep'
/ˈšftá/	'tortilla'	/ˈtaš̌i/	'quiet'
/kaˈhoō̬/	'box'	/ˈkahā/	'box'
/ˈmanĭ/	'Manuel'	/ˈsama/	'changing'
/ˈnāmā/	'wall'	/ˈsānā/	'domesticated animal'
/ˈña?a̬/	'woman'	/ˈmañā/	'naughty'
/ˈwata/	'deceitful'	/ˈk͟awā/	'turning'
/ˈyatį/	'near'	/ˈkayū/	'burning'
/ˈraya̬/	'line'	/ˈšarĭ/	'Nazario'
/ˈlu?u/	'little'	/ˈkalē/	'judge'
		/ˈda?a/	'hand'.

On the other hand if the tonic syllable is checked, the onset of the posttonic syllable is limited to a consonant from Classes VII, XIII, XIV, XV, and XVI:

/ˈtá?dá/	'will break in two pieces'
/ˈtá?má/	'dent'
/ˈta?ñu/	'be jealous'
/ˈta?nú/	'will get broken'
/ˈta?wi/	'break in many pieces'
/ˈtá?yú/	'will putrify'
/ˈpa?la/	'thin'.

In microsegments of the shape 'CVV or 'CV?V when the consonant is nonnasal, oral vowels contrast with nasal vowels:

/ˈkaā/	'laying'	/ˈkaā̬/	'pierce'
/ˈk͟ū?ū/	'brush'	/ˈk͟ū?ú̬/	'go!'
/ˈsĭ?ĭ/	'mother'	/ˈsĭ?ĭ̬/	'crotch'.

But when the consonant is nasal, /m n ñ/, the vowels are always nasal:

/ˈmaa̬/	'this'
/ˈnų̬?ų́/	'tooth'
/ˈñį̬į̇/	'salt'.

1.43.   All nine possible tone combinations occur in microsegments, e.g.

/ˈdó?ó/	'basket'	/ˈdó?ō/	'adobe'	/ˈdó?o/	'got spanked'
/(ˈtú?wa)	'basket	/(ˈwá?á)	'basket (is	/(ˈwá?á)	'adobe (is good)'
ˈdo?ó/	(hammock)'	ˈdo?ō/	good)'	ˈdo?o/	.
/ˈtitá/	'banana tree'	/(ˈtekū)	'basket (is	/ˈdo?o/	'braid'.
		ˈdo?ō/	sitting)'		

1.5.   <u>Macrosegment Patterns</u>.   The microsegments just described combine further according to several well-defined patterns to form macrosegments.   Macrosegments built by these patterns are of two basic types, centered and uncentered.   A centered macrosegment has its peak marked by macrostress, and is one of two subtypes; those with a single center and those with two centers.   An uncentered macrosegment has no microsegment more strongly stressed than any other.

A macrosegment consists of microsegments and syllables that do not belong to any microsegment and may have two, one, or no occurrences of macrostress. When macrostress occurs, it falls on the syllable of a microsegment that in other environments bears merely the microstress. A macrosegment ends with either terminal contour. For example,

Unstressed: /ˈkéča ˈkatĪrá|/ ˈhe began to sayˈ,

Stressed: /ˈˈdiʔiränˈtĬčĬ|/ ˈthey all touched itˈ,

Double Stressed: /naˈˈkuʔụ̈tĬkúˈˈdéʔụ|/ ˈgo and thou wilt see! ˈ,

Unstressed-Final: /taˈkée ˈdikorä ˈqạʔạ̈rá↓/ ˈand he came out again and left.ˈ,

Stressed-Final: /ˈˈñáʔni ˈĬtáčĬ ˈkána↓/ ˈno flowers budded.ˈ, and

Double Stressed-Final: /tanĬˈˈčátiña ˈduta ˈñaaˈˈčaʔa↓/ ˈand she threw out the water that the corn was soaked in.ˈ.

The smallest macrosegment is a microsegment with a terminal contour, e.g. /ˈwáʔá↓/ ˈgood! ˈ. Such a macrosegment can be enlarged by adding certain kinds of syllables either before the microsegment center or after it, or both before and after it.

A premicrosegment (any group of atonic syllables preceding a microsegment) consists of one to five syllables, all of which must be oral. Although a sequence of eight syllables is theoretically possible no single utterance in the corpus contains more than five. All such syllables but one (/ấ/ question marker) have onsets. These onsets fall into twelve classes (c.f. Table 2); and the peak vowels fall into three classes (c.f. Table 3) and the tones fall into two. The positions (counting from the center) and general environments of consonants, vowels, and tones are matched diagrammatically in Table 5.

Table 5.   Distribution of Consonants, Vowels, and
Tones before Microsegments.

Classes \ Syllables	8	7	6	5	4	3	2	1
Consonant	C_a	C_b	C_c	C_c	C_d	C_d	C_e	C_f
Vowel	V_a	V_a	V_a	V_a	V_a	V_a	V_a	V_b
Tone	T	T	T	T	Tˈ	Tˈ	Tˈ	Tˈ

Illustrations of some of the distributional information given in Table 5 are:

/tasánĬčáké (ˈčáʔa)/   ˈand...just beganˈ

/tanĬčákú (ˈdičirä)/   ˈand he put (clothes) onˈ

/tanĬdú (ˈsukụ)/   ˈand...became tallˈ

/čirähó (ˈseē)/   ˈto Josephˈ

/čáñáni ('ča?árā)/   'that he did not give'

/taniká ('kee)/   'and...all came out'

/yúrá ('da?wī)/   'me a poor man'

/niká ('da?yu)/   '...all cried'

/añá ('dé?u̯čīñí)/   'did they not see them?'

/tadā ('íti)/   'and what path'

/ráčá ('dúkurā)/   'the man who looked for'

/darā ('kú̯?ú̯)/   'which one will go'

/ñu̯čí ('qa?ā)/   'Jicayán'

/ta ('di?i)/   'and after that'

/rá ('lú?u)/   'little boy'.

A postmicrosegment (any group of atonic syllables following a microsegment) consists of one to four syllables, with no limitations on nasalization. Again there is the theoretical possibility of a sequence of more syllables than actually occur in any utterance of the corpus. Like the premicrosegments, postmicrosegments not containing a syllable onset are very limited. There are only two: /u̯/ 'thou' and /a̯/ 'there'. The onsets fall into eleven classes (c.f. Table 2); the peak vowels fall into five classes (c.f. Table 3); and the peak tones fall into two (see §1.24). The positions and general environments of the consonants, vowels, and tones are matched in Table 6. In addition, although the postmicrosegments without onset, /a̯/ and /u̯/, occur in positions 1 through 8, only /a̯/ ·occurs in positions 9 and 10.

Table 6.   Distribution of Consonants, Vowels,
and Tones after Microsegments.

Classes \ Syllables	1	2	3	4	5	6	7	8	9	10
Consonant	C_1	C_1	C_1	C_2	C_2	C_2	C_2	C_2	C_3	C_3
Vowel	V_1	V_2	V_2	V_2	V_2	V_2	V_2	V_2	V_3	V_3
Tone	T'	T'	T'	T'	T'	T'	T'	T'	T'	T

Illustrations are:

/('kú?wá) číríčiwe/   'give it to the baby'

/(ñá'síki) u̯tahạ/   'what art thou playing, man?'

/('sa?ma) wēku̯čí/   'it's the baby's clothes'

/(qá̰ díkú) dóčiñí/	'follow them!'
/('ma̰a̰) rātarā/	'these particular men'
/('musū) á̰číña/	'that servant...her'
/('ma̰a̰) doní/	'just you (in particular)'
/('kéta) kārā/	'he arrived again'
/('wa?ā) kúña/	'she is good'
/('tṵ?ṵ) ñačṵ/	'she...thee'
/(ta'qá̰?á̰) ñárā/	'and she went with him'
/('orā) nḭ́ká̰/	'just at that time'
/('qa̰?a̰) tí/	'go, he said'
/('káyṵ́) wā/	'didst thou get burned?'.

Sometimes a microsegment with postmicrosegment syllables is followed by a microsegment with premicrosegment syllables. When this happens, the syllables falling between the microsegments cannot be separated into pre- and postmicrosegments but consist of combinations permitted by the union of Tables 5 and 6 in the proper way. In spite of the large number of possible sequences, the longest one so far discovered contains only four syllables:

/(sá"daa) rāčítasá ('nṵṵ)/	'he raised and lowered it'
/('qá̰?á̰) čídáqadá ('kéeči)/	'it went until it came out'
/('tuku) ñačīrá ('áhilī)/	'she...again to the angel'
/('maa)rātarā ('watī)/	'they...because'
/(sá'daa) rātasá ('nṵṵ)/	'he raised (it) and lowered (it)'
/('kunī) rásádu ('kači)/	'he wants to make clear'
/('qá̰?á̰) má̰ñatu ('ñḭḭ)/	'she has gone to the lagoon'.

2. MORPHOPHONEMICS

Morphophonemics deals with the relation between grammar and phonology, or more specifically, between morphemes and phonemes. The morphemes of JM are represented by phonological units of one, two, or three syllables.

Some morphemes are represented by more than one phonemic shape. These shapes are determined by one of two general kinds of morphophonemic habits: those that have to do with tone and those that do not. The latter type is characterized by shortened allomorphs of morphemes, loss of nasalization, final vowel change, and variants of active verb stems and the demonstrative pronouns, while tonal morphophonemic habits are characterized by allomorphs that differ from each other by tone alone.

2.1. <u>Morph Shapes</u>. Morphemes in JM are in general represented by dis-syllabic morphs, although there are a number of monosyllabic and trisyllabic ones as well. The following array shows the canonical shape of dissyllabic morphs:

	V		CV	
V	/ˈíí/	'holy'	/ˈíti/	'path'
			/ˈíkį̀/	'squash'
	/ˈį́į̀/	'nine'	/ų́ʔų̀/	'five'
			/ˈíʔwi/	'excrement'
CV	/ˈkíí/	'jug'	/ˈkíti/	'horse'
			/ˈdíkį̀/	'horn'
	/ˈkį́į̀/	'step (relative)'	/ˈkį̀ʔį́/	'wide'
			/ˈtíʔwi/	'sweeping'.

Only one trisyllabic morph begins with a vowel (/iˈsukū/ 'wrapping'). All others are represented in the following array:

CV'CVV		CV'CVCV	
/tíˈkíí/	'blister'	/tíˈkátí/	'blanket'
		/súˈdíkį́/	'cow'
/sáˈñį́į̀/	'corncob'	/yuˈnų̀ʔų́/	'food preparation area'
		/kóˈdáʔwí/	'shadow'.

Monosyllabic morphs are either V or CV with the vowel oral or nasal:

V		CV	
/a/	(question marker)	/ka/	'another'
/u̧/	'thou'	/ka̧/	'over there'.

2.2. <u>Nontonal</u> <u>Morphophonemics</u>. Many morphemes represented by allomorphs of two or three syllables also have allomorphs of one or two syllables, respectively.

Morphemes represented by allomorphs of the cononical patterns 'CVV and 'CV?V also have atonic alternants of the shape CV that occur optionally when macrostress falls on some other microsegment:

/'yoo/	'we (incl.)'	~	/yo/
/'nṳ́ṵ́/	'face'	~	/nṵ́/
/'ráí/	'man'	~	/rá/
/'sa?a/	'make'	~	/sa/
/'we?e/	'house'	~	/we/
/'ña̧?a̧/	'woman'	~	/ña̧/.

If the morphs have the shape CV'CVV or CV'CV?V, they likewise weaken to an atonic form CVCV under the same conditions as for 'CVV:

/yú'tá̧á̧/	'tomorrow'	~	/yútá̧/
/ti'ka?a/	'coconut'	~	/tika/.

Morphemes represented by allomorphs of the shape 'CVCV̧ or CV̧ have a nonnasalized alternant:

/'yutu̧/	'tree'	~	/'yutu/
/'tásṵ́/	'hawk'	~	/'tású/
/ru̧/	'that thing'	~	/ru/
/nṵ́/	'face'	~	/nú/.

The first alternant of the dissyllabic form occurs at the end of a macrosegment just before the terminal contour while the second occurs in the interior of macrosegments. The first alternant of the monosyllabic forms is posttonic while the second is pretonic.

Morphemes represented by morphs of the shape 'CVCV belong to two classes. The members of one class show invariant alternation and are always represented by dissyllabic 'CVCV morphs, but the members of the other class are represented by allomorphs of both 'C₁V₁C₂V₂ and C₂V₂:

/'yutu/	'tree'	~	/tu/
/'wátí/	'because'	~	/tí/.

When under macrostress the dissyllabic form occurs; in other positions the shorter form is an optional variant.

Final vowel change for first and second person shows another kind of allomorphic alternation. Morphs with the shape 'CVV and one class of morphs with the shape 'CVCi or 'CVCu, have /-í/ 'I', and /-u̧/ 'thou' respectively, and all other morphs with the shape 'CVCV have /-é/ 'I' and /-o̧/ 'thou' respectively:

/'káí/	'my metal thing'	(< /'káā/	'metal thing')
/'kaū̧/	'thy metal thing'		
/'we?í/	'my house'	(< /'we?e/	'house')
/'we?u̧/	'thy house'		
/'tač í/	'I plant'	(< /'tačí/	'planting')
/'tač u̧/	'thou plantest'		
/'tūtí/	'my paper'	(< /'tūtū/	'paper')
/'tūtū̧/	'thy paper'		
/'šĪtē/	'my uncle'	(< /'šĪtō/	'uncle')
/'šĪtō̧/	'thy uncle'		
/'sa?mē/	'my clothes'	(< /'sa?ma/	'clothes')
/'sa?mo̧/	'thy clothes'.		

A second class of morphs having the shapes 'CVCi and 'CVCu do not have the privilege of final vowel change, i.e.

/'činĪyú/ 'I drink'

/'činuyū/ 'I run'.

A further alternant for first person is nasal when the preceding vowel is nasal, e.g. /-į̧/:

/'nų́į̧/   'my face'

/'nų́?į̧/   'my tooth'.

Active verbs fall into four classes depending on the shape of their stems. In class I (shown in Table 7) all three stems differ; in class II the incompletive stem contrasts with the completive-continuative one; in class III the continuative stem contrasts with the incompletive-completive one; and in class IV no change distinguishes the three stems. Except for class IV the incompletive stem is marked by the initial consonant q̲- or k̲-, and the completive stem is marked by č̲-, k̲-, or č̲a-.

Finally, there are two specific morphophonemic rules. The morpheme Ya 'this' is represented by the allomorph /-ʔwa/ after stressed /u/, /-ʔe/ after stressed čí, /-ʔya/ after other stressed vowels, and /ya/ elsewhere:

/'ruʔwa/   'this thing'

/'čeʔe/   'this thing'

/'ráʔyá/   'this man'

/'dutaya/   'this water'.

The morpheme č í 'it' is represented by the allomorphs /či/ in a postmicroseg-ment, /če/ in a microsegment before Ya, and /ča/ elsewhere:

/'kúʔwãčí/   'give it!'

/'čéʔé/   'this thing'

/čá'waʔā/   'the good thing'

/'čaką/   'that thing'.

Table 7. Active Verb Stems Indicating Aspect.

	Incompletive	Completive	Continuative	
I	'qátú	'čátu	'datu	'wait'
	'qísó	'číso	'diso	'carry'
	'kasi	'časi	'dasĪ	'close'
	'ku?ni	'ču?ni	'nu?ni	'tie'
	'ką̧?ų̧́	'čą̧?ą̧́	'qa̧?ą̧̄	'go'
II	'kání	'čání	'čani	'demolish'
	'kuwi	'čí?í	'čí?i	'die'
	'kúnú	'čínu	'čínu	'run'
	'qísó	'čísó	'čisō	'boil'
	'kúsú	'kĩsí	'kĩsĪ	'sleep'
III	'kóó	(čá)'kóó	'iyō	'be located'
	'kuda	(ča)'kuda	'daā	'be seated'
	'kǎwá	(čá)'kǎwá	'kaa	'lie down'
	'qídí	(čá)'qídí	'idi	'be inside'
	'kĩči	'kĩči	'wãčí	'come'
IV	'dá?yú	'dá?yú	'da?yū	'cry'
	'kákú	'kákú	'kaku	'escape'
	'káyu	'káyu	'kayu	'cough'
	'káná	'kána	'kana	'call'
	'šíta	'šíta	'šíta	'pull'

2.3. Tonal Morphophonemics. Many morphemes are represented by allomorphs whose shapes differ from each other by tone alone. When two morphemes, A and B, occur in the sequence AB, sometimes the tones of A are determined by B, but much more frequently the tones of B are determined by A. At other times the tones of A and B are determined by each other. In such instances, first the tones of A are determined by the basic tones of B, and then the tones of B are determined by the previously established variant tones of A. Thus, wē wá?á 'the good little one' is first /we/ and wá?á, and second /we'wā?á/.

The shape of the morph that occurs in isolation is BASIC.

2.31.   Dissyllabic morphs in JM have seven of the nine possible tone sequences
is their basic patterns. They are:

HH	HM	HL
	MM	
LH	LM	LL.

(H represents high tone, M mid tone, and L low tone.) The variant forms, also
showing seven of the nine possibilities, form a different set, e.g.

		HL
MH	MM	ML
LH	LM	LL.

Because these two sets of tone patterns are complementary, JM shows all nine tone
combinations.

On the basis of the tone patterns active verbs fall into four major classes with
several subclasses. Although the first tone on an active verb in the incompletive and
completive is high or low, it is always low in the continuative. The specific tone
changes are catalogued in Table 8.

Examples of each of these tone classes follow:

Incompletive	:	Completive	:	Continuative	
/ⁿkíʔwí/	:	/ⁿkíʔwí/	:	/ⁿkiʔwí/	'enter'
/ⁿkóó/	:	/čáⁿkóó/	:	/ⁿiyō/	'be'
/'dáʔyú/	:	/'dáʔyú/	:	/'daʔyū/	'cry'
/ⁿkákú/	:	/ⁿkákú/	:	/ⁿkaku/	'escape'
/'táʔwí/	:	/'táʔwí/	:	/'taʔwi/	'break'
/ⁿkáná/	:	/'kána/	:	/ⁿkana/	'call'
/'šíko/	:	/'šíko/	:	/'šiko/	'sell'
/'setā/	:	/'setā/	:	/'setá/	'throw away'
/ⁿkuwi/	:	/'číʔí/	:	/'čiʔi/	'die'
/ⁿkawa/	:	/ⁿkawa/	:	/ⁿkawā/	'turn'
/'sata/	:	/'sata/	:	/'satā/	'cut'.

Table 8. <u>Tone</u> <u>Patterns</u> <u>Indicating</u> <u>Aspect.</u>

		Incompletive	Completive	Continuative
	a	HH	HH	LH
I	b	HH	(H)HH	LM
	c	HH	(H)HH	LL
II		HL	(H)HL	LL
III		LM	LM	LH
	a	LL	HH	LL
IV	b	LL	(L)LL	LM

In any sequence of two morphs the tones of the second morph are determined by (1) the basic tones of the morpheme it represents, and (2) the tones of the preceding morph. Morphemes represented by dissyllabic morphs, therefore, fall into thirteen classes based on the selectional constraints of the tones of the allomorphs that represent them. These constraints are shown for all sequences in Table 9. The first column in the table represents the tones of the first morph of a sequence of two and the first row represents the basic tones of a morpheme represented by the second morph of the sequence. The intersection of the rows and columns represents the variant tones of the second morph for any sequence. The following listing gives examples for each of the classes:

HH: /ˈñíwí/ 'people', /ˈíí/ 'sacred', /ˈkúmí/ 'four'

HH': /ˈwáčí/ 'is coming', /ˈwáʔá/ 'good', /ˈyáʔá/ 'passed'

HH": /ˈráí/ 'man', /ˈdíʔí/ 'small', /ˈúná/ 'eight'

HM: /ˈqáñū/ 'squirrel', /ˈkáā/ 'can'

HM': /ˈsétā/ 'threw out', /ˈdúwā/ 'fell'

HL: /ˈtóho/ 'masked dancer', /ˈsúku/ 'picked'

HL': /ˈčíča/ 'mature', /ˈnáñu/ 'dug', /ˈñáʔni/ 'none'

MM: /ˈsāā/ 'bird', /ˈtāyū/ 'chair'

LH: /ˈtitá/ 'banana tree', /ˈkayú/ 'is burning'

LH': /ˈnumí/ 'fast', /ˈyaʔá/ 'is passing by'

LM: /ˈd̥oō/ 'saint', /ˈsuk̥ū/ 'tall', /ˈsukū/ 'is picking',

/ˈs̥edū/ 'hundred', /ˈyoʔō/ 'you'

LL: /'tatụ/   'messenger',   /'wata/   'deceitful',   /'maạ/   'this'

LL': /'ịị/   'one',   /'čaʔnu/ 'old',   /'nañu/   'is digging'.

Table 9.   Constraints on Tone Sequences.

Second Morph / First Morph	HH	HM	HL	MM	LH	LM	LL
HH	LM	ML	ML	MM	LH	LM	HL
HH'	MM	ML	ML	MM	LH	LM	HL
HH''	HH	HM	HL	MM	LH	LM	HL
HM	HH	HM	HL	LL	LH	LM	HL
HM'	MM	HM	HL	LL	LH	LM	HL
HL	MH	HM	HL	MM	LH	LM	LL
HL'	MM	HM	HL	MM	LH	LM	LL
MM	HH	HM	HL	LL	LH	LM	HL
LH	MH	HM	HL	MM	LH	LM	HL
LH'	LM	HM	HL	MM	LH	LM	HL
LM	MH	HM	HL	LL	LH	LM	HL
LL	MH	HM	HL	MM	LH	LM	LL
LL'	HH	HM	HL	MM	LH	LM	LL

Morphemes represented by dissyllabic allomorphs show both invariant and variant alternation with respect to tone. Those morphemes with invariant alternation have a single allomorph whose tones are always LH or LM, e.g. /'titá/ 'banana tree' and /'yaqị̄/ 'armadillo'.

Morphemes that show variant alternation are represented by either two or four allomorphs. The tone patterns of those represented by two allomorphs are HM (~ ML), HL (~ ML), MM (~ LL), and LL (~ HL) under conditions stated for each in the paragraphs that follow.

Morphemes that are represented by allomorphs with HM or HL have a second allomorph with ML that follows members of the classes (H)H, (H)H', and LH:

              /šítí'qāñu/   'the squirrel's nose'

              /'wáčí'qāñu/   'the squirrel is coming'

/ˈñíˈčãnu/   'the girls who have just married'

/ˈyaʔáˈdĩi/   'the body is going by'

/ˈšítíˈtōho/   'the masked dancer's nose'

/ˈwãčíˈtōho/   'the masked dancers are coming'

/ñíˈtōho/   'the people who are masked dancers'

/ˈyaʔáˈtōho/   'the masked dancers are passing'.

Following members of the class (H) H" the allomorphs with HM and HL occur:

/ˈdíʔíˈqáñũ/   'the squirrel is small'

/ˈúnáˈqáñũ/   'eight squirrels'

/ráˈqáñũ/   'the squirrel'

/ˈdíʔíˈtóho/   'the masked dancers are small'

/ˈúnáˈtóho/   'eight masked dancers'

/ráˈtóho/   'the men who are masked dancers'.

Furthermore, these allomorphs (HM, HL) follow morphs with all other tone patterns:

/ˈtúmĩˈlúkū/   'the dove's feathers'

/ˈčíčaˈkáā/   'the can is sturdy'

/ˈtāyūˈčáñũ/   'the bride's chair'

/ˈsokōˈdĩi/   'the well of the dead'

/ˈii̧ˈmíñĩ/   'one lake', and

/ˈdúwāˈtóho/   'the masked dancer fell'

/ˈnáñuˈtú̧ʔu/   'the mole is digging'

/ˈyūtĩˈtóho/   'the masked dancer's bottle'

/ˈsukų̄ˈtú̧ʔwa/   'the hammock is high'

/ˈkukaˈtóho/   'the masked dancer is rich'.

Morphemes that are represented by allomorphs with MM have a second allomorph with LL that follows all morphs that end on M tone (HM, MM, LM):

/ˈtúmĩˈsaa/   'the bird's feathers'

/ˈtūtūˈtoʔo/   'the town fathers' paper'

/ˈtȩdāˈtoʔo/   'the town father's store'.

In contrast, morphemes that are represented by allomorphs with MM remain MM after morphs ending with tones other than M (HH, HL, LH, LL):

/ˈkáyúˈkū̃ʔū̃/   'the brush got burned'

/ˈnáñuˈĩnā̃/   'the dog dug'

/ˈtItáˈšĩtē̃/   'my uncle's banana tree'

/ˈčaʔnuˈkĩnĩ/   'the pig is old'.

Morphemes that are represented by allomorphs with LL have allomorphs with HL after all morphs that end on tones other than L [(H)H, HM, MM, LM];

/ˈñĩwĩˈñóko/   'people of Pinotepa Nacional'

/ráˈtátu̥/   'the topil'

/ˈdĩkā̃ˈñá̱ʔa̱/   'woman's breast'

/ˈčē̃ʔē̃ˈñá̱ʔa̱/   'woman's skirt'

/ˈkotǭˈtátū̃/   'the topil's shirt'.

In contrast, morphs represented by allomorphs with LL are LL after all morphs ending on L (HL, LL):

/ˈtú̱ʔwaˈkaso̱/   'your male in-law's hammock'

/ˈyuʔuˈkitl/   'the horse's mouth'.

Only morphemes represented by allomorphs with the tone pattern HH have four tonally differentiated allomorphs; the tone patterns of these allomorphs are HH ~ MM ~ LM or LH ~ MH. These morphemes fall into two classes the first of which is represented by the allomorph with LM and the second of which by the allomorph with LH after HH:

/ˈñĩwĩˈwaʔā̃/   'fine people'

/ˈñĩwĩˈdiʔĩ/   'small people'.

The first allomorph (HH) begins a macrosegment, follows HH", HM, LL and MM:

/ˈwá̱ʔá̱/   'good'

/ˈkáyúˈñĩwĩ/   'the people got burned'

/ˈtúmĩˈtású̱/   'the hawk's feather'

/ˈčaʔnuˈñĩwĩ/   'the people are old'

/ˈsāyū̃ˈšá̱á̱/   'whooping cough'.

The second allomorph with (MM) follows HH', HM', and HL':

/ˈwáčĩˈyū̃ʔū̃/   'I am coming'

/ˈdúwā̃ˈñĩwĩ/   'the people fell'

/ˈkĩčĩˈñĩwĩ/   'the people came'.

The third allomorph (with **LM** or **LH**) follows (H)H, LM', and LH':

/'íí'ñiwī/	'the people are holy'
/ñí'wa?ā/	'good people'
/'kúmí'raī/	'four men'
/'dekū'ñiwī/	'the people are sitting'
/'ya?á'ñiwī/	'the people are passing by'.

Finally the fourth allomorph (with **MH**) follows **HL**, **LH**, **LM**, and (L)L:

/'tóho'wā?á/	'the good masked dancer'
/'duwā'ñīwí/	'the people are falling'
/'kayū'yoó/	'the moon is in eclipse'
/'wata'ñīwí/	'people lie'
/ña'wā?á/	'this good woman'.

All of the requirements for the selection of tonally differentiated allomorphs based on the tone pattern of the preceding morph have been cataloged and illustrated in the preceding section. In JM the members of one class of morphemes are represented by allomorphs that are selected on the basis of the tone pattern of the following morph. Morphemes represented by allomorphs with a **LH** tone pattern have a second allomorph with **LM**, (/'titá/ 'banana tree' ~ /'titā/, or /'ya?á/ 'will pass by' ~ /'ya?ā/). The first allomorph (LH) ends a macrosegment or precedes morphs with **MM**, **ML**, **LM**, **LH** (except /'titá/ 'banana tree'), and **M**:

/'titá/	'banana tree'
/'titá'šīte/	'my uncle's banana tree'
/'numí'tóho/	'the masked dancer is in a hurry'
/'dekú'ḍoō/	'the saint is sitting'
/'titá'kayú/	'the burning banana tree'
/'titáwē/	'the child's banana tree'.

The second allomorph (LM) precedes **HM**, **HL**, **MH**, **LH** (only /'titá/), **LL** and **H**:

/'duwā'qáñū/	'the squirrel is falling'
/'titā'ñá?ya/	'this woman's banana tree'
/'titā'dĭ?í/	'the small banana trees'
/'duwā'titá/	'the banana tree is falling'
/'qeē'nañurā/	'he digs slowly'
/'titāká̧/	'that banana tree'.

2.32.   Trisyllabic morphs have the following tone patterns:

HHH	HHM	HHL
HMH	HMM	
HLH	HLM	HLL
	MMM	
LHH		LHL
LMH	LMM	
LLH	LLM	LLL.

Morphemes represented by allomorphs of three syllables have one or two allomorphs distinguished only by the tones of the first syllable. The conditions for the selection of allomorphs are the same as those described for dissyllabic morphs in the preceding sections, e.g. LLM ~ HLM (which follows a preceding H or M):

/ma'riā/   'Mary'

/'wáčímá'riā/   'here comes Mary'.

2.33.   Monosyllabic morphs, like dissyllabic ones, have their tones determined by the tones of the morphs that precede it and follow it. All the tones (H, M, and L) occur in both basic forms and variant forms. Two sets of morphemes represented by monosyllabic morphs have two allomorphs and two sets have three.

ñí 'they' and other members of the same class are represented by two allomorphs: /ñí/ ~ /ñī̀/. The first allomorph follows HH", HL, LM, and LL:

/'káyúñí/   'they will burn'

/'tú̧ʔwañí/   'their hammock'

/'ḑoōñí/   'their saint'

/'watañí/   'they lie'.

The second allomorph follows HH, HH', both HMs, HL', MM, both LHs, and LL':

/'ñíwíñī̀/   'their people'

/'wáčíñī̀/   'they are coming'

/'síwíñī̀/   'their saliva'

/'dúwāñī̀/   'they fell'

/'kíčíñī̀/   'they came'

/'sānāñī̀/   'their animal'

/'yaʔáñī̀/   'they are passing'

/'numíñī̀/   'they are in a hurry'

/'čaʔnuñī̀/   'they are old'.

w̄e (diminutive) also is represented by two allomorphs: /w̄e/~ /we/. The first allomorph follows HL, both LHs, and both LLs:

/ˈñá?niw̄e/   'the little one is not here'

/ˈtitáw̄e/   'the little one's banana tree'

/ˈnumíw̄e/   'the little one is fast'

/ˈwataw̄e/   'the little one is a liar'

/ˈtu?waw̄e/   'the little one is learning'.

The second allomorph follows all HHs, both HMs, HL, MM, and LM:

/ˈñíwíwe/   'the baby's relatives'

/ˈwáčíwe/   'the baby is coming'

/ˈkáyúwe/   'the baby is burned'

/ˈsí?įwe/   'the baby's hip'

/ˈdúwāwe/   'the baby fell'

/ˈtú?wawe/   'the baby's hammock'

/ˈsí?íwe/   'the baby's mother'

/ˈpitūwe/   'the baby's flute'.

rá 'he' is represented by three allomorphs: /rá/~ /rā/~ /ra/. The first allo-morph follows HH'' and LM:

/ˈdí?írá/   'he is small'

/ˈkotōrá/   'his shirt'.

The second allomorph follows HH, HH', all HM, HL, LH, and LL:

/ˈšínírā/   'his head'

/ˈwá?árā/   'he is good'

/ˈdó?yorā/   'his spring'

/ˈtú?warā/   'his hammock'

/ˈsúkurā/   'he picked (it)'

/ˈnumírá/   'he is in a hurry'

/ˈkukarā/   'he is rich'

/ˈča?nurā/   'he is old'.

The third allomorph follows MM:

/ˈtāyūra/   'his chair'.

ñá 'she' and other members of the same class are represented by three allomorphs
also: /ña/~ /ñā/~ /ñá/. The first allomorph follows HL' and both LLs:

/ˈkíči̯ña/   'she came'

/ˈyagaña/   'she is slow'

/ˈnañuña/   'she is digging'.

The second follows both HMs, HL, and MM:

/ˈdíkāñā/   'her breast'

/ˈdúwāñā/   'she fell'

/ˈsúkuñā/   'she picked'

/ˈtāníñā/   'her lover'.

The third follows all HHs and LM:

/ˈtų́ʔų́ñá/   'her language'

/ˈyáʔáñá/   'she passed by'

/ˈkáyúñá/   'she got burned'

/ˈdo̯ōñá/   'her god'.

Of the morphemes represented by monosyllabic morphs only wē (diminutive) has
alternants determined by the tones of morphs that follow it. The allomorph /wē/ pre-
cedes all morphs beginning with low tone (LM and LH) and /we/ precedes morphemes
beginning with the other tones (HM, HL, and MH):

/wē ˈdaʔwí/   'the poor little one'

/wē ˈkayú/   'the little one who is getting burned'

/we ˈdúwā/   'the little one who fell down'

/we ˈčáʔnu/   'the old, little one'

/we ˈwā́ʔá/   'the good little one'.

3. PARTS OF SPEECH

A part of speech is "a form-class of stems which show similar behavior in inflec-tion, in syntax, or both." (Hockett 1958:221) In JM parts of speech are defined principally by their syntactic distribution.

The parts of speech of JM are:

marker:	wátí	'because'
verb:	dawa	'jump over'
noun:	we?e	'house'
pronoun:	dú?ú	'we (inclusive polite)'
numeral:	túwí	'many'
adverb:	isā	'day after tomorrow'
modifier:	diko	'back again'
interjection:	hí?ná	'look!'.

This classification is bisected by the following one based on the functor-contentive dichotomy:

	Functors	Contentives
Markers	x	
Verbs		
Equational	x	
Active		x
Stative		x
Nouns		x
Pronouns	x	
Numerals		x
Adverbs		x
Modifiers	x	
Interjections	x	.

The grammatical categories of JM are:

allocation: person, number, and gender;

subject inflection: number;

aspect: incompletive, completive, and continuative.

The categories of allocation fall into three sets:

person: first, second, and third;

number: singular and plural;

gender: masculine, feminine, sacred, animal, and inanimate.

Subject inflection, like allocation, distinguishes singular and plural.

Nouns are inflected for allocation showing person, number, and gender of pos-
sessor:

sé?į̄	'my child'
sé?ú̧	'thy child'
sa?mē̄	'my clothes'
sa?mǫ	'thy clothes'.

Verbs are inflected for subject showing person, number and gender:

g̱á?į̱	'I am going'
g̱á?ú̧.	'thou art going'
iyē̄	'I am here'
iyō̧.	'thou art here'.

A few stative verbs are inflected to show number of subject:

ka?nu (ị̄tá)	'(the flowers) are big'
na?nu (ị̄tá)	'(the flower) is big'.

Some active verbs are inflected for aspect:

g̱átú (rá)	'(he) intends to wait'
čátu (rá)	'(he) waited'
datu (rá)	'(he) is waiting'.

The definition of the word in JM is a matter of some importance and difficulty. A
word is composed of either a single morpheme or a close-knit sequence of several
morphemes smaller than a phrase. One of its most important phonological character-

istics is its isolability as determined by pause. Although all words cannot occur in complete isolation bounded by silence, all are bounded by points at which pausing is permitted in any stretch of speech. This criterion yields both independent and dependent words. Independent words (always represented by either dissyllabic or trisyllabic morphs), like tūtū 'paper', we?ī 'my house', tité?e 'cockroach', and dušaú 'thou art getting mad', may be bounded by silence and, thus, stand as whole utterances in themselves. On the other hand, dependent words (always represented by monosyllabic morphs), like ta 'and', ní (completive aspect), ka (distal demonstrative pronoun), may be flanked by silence either before or after, but not both at once. A word, so defined, is a grammatical form that is usually smaller than a phrase and sometimes larger than a single morpheme.

In fact, the strings of elements here called words have characteristics parallel to strings of words which are found on the phrase and clause levels in other languages. In the example ta čá ní čá?á ta?a tuku ni rá čá?nu núú kíči rá íku ñuu 'and the old man too has just gone again to the place from which he came the day before yesterday', there are four phrases consisting of words represented by monosyllabic and dissyllabic morphs and one connective. They are, in order, the connective, taa, a constituent with the whole clause that follows it, a verb phrase čá ní čá?á ta?a tuku ni (past time, completive aspect, verb center, derived stative verb attribute, numeral attribute, restrictive marker), a pronoun phrase rá ča?nu (pronoun center, stative verb attribute), a locative noun phrase núú kíči rá (locative noun center, and verb and pronoun), and a temporal adverb phrase iku ñuu (temporal adverb center, noun attribute). In each phrase every word is a single morpheme. That elements like ta, čá, and ní are phonologically dependent on čá?á is irrelevant here; they are small size-level grammatical forms or words.

Words are classed according to the larger size-units to which they belong and their own internal make-up.

3.1. Markers. In this description, markers are taken as given and provide the basis for the definition of all other word classes. A marker is any element which signals the grammatical relationship of surrounding elements. They are classed according to the size-level on which they function. Thus, JM has sentence markers, clause markers, phrase markers, and word markers. (Word markers are prefixes, c.f. ₹4.1.)

3.11. The four sentence markers are tá and na which mark vocative and nonvocative questions, respectively, and tí and to which mark quotations. All except tá end the sentence; tá immediately precedes its sentence ending vocative, e.g.

daā qá?ú tá hna.	'Where are you going, friend?'
qá kíči ku na.	'Will you come?'
qa?ā koto kání čí?i ku tí.	'Go before I hit you, he said.'
wá?á to	'O.K., you say.'.

3.12.   Clause markers are conjunctions and are of two types: independent con-
junctions precede a clause that can stand alone as a sentence without further additions
(taa, 'and'; koto, 'lest') and dependent conjunctions introduce a clause that always
occurs with another clause (tu, marker of conditions; soko, adversative particle;
and wátí, 'because'), e.g.

taa qá káči rá šítá.	'And he will eat a tortilla.'
koto kání čiʔi ku.	'Lest I hit you.'
[wáʔá šáá] tu číká kuní ku.	'[That's fine] if that is what you want.'
[qaʔá witi] soko yútáá qá kíči tuku ku.	'[Go now] but come again tomorrow.'
[mistū Ya kíʔi] wátí qá káʔda yoʔo kuʔu.	'[Take this cat] because thou wilt cut the brush.'.

A second set of dependent conjunctions consists of those words which also mark
questions [yoso 'how', ñáá 'what', daā 'where', ñaku 'why', ama 'when',
yoo 'who', and atu (indirect question marker)]. Used in the following examples
they mark the beginning of a clause that stands in a dependent relationship with the
preceding clause:

[číto doō] yoso daā čí.	'[I don't know] how much it is.'
[číto doō] ñáá čí kuu číká.	'[I don't know] what that is.'
[číto doō] daā qáʔá rá.	'[I don't know] where he went.'
[číto doō] ñaku sáwaʔá rá číká.	'[I don't know] why he did that.'
[číto doō] ama qá kíči ñí.	'[I don't know] when they will come.'
[číto doō] yoo qáʔá.	'[I don't know] who went.'
[číto doō] atu díča rá.	'[I don't know] if he is telling the truth.'.

In questions their clause does not stand in construction with another clause:

yoso daā čí.	'How much is it?'
ñáá čí kuu číká.	'What is that?'
daā qáʔá rá.	'Where did he go?'
ñaku sáwaʔá rá číká.	'Why did he do that?'
ama qá kíči ñí.	'When will they come?'
yoo qáʔá.	'Who went?'
atu díča rá.	'Is he telling the truth?'.

3.13.   Phrase markers are of several types. Verb and noun (phrase) markers
precede or follow their centers. Those markers that precede verb centers with or

without attributes between them and their center are <u>preverbs</u>. The preverbs are: plural (<u>ka</u>), aspectual (<u>qá</u>, incompletive and <u>nǐ</u>, completive), temporal (<u>sá</u> 'just now', <u>ni</u> 'still', and <u>ča</u> 'a while ago'), restrictive [(ña) <u>tá</u> 'not yet'] negative (<u>ñá</u> 'not'), and hortatory (<u>na</u> 'let's'). The relative order of preverbs is shown in the following array:

Hortatory	Negative	Restrictive	Temporal	Aspectual	Plural
<u>na</u>	<u>ñá</u>	<u>tá</u>	<u>sá</u>	<u>nǐ</u>	<u>ka</u>
			<u>ni</u>		(verb)
			<u>ča</u>	<u>qá</u>	

Not all combinations occur. The permitted sequences of the members are indicated by x in Table 10. Some examples of these arrangements and restrictions follow:

<u>qá</u> (<u>nákị?ị̇</u> <u>rá</u> <u>čị?ị̇</u> <u>čí</u>)	'he is going to come and take it'
<u>ča</u> <u>nǐ</u> (<u>čákuda</u> <u>rá</u>)	'he has already sat down'
<u>qá</u> (<u>kée</u> <u>ñǐ</u> <u>yútáá</u>)	'they will get out tomorrow'
(<u>taa</u>) <u>nǐ</u> (<u>iyō</u> <u>rá</u> <u>yútáá</u>)	'and he will be here tomorrow'
<u>sá</u> (<u>kǐči</u> <u>yú?ú</u>)	'I just got here'
<u>ča</u> (<u>qá?ạ́</u> <u>rá</u>)	'he left a while ago'
<u>ni</u> <u>qá</u> (<u>sáwa?á</u> <u>rá</u> <u>čị?ị̇</u> <u>čí</u>)	'he still had to make it'
<u>ñá</u> <u>tá</u> (<u>kụ́?ụ́</u> <u>rá</u>)	'he has not gone yet'
<u>ñá</u> (<u>čãči</u> <u>rá</u> <u>šítá</u>)	'he will not eat'
<u>na</u> (<u>kǐči</u> <u>rá</u> <u>witị</u>)	'have him come right now'.

Table 10. Permitted Sequences of Preverbs.

na	ñá	sá	ni	ča	qá	ní	ka
x							x
x	x						
x	x						x
x	x				x		
x	x				x		x
x					x		
x					x		x
	x						x
	x	x					
	x	x					x
	x		x				
	x		x				x
	x			x			
	x			x			x
	x				x		
	x				x		x
	x					x	
	x					x	x
	x	x				x	
	x	x				x	x
	x		x			x	
	x		x			x	x
	x			x		x	
	x			x		x	x
	x	x			x		
	x	x			x		x
	x		x		x		
	x		x		x		x
	x			x	x		
	x			x	x		x
		x					x
		x			x		
		x			x		x
		x				x	
		x				x	x
			x				x
			x		x		
			x		x		x
			x			x	
			x			x	x
				x			x
				x	x		
				x	x		x
				x		x	
				x		x	x
					x		x
						x	x

čị?ị marks object phrases and adverb phrases. Preceding a noun it marks an
adverb phrase and preceding a pronoun it marks either an adverb phrase or an object
phrase depending on its syntactical distribution (§4.32), e.g.

šiko čị?ị rị šaa	'sell it (an animal), friend'
kú?wá šụ?ụ čị?ị sútú kụ	'give the money to your father'
šiko čị?ị rị čị?ị yú?ú šaa	'sell it (an animal) to me, friend'.

čị?ị also connects two nouns in an additive phrase, and is a predicator in one
type of equational clause (§4.33), e.g.

sí?í rá čị?ị sútú rá	'his mother and father'
sé?é rá čị?ị ña	'she is his child'.

dáá marks adverb expressions and precedes noun and adverb centers, e.g.

dáá we?e	'home'
dáá tẹbū	'in time'
dáá nuni	'until later'.

The two remaining phrase markers, (ni, restrictive and ká, additive), follow
either a verb or a numeral, but only ni follows nouns, pronouns, and interjections,
e.g.

siki ni wē	'the baby is just playing'
data ká rá wítú	'he is splitting a board more'
kú?wá úwí ni	'give (me) just two'
kú?wá úwí ká čí	'give me two more of them'
šiko úwí tītā ni	'sell me just two bananas'
yú?ú ni	'just me'
awi ni	'yes, indeed'.

3.2. Verbs. Words which are not preverbs (defined in the preceding section)
and which may follow ñá, negation, are verbs:

ñá kú?ú rá	'he will not go'
ñá šíko rá čị?ị rị	'he will not sell it (animal)'
ñá dúwa?a ña	'she is not getting well'
ñá kuu kači kụ	'thou canst not eat'
ñá sášinī kụ	'do not worry'
ñá kútu?wá ñí gati	'the children do not learn'

| ñá kuu rá ráí | 'he is not a man' |
| ñá šáá̧ ká ᐧri | 'it (animal) is not dangerous any more'. |

Verbs are equational (following a noun complement), active [following qá (incompletive)], and stative (all others).

3.21.   The <u>equational verb</u> stands in construction with two nouns, or with a noun and a pronoun, that agree in gender (see §4.3). Examples of the single equational verb showing gender agreement between complement and subject are:

ráí kuu rá	'he is a man'
ña̧ʔa̧ kuu ña	'she is a woman'
īnā kuu ri	'it is a dog'
saʔwa kuu ru̧	'it's a toad'
čítóʔyo kuu ya	'it is an image'
yúú kuu čí	'it is a stone'
káwá kuu číká	'that is a boulder'
ñíwí kuu yoʔō	'thou art people'
ráí kuu yúʔú	'I am a man'.

It co-occurs with all preverbs except <u>ka</u> (plural), e.g.

na kuu rá ráí	'let him be a man'
ñá kuu rá ráí	'he is not a man'
ča kuu rá ráí	'he is already a man'
ni kuu rá ráí	'he is still a man'
qá kuu rá ráí	'he will be a man'.

3.22.   Any of the remaining verbs that can follow qá, incompletive aspect, is an <u>active verb</u>:

qá kuu	'it will be possible'
qá dušáá̧ rá	'he will become angry'
qá síki ñí	'they will play'
qá sáduwáʔá rá	'he will make (them) well'.

On the basis of syntactic distribution active verbs fall into two classes: <u>main verbs</u>, which are the center of verb phrases, and <u>auxiliary</u> verbs, which precede and modify main verbs. In the following two examples <u>kuu</u> and <u>kéčáʔa</u> are auxiliary verbs, and <u>kiči</u> and <u>katí</u> are main verbs:

| ñá kuu kiči ᐧdí yútá̧á̧ | 'we (excl.) cannot come tomorrow' |

ta kečá?a katĺ rá   'and he started to say'.

Furthermore, main verbs are intransitive or transitive. Although most main verbs
are indifferent to formally marked differences of transitivity, their transitivity is
shown in patterns for building larger grammatical forms. That is, an intransitive
verb never occurs with an object; a transitive verb may occur with or without one, e.g.

Intransitive Verbs

gá̧?á̧ rá	'he is going'
duwá?á rá	'he is getting well'
kutu?wá rá	'he is learning'
činu rá	'he is running'
či?ĺ rá	'he is dying'
kišĺ rá	'he is sleeping'
kaša rá	'he is sneezing', and

Transitive Verbs

ča?á rá šų̧?ų̧	'he is giving the money'
kani̧?i̧ rá duta	'he carries water'
čači rá šítá	'he is eating a tortilla'
data rá dūkū	'he is splitting the firewood'
či?ĺ rá dúšĺ ñuñu	'he is eating wild honey'
ča?ni rá či̧?i̧ ñí	'he killed them'
siki dí pelotā	'we (excl.) are playing with the ball'
sáwa?a rá mesā	'he made the table'
sakutĺ ña či̧?i̧ wē	'she is bathing the child'.

In addition, two relatively small subclasses of verbs must be distinguished. Mod-
ifying verbs follow and modify a main verb; subjectless verbs occur without a subject.

Some modifying verbs are dua 'sitting', nuna 'opening', de?ē 'seeing', naa
'holding', and kateni 'joking' in the following examples:

na kákí daa ma̧ĺ či̧?i̧ čí	'let me put it down in an upright position'
nakoo nuna rá pilā	'he left the water tank open'
kišĺ de?ē ri kunešü	'rabbits sleep with their eyes open'
ida naa̧ ru̧	'it leans'
katĺ kateni ma̧ĺ	'I said jokingly'.

Two subjectless verbs are <u>qaa</u> 'darkening' and <u>t̯áa̯</u> 'trembling', e.g.

<table>
<tr><td>č̯a quaa</td><td>'it's dark'</td></tr>
<tr><td>č̯a t̯áa̯</td><td>'it was an earthquake'.</td></tr>
</table>

All active verbs may be preceded by any preverb and in any combination shown in Table 10.

3.23.   All of the remaining verbs are <u>stative</u>, e.g.

<table>
<tr><td>š̯áa̯ r̯i</td><td>'it is dangerous'</td></tr>
<tr><td>na?nu r̯á qati su?wa</td><td>'the boys are sort of big'</td></tr>
<tr><td>qaā̯ č̯í</td><td>'it is yellow'</td></tr>
<tr><td>kani š̯áa̯ ñ̄ū̯ū̯</td><td>'town is very far'</td></tr>
<tr><td>n̯í?í̯ š̯áa̯ r̯á tó?ó</td><td>'the stranger is very strong'</td></tr>
<tr><td>d̯ík̯í ma̯ǐ su?wa</td><td>'I am a little short'</td></tr>
<tr><td>nani š̯áa̯ yutu̯</td><td>'the poles are very long'</td></tr>
<tr><td>s̯íí š̯áa̯ ini r̯á</td><td>'he is really happy'.</td></tr>
</table>

All stative verbs occur as the head of a predication (as shown above) and also, as modifiers, preceding an active verb or following a noun:

<table>
<tr><td>wá?á s̯ík̯í wē</td><td>'the baby played well'</td></tr>
<tr><td>d̯ič̯a ká̯?á̯ ñ̯í</td><td>'they spoke truthfully'</td></tr>
<tr><td>ña?a d̯ič̯a</td><td>'truthful woman'</td></tr>
<tr><td>we?e qaā̯</td><td>'yellow house'.</td></tr>
</table>

They fall into three subclasses on the basis of further privileges of occurrence. A stative verb of the first subclass (SV_1) has the additional characteristic of following a noun that is already followed by a modifying stative verb:

<table>
<tr><td>yač̯i̯ qaā̯ lu?u</td><td>'little yellow gourd cup'</td></tr>
<tr><td>ña̯?a wá?á d̯ič̯a</td><td>'good truthful woman'.</td></tr>
</table>

A stative verb of the second subclass (SV_2) may either precede or follow an active verb which it modifies:

<table>
<tr><td>qa̯?a̯ yát̯í</td><td>'go quickly'.</td></tr>
</table>

š̯áa̯, the sole member of the third subclass (SV_3), also modifies and follows both stative and active verbs:

<table>
<tr><td>yu?wǐ š̯áa̯ ña</td><td>'she's really afraid'</td></tr>
<tr><td>č̯ínu š̯áa̯ r̯i</td><td>'it (animal) really ran'</td></tr>
</table>

<div style="text-align:center">duta šáá̲   'fierce drink' (i.e. aguardiente).</div>

As centers of predications all stative verbs co-occur with preverbs ña (negative) or ni 'still' only:

ñá asī čí   'the meat isn't tasty'

ni lu?u wē   'the baby is still little'.

3.3. Nouns. Words which are not verbs or markers and which can precede ka, distal demonstrative pronoun, Ya, proximal demonstrative pronoun, or follow ta, vocative marker, are nouns.

Every noun belongs to one of five genders:

masculine: ráí 'man',   to?o 'town father',

            sútú ñūu̲ 'political leader of town',

            tasī 'witch',   sáwí 'rain';

feminine: ña?a̲ 'woman',   čīsī 'aunt',

            ma ča?nu 'lady';

sacred: čító?yó 'saint',   dósó yá?á 'comet'

            sútú doō 'our father god';

animal: kiti 'horse',   lii 'insect',

            yóó 'moon';

inanimate: yúú 'rock',   sa?ma 'cloth',

            yutu̲ 'tree',   we?e 'house',

            támá 'famine'.

In the telling of folk tales sometimes certain characters change gender, e.g. kunešū 'rabbit' becomes masculine, but kóó 'snake' remains animal.

Although the gender of a noun is not marked within the word itself, it comes into play in agreement between noun and verb phrase and in substitution of pronouns. Details of agreement are found in §4.3.

Furthermore, nouns fall into various classes relative to possession. Nouns which are obligatorily possessed are dependent nouns. They include certain body parts (nú?ú ku 'your tooth'; díkā ña 'her breast'; só?ó rá 'his ear'; šítí yú?ú 'my nose'), and kinship terms [sáčí yú?ú 'my cousin (any collateral relative of the same or descending generation)'] ; čánū rá 'his female in-law'; sé?é ña ('her child').

Of those nouns which are not obligatorily possessed, and thus independent, some

are never possessed. These are <u>unpossessable</u> <u>nouns</u>. They include personal names (p̲aā 'Juan'; <u>lolō</u> 'Cornelio'; <u>šilī</u> 'Giliberto'; <u>šatū</u> 'Fiacro'; <u>sisā</u> 'Narcisa'; <u>loc̆a</u> 'Rosa'; <u>šika</u> 'Francisca'; etc.) names of natural phenomena (<u>dósó yá?á</u> 'comet'; <u>nĭkádi</u> 'sun'; <u>tíñú</u> 'star'; <u>wĭkó</u> 'cloud'; <u>yóó</u> 'moon'), some bodies of water (<u>yútá</u> 'river'; <u>tañu?u</u> 'ocean'; <u>mínĪ</u> 'lake'), and supernatural beings [q̲í?ná (a malevolent spirit); ·<u>doō</u> 'god'; <u>sáwí</u> 'rain god'].

All other nouns, which are sometimes possessed and sometimes not, are <u>possess-able</u> <u>nouns</u>. This group of nouns is the largest of the three. It includes: <u>yo?o</u> 'rope', <u>šú̲?ú̲</u> 'money', <u>s̲í?ǐ̲</u> 'hip, forked stick', <u>yūtǏ</u> 'bottle', <u>kĬnĪ</u> 'pig', and <u>sa?ma</u> 'clothes'.

In a third significant cross-cutting classification nouns fall into three classes. Those which follow the interrogative vocative marker tá are <u>vocative</u>, e.g. liā 'little one', <u>šáá</u> 'friend', <u>taní̲í̲</u> 'friend', <u>má̲?á̲</u> 'madam', <u>tatā</u> 'sir', and <u>yayā</u> 'mother'. Vocative nouns differ from all other nouns by virtue of their distinctive tone patterns. Successive calls by name not embedded in discourse have the following tones:

> lípā 'Felipa!' (1st call)
>
> lipá 'Felipa!' (2nd call)
>
> lípa 'Felipa!' (3rd call).

In discourse all vocative forms have the pattern (L)HH, e.g. <u>patró̲ó̲</u> 'boss!', <u>hoséé</u> 'Joseph!', <u>šáá</u> 'friend!'. Some vocative nouns also occur elsewhere; they are <u>proper</u>, e.g. <u>šilī</u> 'Giliberto', <u>luhū</u> 'Adolfo', <u>šikā</u> 'Francisca', and <u>sáwí</u> 'rain'. All other nouns not vocative or proper are <u>common</u>, e.g. <u>yúú</u> 'rock', <u>c̆átá</u> 'back', and <u>yútá</u> 'river'.

Common nouns, furthermore, fall into four subclasses: <u>locative</u> <u>nouns</u>, <u>descrip-tive</u> <u>nouns</u>, <u>modifying</u> <u>nouns</u>, and those that are indifferent to location, description, and modification.

First, nouns which both follow dáá, adverb phrase marker, and have the same privileges of occurrence as tika 'over there' are <u>locative</u>: e.g. <u>we?e</u> 'house', <u>c̆ĭkí</u> 'cornfield', <u>ñűű</u> 'town', <u>tañu?u</u> 'ocean', <u>wiko</u> 'fiesta', <u>tuñí̲í̲</u> 'lagoon', <u>iti</u> 'road', <u>c̆átá</u> 'back', <u>tǐc̆í</u> 'stomach', and <u>šǐní</u> 'head'.

Second, certain nouns (including some locative nouns) follow a noun center in a noun phrase and are attributive to it. They are <u>descriptive</u> <u>nouns</u>:

<u>c̆atū ñi̲i̲</u>	'rubber pants' (lit. 'pants rubber')
<u>yo?o káā</u>	'wire' (lit. 'vine metal')
<u>sa?ma šúú</u>	'diapers' (lit. 'cloth genitalia')
<u>we?e káā</u>	'jail' (lit. 'house metal')

sa?ma da?a	'tortilla cloth' (lit. 'cloth hand')
ītā niñū	'picture' (lit. 'flower child')
dūsū ñų̄?ų̄	'supernatural sound' (lit. 'sound fire')
dósó yá?á	'meteorite'
itī ñūū	'road to town' (lit. 'road town')
duta nų́ų́	'tear' (lit. 'water face')
yutī paā	'flour' (lit. 'powder bread')
itī šíní	'above' (lit. 'road head')
čátá we?e	'behind the house' (lit. 'back house').

Finally, certain nouns modify verbs in verb expressions in the same way in which a verb, either stative or active, modifies another active verb. Such nouns are modifying, e.g. čátá 'back', dītī 'string beans', qedā 'account', wátí 'shade', and tiñi 'fingernail':

čika čátá rī	'it (animal) walks on its back'
qídá dītī mau	'you were standing on tiptoes'
kumi qedā rá čí	'he is taking care of it'
daā wátí yú?ú su?wa	'I'm sitting in the shade a little'
šíki tiñi rá čį?į ku	'he pinched you'.

3.4. Pronouns. Words that substitute for nouns are pronouns. They are of two subtypes; personal and demonstrative. Personal pronouns are distinguished according to person (first and second), number (singular and plural), inclusion (inclusive and exclusive), and degree of familiarity (polite and familiar). Polite personal pronouns show person and number, as familiar personal pronouns do, but, in addition, show inclusion or exclusion in the plural first person (c.f. Table 11).

Table 11. Polite Personal Pronouns

Person \ Number	Singular	Plural	
		Inclusive	Exclusive
1	yú?ú	yoo	dú?ú
2	yo?ō	do?ō	

The familiar pronouns do not show inclusion and are:

	Singular	Plural
First Person	$\underline{\acute{\text{i}}}$	$\underline{\text{dí}}$
Second Person	$\underline{\text{ku}}$	$\underline{\text{do}}$.

Demonstrative pronouns are proximal, distal, or indifferent to distance, and belong to one of the genders shown in Table 12. Both the neutral demonstrative pro-

Table 12.   <u>Demonstrative Pronouns</u>.

Distance / Gender					Indifferent to Distance	Proximal	Distal
3	General	Animate	Human	Collective	<u>ñí</u>	<u>ñíYá</u>	<u>ñíká</u>
			Specific M		<u>rá</u>	<u>ráYá</u>	<u>ráká</u>
			Specific F		<u>ña</u>	<u>ñaYa</u>	<u>ñaka</u>
			Supernatural		<u>yá</u>	----	----
			Animal		<u>ri</u>	<u>riYa</u>	<u>rika</u>
		Inanimate			<u>čí</u>	<u>číYá</u>	<u>číká</u>
	Special	Diminutive			<u>wē</u>	<u>weȲa</u>	<u>wekā</u>
		Common			<u>ru</u>	<u>ruYa</u>	<u>ruka</u>
	Neutral				----	<u>Ya</u>	<u>ka</u>

nouns and those that are indifferent to distance terminate noun phrases with or without attributes between them and the center, e.g.

sa?ma <u>rá</u>	'his clothes'
sa?ma lu?u <u>rá</u>	'his little clothes'
sé?é <u>ñí</u>	'their child'
sé?é kíí <u>ñí</u>	'their adopted child'
sa?ma <u>Ya</u>	'this cloth'
sa?ma da?a <u>Ya</u>	'this cloth for tortillas'
sa?ma ka?nu <u>Ya</u>	'this big cloth'
we?e <u>ka</u>	'that house'
we?e ñú?ú <u>ka</u>	'that church'

we?e kutā ka	'that round house'.

In addition, those that are indifferent to distance terminate verb phrases with or without attributes occurring between them and the center, e.g.

siki wē	'the baby is playing'
siki šáá wē	'the baby is playing a lot'.

The other demonstrative pronouns (proximal and distal) never terminate noun or verb phrases but occur as clause constituents, e.g.

qá?á ñíká iku	'those people went yesterday'.

3.5. <u>Numerals</u>. Of the remaining words (not markers, verbs, or nouns), those that occur as attributes preceding a noun are <u>numerals</u>. Numerals that precede ká (additive marker) are <u>specific numerals</u>, and those that do not are <u>general numerals</u>. Specific numerals fall into two more subclasses: <u>unit numerals</u> and <u>group numerals</u>. Group numerals occur only as centers of numeral phrases; unit numerals occur as either center or attribute. When unit numerals precede the center, they are cardinal:

úwí kíwí	'two days'
účí káā	'ten cans'
účá tañu?u	'seven seas'.

When they follow the center, they are ordinal:

kíwí úwí	'the second day (Tuesday)'
káā účí	'the tenth hour (ten o'clock)'
tañu?u účá	'the seventh sea'.

The general numerals are <u>duwí</u> 'both', <u>ñáwí</u> 'none', <u>tuku</u> 'other', and <u>maa</u> 'this'. The group numerals are <u>šiko</u> 'twenty', <u>sedū</u> 'hundred', and <u>mill</u> 'thousand'. The unit numerals are <u>ii</u> 'one', <u>úwí</u> 'two', <u>úní</u> 'three', <u>kúmí</u> 'four', <u>ú?ú</u> 'five', <u>íñú</u> 'six', <u>účá</u> 'seven', <u>úná</u> 'eight', <u>íí</u> 'nine', <u>účí</u> 'ten', <u>čá?ú</u> 'fifteen', <u>ókó</u> 'twenty', and <u>ígá</u> 'another', <u>qá?á</u> 'a lot', <u>túwí</u> 'a lot (people)', <u>ñá?ní</u> 'none', <u>su?wa</u> 'a few', and <u>di?í</u> 'all'.

3.6. <u>Adverbs</u>. Of the words not already classed, any word that can follow dáá is an <u>adverb</u>, e.g.

dáá dáká	'over there'
dáá nùnì	'until later'.

Adverbs, in addition, include any single word substitute for a dáá phrase. Such substitutes are manner (immediately following a noun object, if present), e.g. <u>taka</u> 'thus, in that way', <u>te?e</u> 'in this way'; locative (following a manner adverb, if present), e.g. <u>dáká</u> 'there'; and temporal (following a locative adverb or locative noun phrase, if present), e.g. <u>kuni</u> 'last night', <u>isā</u> 'day after tomorrow', <u>ší?ná</u> 'first'.

3.7. <u>Modifiers</u>. Of the remaining words, any word that immediately follows a verb and modifies it is a <u>modifier</u>. Examples of this small class of modifiers (<u>diko</u> 'return', and <u>kuu</u> 'around') are:

<table>
<tr><td>qą́ʔą́ <u>diko</u> rá</td><td>'he went back'</td></tr>
<tr><td>čika <u>kuu</u> ñí</td><td>'they walked around'.</td></tr>
</table>

3.8. <u>Interjections</u>. All remaining words are <u>interjections</u>. These include responses to statements (<u>awi</u> 'yes'), the hesitation form (<u>ika</u>), and pure interjections (<u>áwālō</u>, <u>híʔná</u>, <u>hui</u>).

4. GRAMMATICAL PATTERNS

The words of JM described in Chapter 3 group together in certain specifiable ways to constitute forms of larger size-levels. Such composite grammatical forms reflect the patterns--constructions or rules--by which they are built.

Since a construction is a pattern for building composite forms of a specific form-class out of ICs belonging to specific form-classes, any description of a construction must include a statement of the form-class membership of the forms involved. Perhaps the simplest, most concise, and most straightforward way to make such a statement is by formula. Once the arrangement of the constituents relative to each other has been made clear, there only remains the necessary statements giving the class membership of the constituents and of the resultant constitutes. The procedure adopted here is to describe a construction in terms of the ordering of the constituents, and to indicate the class membership of the constituents and of the resulting constitute, by a formulaic notation. For example, the preposed attribute construction, Nu N → NP, is read: an attributive numeral followed by a noun constitutes a noun phrase which has much the same privileges of occurrence as does the noun alone.

Constructions in JM are of two major types: endocentric (those in which the nucleus has the same privileges of occurrence as the constitute built by the construction) and exocentric (those which are not endocentric).

Endocentric constructions which involve a satellite are subordinate; those with no satellite are coordinate. In subordinate endocentric constructions the satellite is either preposed or postposed. Postposed subordinate constructions allow a certain amount of nesting since the constitute built by such a construction can, in turn, be the nuclear constituent of a constitute built by the same construction. In contrast, preposed subordinate constructions do not nest. The several subtypes of coordinate endocentric constructions are additive (built with or without taa and či?i), alternative {built with correlative [(a...)a]}, and appositive.

Exocentric constructions are directive (conjunctive or objective), connective, and predicative. A directive construction builds a phrase or clause which has as its constituents a director and an axis. A connective construction builds a clause which has as its constituents a connector and a complement. A predicative construction builds a clause which has as its constituents a comment and a topic.

4.1. Words and Word Patterns. Although the definition and distribution of words are discussed in Chapter 3, the patterns for constructing them are not. Morphemically complex nouns, verbs, and demonstrative pronouns are built by several

different patterns peculiar to their classes. Such details of word formation are, of course, derivational.

Although most nouns in JM are morphemically simple, some are derived. Derived nouns (N) are built by two patterns:

Precenter	Center		Type
NPx	N'	→	N
NPx	V'	→	N .

The precenter of such a noun is one of the following noun prefixes (NPx): tí- (animal marker), di- (nominalizer), tu- (tree marker), and ñá- (agentive), and their center is one of a small class of nouns (N') or verbs (V'):

> tí su?ma (N') 'tail' → tísú?ma 'scorpion'
>
> tí qa?ā (V') 'red' → tíqa?ā 'chigger'.

Each of these derivational prefixes is restrictive.

Most verbs in JM are morphemically simple also, but those that are derived are built by the patterns:

Precenter	Center		Type
VPx	SV	→	AV
VPx	AV'	→	AV .

The precenter is one of the following verb prefixes (VPx): du- 'become', ku- 'become', ka-, ni- and čá- (active stem formatives), na- (iterative), ku- (detransitive), and sa- (causative), and the center is any stative verb (SV) or one of a small class of active verbs (AV'):

> du wá?á 'good' (SV) → duwá?á 'get well'
>
> ni qe?e 'sick' (SV) → niqe?e 'get cut'
>
> čá duta 'water' (SV) → čádúta 'was baptized'
>
> na duku 'look' (AV') → naduku 'looked around'
>
> ku nú?ní 'tie' (AV') → kunú?ní 'be tied'
>
> sa kunu 'run' (AV') → sakunu 'chase'
>
> sa duwá?á 'get well' (AV') → saduwá?á 'make well'.

du-, ku- ('become'), ka-, ni-, and čá- occur only with stative verbs; na- and ku- (detransitive) occur only with active verbs; and sa- occurs with both stative and active verbs. In all cases the derived verb is active.

All active verbs (AV) have three stems: incompletive, completive and continua-
tive. They are built by the pattern:

Marker	Center		Type
Aspect	AV Stem	→	AV .

The marker is one of the aspect marking initial consonants (§2.2) and/or one of the
aspect marking tone patterns (§2.3) and the center is any active verb stem:

c̆,	HL	datu	→	c̆átu	'waited'
k̲,	HH	c̆ani	→	kắnı́	'will demolish'
	LM	dasi	→	dası̄	'close'.

All active verbs have an imperative that is derived from the incompletive stem
by the pattern:

Marker	Center		Type
Tone Pattern	Incompletive Stem	→	Imperative Verb, e.g.
LL	kúnú	→	kunu 'run'
LL	kátu	→	katu 'pat'.

The marker is LL, LM, or HH, and the center is any incompletive verb stem.

In addition, some active verbs have an intransitive stem derived from the transi-
tive one by the pattern:

Tone Pattern	Transitive Stem			Intransitive Stem, e.g.
HH	tűc̆i 'shot (somebody)'	→		tűc̆ı́ 'was shot'.

While most stative verbs (SV) are ambiguous as to number, some (SV') have two
stems: singular and plural. The pattern by which these are built is:

Precenter	Center		Type
Initial Consonant	SV'	→	SV.

The precenter is the initial consonant n- followed by one of a very limited class of
stative verbs (SV'):

n-	kani	→	nani 'long'
n-	ka?nu	→	na?nu 'big'
n-	lu?u	→	qati 'little'.

Finally, certain stative verbs (SV) are derived from nouns (N'). Such verbs are
built by the patterns:

Marker	Center		Type
Tone Pattern	N'	→	SV.

The marker is the derivational tone pattern and the center is one of the class of nouns that can be a base for derivation:

LM   ráí 'man' → raí 'manly'

LL   túú 'charcoal' → tuu 'black'

HH   dū?wā 'plain' → dú?wá 'flat'.

Proximal and distal demonstrative pronouns (DmPr) are built by the pattern:

Center	Postcenter		Type
IPr	NPr	→	DmPr .

The center is any one of the pronouns indifferent to distance (IPr) and the postcenter is one of the neutral pronouns (NPr):

ñí   Yá → ñíYá 'these here'

rá   ka → ráká 'that fellow'.

4.2. __Phrases__ and __Phrase__ __Patterns__.   A phrase is a constituent of a clause. As such, a phrase may be as small as a single word or as large as a whole clause. There-fore, a phrase contains as a minimum a center; it may also include attributes which, in JM, are either preposed or postposed. Both preposed and postposed attributes may occur in several positions (first, second, and even third in some cases). Furthermore, some phrases are initiated by a specifier (ii 'one'), but a number of phrases are terminated by either a neutral demonstrative (noun phrases only) or a pronoun indif-ferent to distance (both noun and verb phrases). A phrase that is terminated by one of these pronouns is a closed phrase. One which is not terminated by any of them is an open phrase. From this point of view active verb phrases are usually closed, noun phrases are frequently closed, stative verb and numeral phrases less frequently, and adverb phrases never. In summary, the elements in a phrase and their arrangement are: Initiator, Preposed-Attributes, Center, Postposed-Attributes, and Terminator.

The following classification of phrases is based on the class membership of the head (these phrases are all centered) and the particular arrangement and kind of attributes surrounding the center.

4.21.   A verb phrase always has a verb center. It may, in addition, have various pre- and postposed attributes depending on its type.

Three post posed modifiers used in verb phrases regardless of their centers are **R** 'intensive', ni 'restrictive', and ka 'comparative'. Verb phrases followed by these modifiers are built by the patterns:

Center	Postcenter		Type
V	R		VP
V	ni	ka	VP

Examples, of verb phrases with the restrictive and comparative modifiers are:

su?wa ni	'just a little'
qá?á̤ ni	'just went', and
kii ka	'faster'
šíta ka	'will pull more'.
su?wa ni ka	'just a little more'
šíta ni ka	'will pull just a little more'.

Another kind of general verb phrase has as center any open verb phrase and as postcenter any demonstrative pronoun (DPr') not marked for distance. Such a verb phrase is closed (CdVP) and is built by the pattern:

Center	Postcenter		Type
OpVP	DPr'	→	CdVP
lu?u rá	'he is little'		
qá?á̤ rá	'he went'.		

A <u>stative verb phrase</u> contains a center, and one postposed attribute; the phrase may or may not be closed depending on its function in the clause and is an attribute of a noun or verb phrase, or head of a stative verb clause (c.f. §4.34). In the stative verb phrase the center is a stative verb (SV) and the single postposed attribute is also a stative verb. The pattern by which it is built is:

Center	Postcenter		Type
SV	šá̤á̤	→	SVP, e.g.
kii šá̤á̤ (rá)	'(he) is very fast'		
qaā̤ šá̤á̤ (čí)	'(it) is very yellow'		
kani šá̤á̤	'very far'.		

An <u>active verb phrase</u> (AVP), the second and most complex of the verb phrases, contains an active verb (AV) in the center and is usually closed. In addition, it may contain as precenter an open stative verb phrase (SVP); and preverb or the configuration of preverbs shown in Table 10 (PreV), an auxiliary verb (AxV); in addition to the active verb it may contain as center any member of SV_3 or a modifying noun (ModN) or verb (ModV); and it may contain any modifier (Mod), and the group numeral <u>tuku</u> as postcenter followed by a demonstrative pronoun (Pro) as closer. The active verb phrase is head of an active verb clause or the modifier of a noun expression.

When not specified it is built by the pattern:

Precenters		Center			Postcenters			Type
SVP	PreV	[AxV	(AV	$SV_3 \lor ModN \lor ModV$)	SV_1	Mod <u>tuku</u>]	Pro. →	AVP.

Examples are:

qá?á rá	'he is going'
kii šáá qá?á rá	'he is going very fast'
kii šáá na kú?ú rá	'let him go real fast'
kii šáá ni qá?á rá	'he has gone very fast'
kii kii qá kú?ú rá	'he will go away very fast'
kii kii qá kuu kú?ú rá	'he will be able to go very fast'
naduku šíní šáá rá	'he is trying to figure it out'
kaki tá?nú či	'lay it folded'
ča?a wá?á šáá rá qedā	'he explained it real well'
ka?a mání diko ña	'she is talking nice again'
qá kíči sii diko tuku rá	'he will come back again'.

A specified verb phrase is built by the pattern represented by the following:

Precenter	Center		Type
ii	AVP	→	SpVP .

The precenter is ii 'one' and the center is any active verb phrase (AVP):

ii qá?á ni	'a going'
ii tidúkú ní kú šíní ku	'a stiffening of your head'.

4.22. Numeral Phrases fall into two classes: specific and general. Specific numeral phrases (SpNuP) may contain the specifier ii as precenter, any specific numeral (SpNuP) as center, and the verb phrase yóso sawa and ni 'restrictive' and ka 'comparative' as postcenter. Only the center is obligatory. Illustrations of these are:

ii úwí	'some two'
kúmí šiko	'eighty' (lit. 'four twenty')
úwí sedū yóso sawa	'two hundred and fifty' (lit. 'two hundred on-top-of-half')
úwí ni	'just two'
úwí ni ca	'just two more'.

The pattern represented by these examples is:

Precenter	Center	Postcenter		Type
ii	SpNuP	yóso sawa ni ka	→	SpNuP .

Specific numeral phrases fall into four smaller classes. An <u>attributive numeral phrase</u> (AtNuP) contains a unit numeral (UNu) as precenter and any group numeral (GrNu) as center, e.g.

ii tu̯ʔu̯	'only one'
úwí šiko	'forty' (lit. 'two twenty')
ụ́ʔụ́ sedū	'five hundred'
čá̯ʔú̯ miĩl	'fifteen thousand'.

The pattern is:

Precenter	Center		Type
UNu	GrNu	→	AtNuP .

An <u>additive numeral phrase</u> (AddNuP) contains two unit numerals (UNu) or group numeral phrases (GrNuP) in sequence as coordinate centers that may be followed by another additive numeral phrase, e.g.

ũčí kúmí	'fourteen' (lit. 'ten four')
čá̯ʔú̯ úní	'eighteen' (lit. 'fifteen three')
ókó ũčí kúmí	'thirty four' (lit. 'twenty ten four')
kúmí miĩl úní šiko čá̯ʔú̯ úwí	'four thousand seventy-seven' (lit. 'four thousand three twenty fifteen two').

The patterns are:

Centers		Postcenter		Type
UNu	UNuP	AddNuP	→	AddNuP
GrNuP	GrNuP	AddNuP	→	AddNuP.

An <u>alternative numeral phrase</u> (AlNuP) contains any two successive specific numerals (SpNuP) as coordinate centers which may or may not be linked by <u>a</u> 'or', e.g.

úwí úní	'two or three' (lit. 'two three')
ókó ókó ii	'twenty or twenty-one' (lit. 'twenty twenty-one')
úwí a úní	'two or three'
ókó a ókó ii	'twenty or twenty-one'
a úwí a úní	'two or three'
a ókó a ókó iin	'twenty or twenty-one'.

The pattern is:

Center	Center	Type

(a̠)   SpNuP$_a$ (a̠)   SpNuP$_b$ →   AlNuP.

(a and b indicate two consecutive numeral phrases, e.g. one two or twenty-one twenty-two.)

A distributive numeral phrase (DisNuP) contains two coordinate unit numerals (UNuP$_i$) as centers, the second of which is a chameleon morpheme whose shape is identical to the one that precedes it, e.g.

ii ii	'each one' (lit. 'one one')
ũčí úwí ũčí úwí	'twelve each' (lit. 'ten two ten two').

The pattern is:

Center	Center		Type
UNuP$_i$	UNuP$_i$	→	DisNuP.

(See also the chameleon in §4.21.)

General numeral phrases (GNuP) contain a general numeral (GNu) as center and the stative verbs šáá or qiī, as postcenter. Only the center is obligatory, e.g.

qá?á šáá	'quite a lot'
di?i qiī	'everything'.

The pattern is:

Center	Postcenter		Type
GNu	šáá∨qiī	→	GNuP.

All numeral phrases occur as preposed attributes to nouns, but only unit numeral phrases occur as postposed attributes to them.

4.23.   A noun phrase contains any noun as center. In an attributive noun phrase (AtNP) the center may be preceded by any numeral phrase (NuP) and followed by one to three postposed attributes. The attribute immediately following the center is a descriptive noun (DN), a unit numeral phrase (UNuP), an active verb phrase, a stative verb phrase (VP), or ni 'restrictive'. Members of a small subclass of stative verbs (SV$_2$) may follow a noun phrase consisting of a noun followed by any other stative verb. Pronouns (Pr) may follow, closing the noun phrase. Only the center is obligatory. Examples are:

ii ñíwí	'one person'
úná ta?a ñíwí	'eight people'
ii úná ta?a ka ñíwí	'some eight more people'
túwí šáá ñíwí	'lots of people'
di?i qiī ñíwí	'all the people'

yo?o káā	'wire' (lit. 'vine metal')
tañu?u ūčá	'the seventh sea'
káā kúmí	'four o'clock' (lit. 'bell four')
ráí kúmi tiñu	'town officials' (lit. 'man care-for business')
ráí kuu šíní	'boss' (lit. 'man is head')
ráí činī	'the drunk' (lit. 'man drink')
yačį qaā	'yellow gourd cup'
yačį lu?u	'little gourd cup'
yačį qaā lu?u	'little yellow gourd cup'
ii úwí ta?a ni ka yačį qaā lu?u ka	'some two more of those little yellow gourd cups'
qá?á šáá yo?o káā qiñi ñí	'a whole lot of their thin wire'.

The pattern by which these phrases are built is:

Precenter	Center	Postcenter(s)	Type
NuP	N	DN∨VP∨UNuP ni Pr → AtNP.

A _locative noun phrase_ (LNP) has a locative noun (LN) for its center and any noun phrase, stative verb phrase (SVP), or basic order independent clause without a conjunction (IC1) (c.f. §4.35) for its postposed attribute, e.g.

síkí yuku	'the top of the mountain'
tíčí we?e	'inside the house'
núú ké?ni awiyoǫ	'where the airplane lands' (lit. 'face fall airplane')
iti ka?nu	'main trail' (lit. 'trail big').

These examples are built by the pattern:

Center	Postcenter(s)	Type
LN	N∨SVP∨IC1 Pr →	LNP.

Locative noun phrases modify verb phrases as subject, object, and adverb.

Additive and appositive noun phrases, in contrast to attributive noun phrases, have noun phrases (NP) as coordinate centers. An _additive noun phrase_ (AddNP) has its two centers linked by taa 'and' or či?i 'with', whereas an _appositive noun phrase_ (ApNP) has its two centers in sequence without any linking word, e.g.

i̯i rá daʔwī čḭʔḭ ña sḭʔḭ rá	'a poor man and his wife'
ña sḭʔḭ rá taa i̯i séʔé rá	'his wife and his one child'
īnā sānē	'my pet dog'
šṵ̌ʔṵ́ yáʔwí	'pay' (lit. 'money wage')
čḭkí nṵ́ṵ́ sátíñu rá	'field where he works'.

The patterns are:

Center		Center		Type
NP	taa∨čḭʔḭ	NP	→	AddNP
NP		NP	→	ApNP.

In an additive locative noun phrase, the two locative noun centers are linked only by their sequential arrangement:

nṵ́ṵ́ iyō sútú rá nṵ́ṵ́ iyō sḭʔḭ rá   'where his father is, where his mother is'.

The pattern by which it is built is:

Center	Center		Type
LNP	LNP	→	AddLNP.

In another kind of noun phrase the coordinate centers are distributive (DNP). Both centers are alike (N_i) and are connected by taa 'and':

we̯ʔe taa we̯ʔe   'house to house'.

The pattern is:

Center		Center		Type
N_i	taa	N_i	→	DNP .

An interrogative noun phrase has any attributive noun phrase as center and yoči 'whose', daā 'where', ñáá 'what', or yoo 'who' as precenter:

yoči we̯ʔe	'whose house?'
daā iti	'which path?'
ñáá orā	'what hour?'
yoo ráí	'which man?'.

The pattern for building these phrases is:

Precenter	Center		Type
IntMk'	N	→	IntNP .

Noun phrases modify verb heads as subject and object at the clause level.

4.24. <u>Pronoun Phrases</u> are attributive (AtPrP) and contain a pronoun (Pr) as center and a verb phrase (VP) or noun (N) as postposed attribute in the first two examples; are appositional (ApPrP) and contain a pronoun and noun phrase as centers; or are additive coordinate (AddPrP) and contain two like pronouns (P_i) as centers that are connected by <u>taa</u>: e.g.

<u>rá</u>	<u>luʔu</u>		'little boy'
<u>rá</u>	<u>luwí</u>		'Louis'
<u>yúʔú</u>	<u>rá</u>	<u>daʔwí</u>	'I, a widower'
<u>doʔó</u>	<u>ñí</u>	<u>ñaʔa</u>	'you, the women'
<u>yoʔó</u>	<u>yãní</u>		'thou, brother'
<u>ra</u>	<u>taa</u>	<u>ra</u>	'they (male)'
<u>ñi</u>	<u>taa</u>	<u>ñi</u>	'they'.

These phrases are built by the following patterns:

Center	Center	Postcenter		Type
Pr		N∨VP	→	AtPrP
Pr	NP		→	ApPrP
Pr_i	<u>taa</u>	Pr_i	→	AddPrP.

When pronoun phrases are objects, they are marked by <u>číʔi</u>:

<u>číʔi</u> <u>rá</u> <u>daʔwí</u> <u>ka</u>   'that poor fellow'.

The pattern for building it is:

Precenter	Center		Type
<u>číʔi</u>	PrP	→	ObjPrP.

Pronoun phrases also modify verb heads as subject and object at the clause level.

4.25. <u>Adverb Phrases</u> (AdP) have adverbs as centers or substitute for adverbs. They contain any noun phrase (NP), locative adverb (LAd), or <u>sawa</u> 'half' (GNu') as center and <u>dáá</u> as precenter:

<u>dáá</u>	<u>sawá</u>	'halfway'
<u>dáá</u>	<u>tañuʔu</u>	'up to the ocean'
<u>dáá</u>	<u>weʔe</u>	'to the house'
<u>dáá</u>	<u>tebū</u>	'in time'
<u>dáá</u>	<u>dáká</u>	'over there'.

Patterns for building these forms are:

Precenter	Center		Type
dáá	GÑuʼ	→	AdP
dáá	NP	→	AdP
dáá	LAd	→	AdP.

Appositive locative adverb phrases (ApLAdP) have dual centers without an intervening link. The first center is a locative adverb (LAd) and the second a locative noun phrase (LNP):

        tika čátá weʔe   ʼover there behind the houseʼ.

The pattern by which it is built is:

Center	Center		Type
LAd	LNP	→	ApLAdP.

Temporal adverbial phrases (TAdP) are attributive, substitute for witi ʼnowʼ, and contain temporal adverbs (TAd) as center and a noun phrase (NP) including a numeral phrase as attribute, e.g.

      yútáá úná kíwí   ʼone week from tomorrowʼ (lit. ʼtomorrow eight daysʼ).

The pattern that builds this phrase is:

Center	Postcenter		Type
TAd	NP	→	TAdP.

Additive temporal adverb phrases (AddTAdP) have two centers with an adverb or noun phrase as the first center and an adverb as the second center, and are linked by taa ʼandʼ. The first center is a temporal adverb (TAd) or noun phrase (NP) and the second is a temporal adverb phrase (TAdP):

witi taa duwi yútáá	ʼnow and all day tomorrowʼ
orā witi čí qá qaa ta duwi yútáá	ʼtoday when it gets dark and all day tomorrowʼ.

The pattern for building an additive temporal adverb phrase is:

Center		Center		Type
TAd∨NP	taa	TAdP	→	AddTAdP.

Alternative temporal adverb phrases (AlTAdP) also have two temporal adverb phrases (TAdP) as successive centers linked by a ʼorʼ and, at times preceded by a ʼeitherʼ, e.g.

witi a yútáá	ʼtoday or tomorrowʼ
a witi a yútáá	ʼeither today or tomorrowʼ.

The pattern is:

	Center		Center		Type
(a)	TAdP	a	TAdP	→	AlTAdP.

Manner adverb phrases (MAdP) substitute for taka 'like that' and contain a noun phrase introduced by čị?ị 'with' or qedā 'for', e.g.

(sátíị rá nāmā we?e) čị?ị duta	'(he dampened the wall of the house) with water'
(satiñu rá) qedā rákạ	'(he works) for that man'
(siki rá) čị?ị pelotā	'(he is playing) with the ball'.

The pattern for building these phrases is:

Precenter	Center	Postcenter		Type
čị?ịᵥqedā	NP		→	MAdP.

Adverb expressions modify verb head on the clause level.

4.3. Clauses and Clause Patterns. A clause is a composite grammatical form, larger than a phrase but smaller than a sentence; it is a single predication. In JM a clause consists of a verbal nucleus (head) with or without adjuncts. Clauses differ from one another, primarily, in the kinds of verb phrases which occur as nucleus and in the kinds of adjuncts. Most clauses contain a verb phrase immediately followed by a noun phrase marked by its position as subject. If the nuclear verb phrase is closed, a subject must agree in gender with the pronoun in the verb phrase. If the verb phrase is not closed, the clause must contain a noun phrase as subject, e.g.

wãčí rá	sútú kụ	'he is coming	your father' = 'your father is coming'
wãčí	sútú kụ	'comes	your father' = 'your father is coming'
kana ña	kú?wọ	'she is calling	your sister' = 'your sister is calling'
kana	kú?wọ	(ibid.)
ké?ni ri	kiti	'it fell	the horse' = 'the horse fell'
ké?ni	kiti	'fell	the horse' = 'the horse fell'.

On the basis of the verb phrases contained in them, clauses are classed as intransitive, transitive, equational, or stative; on the basis of the occurrence of a conjunction they are classed as independent or dependent; and on the basis of word order they are classed as basic or emphatic. They are built by several different patterns.

4.31. An intransitive clause (InCl) contains an intransitive verb phrase (InVP) as center. It may, in addition, contain a subject noun phrase (NP) (defined by its position after the verb phrase). Other optional constituents include one of more adverb phrases (AdP) or locative noun phrase (LNP) after the verb phrase and an open stative verb phrase (OpSV) before the intransitive verb phrase. Any of the adverb

phrases (§4.25) can follow the verb center and its noun subject. When more than one adverb phrase occurs in the same clause, the order is manner adverb phrase, locative adverb phrase, and temporal adverb phrase. For example,

wãči rá   'he is coming'

wãčí | maa sútú rá   'comes | his father' = 'his father is coming'

wãčí | sútú rá ' čị?ị karotē rá   'comes | his father | with his stick' = 'his father is coming with his stick'

čị?ị rá | sōkō   'he is dying | of hunger' = 'he is dying of hunger'

wãčí | maa sútú rá | tikạ   'comes | his father | there' = 'his father is coming over there'

wãčí | maa sútú rá | witị   'comes | his father | now' = 'his father is coming now'

wãčí | maa sútú rá | tikạ | witị   'comes | his father | there | now' = 'his father is coming over there now'

kiị šáá ni | wãčí | maa sútú rá   'very fast | comes | his father' = 'his father is coming real fast'.

The pattern for building intransitive clauses is:

Precenter	Center	Postcenter(s)		Type
OpSVP	InVP	NP AdP∨ LNP	→	InCl.

(Here and in the following sections the symbol AdP represents a sequence of as many as three adverb phrases.)

4.32. A <u>transitive clause</u> contains a transitive verb phrase (TrVP) as center. In addition to containing any of the phrases which an intransitive clause may contain, a transitive clause, frequently but not always contains an object noun phrase (NP) (marked by second position after the verb). If the object is a pronoun phrase, it is marked by čị?ị (c.f. §4.24). If it is a clause, it is marked by wátí 'because' (c.f. §4.35). The same conditions of agreement between verb head and subject noun phrase found in intransitive clauses apply to transitive clauses. Examples are:

čá?á nuụ rá   'he loaned (it)'

čá?á nuụ rá | šú?ú   'he loaned | the money'

čá?á nuụ rá | šú?ú | čị?ị sãčị rá   'he loaned | the money | to his nephew'

čá?á nuụ rá | čị?ị čí | čị?ị rá | iku   'he loaned | it | to him | yesterday|

čá?á rá | čị?ị čí ' čị?ị rá | iti   'he gave | it | to him | one the road
   ñoko | iku   to Pinotepa | yesterday'

u̜ʔwi šáá̜ | čáʔá rá | či̜ʔi̜ čí | iku   'very stingily | he gave | it | yesterday'

déʔe rá | wátí tašì̜ kuu   'he saw | that all was quiet'

sáʔá rá | kanaā̜ | či̜ʔu̜   'he caused | win | thee' = 'he beat thee'

ñá sáʔĩ́ | ɋedā̜   'I did not cause | account'
'I didn't realize (it) '.

The pattern for building transitive clauses is:

Precenter	Center	Postcenter(s)	Type
OpSVP	TrVP NP	NP∨VP∨ wátí clause AdP	→ TrCl.

4.33.   An equational clause (EqCl) contains an equational verb phrase (EVP) as link, and a noun phrase (NP) as complement. If it is open, the verb is followed by another noun phrase as subject; if not, then no noun expression is required. A kuu equational clause has the verb kuu as its link that is preceded by a noun phrase as complement. A či̜ʔi̜ equational clause has či̜ʔi̜ as link. Examples are:

ráí | kuu rá   'man | he is' = 'he is a man'

rá čaʔnu | kuu rá | witi̜   'old man | he is | now' =
'he is an old man now'

ii̜ tu̜ʔu̜ čí ídi tíčí saʔma síní   'just one of those things inside of your
ku̜ | kuu | čí kuní yúʔú   pillow | is | what I want'

yáʔwí ri̜ | kuu | číká̜   'its pay | is | that thing' =
'that is its pay'

séʔĩ́ | či̜ʔi̜ rá   'my child | he is' = 'he is my child'

ñíwí rá | či̜ʔi̜ rá   'his relatives | they are' =
'they are his relatives'.

The pattern is:

Prelink	Link	Postlink	Type
NP∨PrP	EVP	NP∨PrP TAdP	→ ECl.

4.34.   A stative clause (SCl) contains a stative verb phrase (SVP) as center and a noun phrase (NP) and temporal adverb phrase (TAdP) as postcenters. In many respects the stative clause is similar to the intransitive clause (§4.31), but it differs in three ways: (1) its head belongs to a different form-class, (2) the only kind of adverb phrase permitted as a postcenter is temporal, and (3) no subject noun phrase, either in the form of a pronoun closer or of a noun expression, is required. In other words, it is an open phrase and, as such, may not have a noun subject. For example,

wáʔá̜   'good'

wáʔá̜ ni̜   'that is good'

kani šáá	'that is real far'
wá?á šáá rá	'he is very fine'
kani šáá | ñūū	'is very far | the town' = 'the town is very far'
kii šáá rá | witi	'he is very fast | now'.

The pattern for building it is:

Center	Postcenter(s)		Type
SVP	NP TAdP	→	SCl.

4.35. Cutting across this classification of clauses is a second classification based on the presence or absence of conjunctions that are also clause-level constituents. Any of the five clause-level conjunctions or six interrogative conjunctions-- either dependent (DpConj) or independent (IConj)--can precede any of the clauses which have been described in §§4.31-4.34. Therefore, clauses (Cl) that stand in construction with one of the independent conjunctions--taa 'and', koto 'lest' or any of the interrogative markers in direct questions--or have no conjunction at all are independent (IC1). And clauses that stand in construction with one of the dependent conjunctions--tu 'if', soko 'but', or wátí 'because' or any of the interrogative conjunctions in direct question--are dependent (DC1). Examples are:

kéta rá núú iyō ñí	'he arrived at the place where they were'
taa | ní kíší ta?a īnā ka	'and | that dog slept, too'
koto | ké?ni ku tíčí šá?wá	'look out lest | you fall into the gorge'
[qá?á ri tika] soko | ñá kéta ri yu?u ñūū	'[it went over there] but | it did not get to the edge of the town'
[wéé šáá] tu | číká kuní ku	'[it is real heavy] if | that is what you want'
[ñá kuu kú?ú yú?ú] wátí | wéé šáá yú?ú	'[I cannot go] because | I am real tired'.

The patterns for building these clauses are:

Precenter	Center		Type
IConj	Cl	→	ICl
DpConj	Cl	→	DpCl.

4.36. Order of Clause Constituents: The clauses described so far are in basic order. A basic order clause depending on its type may contain, in the following order, a conjunction, a verb phrase (VP), a subject noun phrase (NP), an object noun phrase (NP), a manner adverb phrase (MAdP), a locative adverb phrase (LAdP), and a temporal adverb phrase (TAdP). An emphatic order clause involves the same possi-

ble constituents, but with a constituent other than the verb phrase first after the conjunction (if any):

maa rá ča?nu | kĭči | kuni   'the old man himself | came | last night'

tíqáá | šíko rá | luwĭ   'citrus fruit | he is selling | Louis' =
                      'Louis is selling citrus fruit'

či?į maa rá | qá kú?wá kú| 'to him | you will give | the money' =
šú?ú   'you will give the money to him'

číkí | qá?á rá   'to the field | he has gone' =
                      'he has gone to the field'

íku ñūū | čí?í rá   'the day before yesterday | he died'

či?į šú?ú | sáta ru | či?į čí   'with money | he bought | it' =
                      'he spent money on it'

ke?ni wē | sawa?ā rá   'the baby fell | he caused' =
                      'he made the baby fall'.

The pattern for transforming a basic order clause into an emphatic order one is:

Precenter	Center	Postcenter(s)			Type
NP $\lor$ AdP	VP	NP	NP	AdP $\rightarrow$	EmCl.

4.4. <u>Sentences</u> and <u>Sentence</u> <u>Patterns</u>. "A <u>sentence</u> is a grammatical form which is not in construction with any other grammatical form: a constitute which is not a constituent." (Hocket 1958:199) Sentences are larger than clauses and represent the largest size-level described in this treatment.

In JM sentences are <u>centered</u> or <u>uncentered</u>. If centered, they are <u>simple</u>, <u>compound</u>, or <u>complex</u>. The only uncentered sentences are complex. The constituents of sentences are: clausal core, vocative form, and sentence-closing markers. Sentence-closing markers have been discussed in §3.11, vocatives in §3.3, and clauses in §4.3. Two minor sentence types are clause <u>fragments</u> and <u>interjections</u>.

4.41. A <u>centered</u> <u>sentence</u> contains at least one independent clause (c.f. §4.35). If a centered sentence contains just one independent clause, it is <u>simple</u>. If the sentence contains two or more independent clauses and no dependent clause, it is <u>compound</u>. A <u>compound</u> <u>sentence</u> is linked (LCpS) when its clauses are connected by a conjunction, <u>unlinked</u> (ULCpS) when there is no conjunction. Finally, if the sentence contains at least one independent clause and one or more dependent clauses, it is <u>complex</u> (CxCenS). Any complex sentence has an independent clause as its center and a dependent clause as its postcenter. Examples are:

taa | qá kú?wá dí nuni či?ų dáá tebū taa.

   'And | will give we corn to thee in time sir' = 'We (excl.) will give
   thee corn in time, sir.'

čáʔą́ rá čĭ kíʔí rá čĭ ídi tĭčĭ saʔma šíní rá | taa kĭči rá |
taa ní čáʔá rá čįʔį čĭ čįʔį paqā.

'went he it brought he it stand stomach cloth head he | and come he |
and c.a. gave he d.o. it to Pascual' = 'He went to bring what was
inside his pillow and he came back and he gave it to Pascual.'

idi rá | sata rá wítú.

'stand he | cut he board' = 'He is standing there cutting the board.'

wãčí ráką́ | wátí nų́ų́ iyō síʔí rá wãčí rá.

'comes that fellow | because face is mother his comes he' = 'That
fellow comes because he is coming to the place where his mother lives.

wlti kúʔú do, amíku, | wátí kúʔú déʔe do nų́ų́ qą́ʔą́ čĭ | soko
kúʔú síʔná do; kúʔú dúku do čĭ kãči yúʔú | wátí koto kúwí
yúʔú sōkō | wátí ñá qá kúdee maí sōkō | wátí qáʔá šą́á kíwí
qá kúʔų́ do.

'now go you, friend | because go see you face went it | but go first
you; go look you it will-eat I | because lest will-die I hunger |
because not will bear-I hunger | because many angry day l.a. go
you.' = 'Go now, friends, because you will go and look for the
place where it went but go first and look for something for me to
eat or else I will die of hunger because I cannot bear the hunger
because you will be gone quite a few days'.

The patterns for building these sentences are:

Center(s)		Postcenter		Type
S		Voc M	→	S
ICl	ICl(Cj)		→	LCpS
ICl	ICl(noCj)		→	ULCpS
ICl		DpCl	→	CxCenS.

If the conjunction of the dependent clause is tu 'if', the dependent clause may pre-
cede the independent one:

tu ča kúʔwá ku čĭ́ką́ čįʔį, | čĭ́ką́ ni kuni yúʔú.

'If thou wilt give it to me, | I want it.'.

4.42.   An underlined uncentered sentence (UnS) contains no independent clause but consists
of two or more dependent clauses (DpCl), e.g.

tu čito mau | wátí niʔí ku núní kúʔwá ku.

'If thou knowest   because thou wilt find the corn that thou wilt give.'

tu kati ku | wátí taʔwi ku čįʔí.

'If thou sayest | because thou wilt pay me.'

tu čito ku yoso qá kų́ʔų́ kumi ku či̧ʔi̧ čí | wátí koto kų́ʔų́ čí
sawaʔa ku | wátí palu weru kuu čí.

'If thou knowest how thou wilt take care of it | so that thou wilt not
make it go | because it is palu weru.'.

The pattern for building uncentered sentences is:

Noncenters			Type
DpCl	DpCl	→	UnS.

4.43. Two relatively unimportant kinds of sentences are the clause fragment
and interjection. Any nonverb phrase (except for stative verb phrases) that is as
small as an independent word can be found either as a response to a question or as an
interruption in a conversation, e.g.

yų́ʔų́	'I'
taka tǫ́ǫ́	'it's like that, you say'
wáʔá šą́ą́	'very good'
dáá dáká	'over there'
ña siki či̧ʔi̧ we luʔu	'the girl playing with the baby'
nų́ų́ keʔni awiyǭ	'where the plane lands'
híʔná	'look!'
áwāl̄ō	'imagine that!'.

The patterns for the larger forms have already been described in §4.2.

5. TEXT

The following text illustrates statements made about JM in the preceding sections; it is followed by a set of grammatical notes. Although some might prefer notes that completely analyze the whole text, only special features have been selected for annotation, shifting from size-level to size-level after analyzing fairly thoroughly the first sentences. With this initial aid along with the information of the earlier sections anyone who wishes to should be able to analyze the remainder of the text to his own satisfaction.

The text itself is presented in four parallel lines. The first line is a phonological transcription (indicated by P); the second is a morphophonemic transcription (G); the third is a morpheme-by-morpheme translation (MT); and the fourth is a free translation (FT).

The three abbreviations used to indicate morpheme meaning are c.a. (completive aspect), i.a. (incompletive aspect), and d.o. (direct object). All verbs not marked for aspect are continuative. The meanings of multimorphemic words are linked by hyphens.

5.1. Text Transcribed.

P1. /"taa| ᴙkéča ᴙkatĭñámáᴙriā↓   2. čirā'qĭʔná↓

G1. taa kéčáʔa katĭ ña mariā   či̭ʔi̭ rá qíʔná,

MT. and c.a.-began say she Mary   to him demon

FT. Mary began to say to the demons,

3. "watĭ   tu'daadō ᴙkunĭ čḭʔi̭↓

    wátí   tu daa do kunĭ či̭ʔi̭,

    because if where you want d.o. -me

    "If any of you want me,

4. ná"ti̭ḭdótú'yóō'tṷʔu'itiyā↓

    ná ti̭ḭ   do túyóō tṷʔu iti Ya.

    let i.a.-touch you tree   cane dry this

    come and touch this dried-up cane pole.

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5.   tunῐ̋ʼčáaʼ ῐ́tǎčῐ́ | ʼčido ʼkuῐ̄ |

2.   <u>tu</u> <u>nῐ́</u> <u>čáa</u>   <u>ῐ́tá</u> <u>čῐ́</u>,   <u>čῐ̣ʔ</u> <u>do</u> <u>kuῐ̄</u>,

    if c.a. c.a.-renew flower it   to   you am-I

    If its flower buds, I am yours",

ʼkatῐ̄ñá↓   6.   "wáʔá ʼkatῐ̄rā ʼqῐ́ʔná↓

<u>katῐ̄</u> <u>ña</u>.   3.   <u>wáʔá</u>, <u>katῐ̄</u> <u>rá</u> <u>qῐ́ʔná</u>.

say she   good   say he demon

she said   3.   "Good," said the demons.

7.   "čạ́ʔạ́ráta ʼtῐ̣ῐrā | tú ʼyóō ʼtụ́ʔu↓

4.   <u>čạ́ʔạ́</u>   <u>rá</u>, <u>taa</u> <u>tῐ̣ῐ</u>   <u>rá</u> <u>túyóō</u> <u>tu̜ʔu</u>.

    c.a.-went he and c.a.-touched he he tree cane

4.   One went and grabbed the cane pole.

8.   sá"daarǎčῐ́tasá ʼnu̜u̜ ʼdikorā↓

5.   <u>sádaa</u>   <u>rá</u> <u>čῐ́</u>, <u>taa</u> <u>sánu̜u̜</u>   <u>diko</u> <u>rá</u>.

    c.a.-make-go-up he it and c.a.-make-go-down follow he

5.   He slid his hand up it and back down.

9.   "ñạ́ʔni ʼῐ́tǎčῐ́ ʼkána↓

6.   <u>ñạ́ʔni</u> <u>ῐ́tá</u>   <u>čῐ́</u> <u>kána</u>.

    no   flower it c.a.-sprouted

6.   Not a flower sprouted from it.

10.   "čạ́ʔạ́ ʼtúku ʼῐ́gárá↓

7.   <u>čạ́ʔạ́</u>   <u>tuku</u> <u>ῐ́gá</u>   <u>rá</u>.

    c.a.-went again another he

7.   Another one went.

11.   "tῐ̣ῐrǎčisá ʼdaarātasá ʼnu̜u̜rā↓

8.   <u>tῐ̣ῐ</u>   <u>rá</u> <u>čῐ́</u>. 9. <u>sádaa</u>   <u>rá</u>, <u>taa</u>

    c.a.-touched he it   c.a.-make-go-up he and

8.   He grabbed it and 9. slid his hand up

                    12.   "ñạ́ʔni ʼῐ́tǎčῐ́ ʼkána↓

sánuu   rá.   10.   ñáʔni   ítá   čí   kána.

c.a.-make-go-down he   no   flower it c.a.-sprouted

and down.   10.   Not a flower sprouted from it.

13.   ''čáká'čiʔi''sā̧árátí''síʔi↓   14.   'taa|

11.   číká   čiʔi   šáá   rá tísíʔi,   taa

11.   because-of-it   is-dying very he anger   and

11.   That's why they got boiling mad and

''diʔirānf''tĺičí| ta''ñáʔni''ítāčí'kána↓

diʔi rá ní   tíí   čí,   taa ñáʔni ítá   čí

all   he c.a. c.a.-touched   it   and no   flower it

they all grabbed it but no flowers

                                        15.   ''čákákučā|

kána.   12.   číká   kuu   čí

c.a.-sprouted   thing-that   is   it

sprouted from it.   12.   Because of that

ní''tāčiñama'riā| ''tíñu| čirahó'seē|

ní   tāčí   ña maríā   tíñu   čiʔi rá   hoseē

c.a. c.a.-send she Mary   business   to   him Joseph

Mary sent an order to Joseph

nú'idirā'satarā'wítú↓

núú̧ idi   rá; sata rá wítú.

face stand-in he   shave he board

where he was working in his carpenter shop.

16.   ''táwa'tiñuña| čirā''áhilĺ↓

13.   táwa   tiñu   ña čiʔi rá ahilĺ.

        c.a.-take-out business she d.o. him angel

13.   She sent an angel.

17.   ''kéča'katĺñátí| qá''déʔedo|

14.　kéčá?a　katī ña, wátí　　　qá dó?e　do

　　　c.a.-begin say she because　　i.a. i.a.-see you

14.　She said, "Go see Joseph.

nú'idirā|　　　hó'seē|　ná'kīči'šf?ná rā,

núų́ idi　　　rá hoseē.　15.　ná kīči　šf?ná rá,

face stand-in he Joseph　　　　let i.a.-come first he

　　　　　　　　　　15.　Have him come

'tīí|　　'kunīyúį'tiñu'čį?įrā|　　　'katīdó↓

wátí　　kunī yú?ú įį tiñu　čį?į rá, katī do.

because want I　a business　with him say you

because I have a deal for him, tell him."

18.　'wá?á'katīrá'áhilī↓　　　19.　'kéerā'qą̄?ą́rá↓

16.　wá?á, katī rá ahilī.　　　17.　kée　　　rá;

　　　good　say he angel　　　　　　c.a.-went-out he

16.　"Good," the angel said.　　17.　He left and

　　　　　　　20.　'taa|　'kétarā|　　　　　nú'idirā|

qą́?ą́　　rá,　　　taa　kéta　　rá núų́ idi

c.a.-went he　　　and　c.a.-arrived he face stand-in

went out.　　　　And he arrived where

　　　hó'seē'satarā'wītú↓

rá hoseē; sata rá wítú,

he Joseph cut he board

Joseph was working.　He was cutting boards.

21.　ta'kéča'katīrá↓　　22.　ho''séé|

　　　taa kéčá?a　katī rá,　hoséé,

　　　and c.a.-began say he　Joseph

　　　He said, "Joseph,

"kų́?ų́'šf?nátíkú'dé?ų|

kų́?ų́　šf?ná, wátí　kų́?ų́ dé?ų

i.a.-go first   because go   i.a.-see-thou

let's go first so that you can see

'ñáá 'kúuñama 'rīa̖c̆ų́↓   23.   'duku 'tų̖ ʔų̖ñac̆ų̄↓

ñá̖á̖ kuu ña marīā c̆i̖ʔų̖.   18.   duku tų̖ʔų̖ ña c̆i̖ʔų̖,

what is   she Mary   to-thee   look   word she to-thee

what Mary wants with you.   18.   She is asking for you.

24.   ta''kḛ̆c̆a 'katĪ ráhó 'seē|

          taa kḛ̄c̆áʔa   katĪ rá hoseē,

          and c.a.-began say he Joseph

          But Joseph said,

ñá 'kų̄ʔų́yúrá 'daʔwĪ 'wātíyū|

ñá kų́ʔų́   yú ʔú rá daʔwĪ, wátí   yú ʔú--

not i.a.-go I   he poor   because I

"I won't go. I am a poor man because I--

'laʔdā 'šḁ̄ą̄ 'saʔmē↓   25.   'yúmá ''šá̖Ī↓

laʔdá šá̖á̖ saʔmē.   19.   yúmá šá̖Ī.

torn   very clothes-my   dirty very-I

my clothes are all torn.   19.   I'm dirty.

26.   'mekū ''šá̖Ī↓   27.   ta 'ñaka̖ 'ña̖ʔa̖ 'waʔā 'dĬc̆akuña↓

20.   mekū   šá̖Ī,   taa ñaka̖   ña̖ʔa̖ wá ʔá

         spotted very-I   and woman-that woman good

20.   I'm dusty.   And that woman--she is really

                              28.   ''ñá̖á̖ 'kaa 'yū ʔúrá 'daʔwĪ 'sáʔma 'laʔdā↓

dĬc̆a kuu ña.   21.   ñá̖á̖   kaa yúʔú rá daʔwĪ--

true is   she   what lies I   he poor

a good woman.   21.   Look at poor me--

                              29.   'saʔma 'yúmá↓

saʔma   laʔdá,   saʔma   yúmá,

clothes torn   clothes dirty

torn clothes, dirty clothes,

30.   ta ʰkų́ʔɪ́nú ˈdaā ˈñákata ˈñaka ˈña̰ʔa̰ ˈwaʔākúña↓

         <u>taa</u> <u>kų́ʔɪ́</u>   <u>nų́ų́</u> <u>daā</u> <u>ñaka</u>,   <u>taa</u> <u>ñaka</u>

         and i.a.-go-I   face sit   woman-that and woman-that

         and I would go to see her and she

                                        31.   ʰkatɪ́rá| hóˈseē↓

<u>ña̰ʔa̰</u> <u>wáʔá</u> <u>kuu</u> <u>ña</u>,   <u>katɪ́</u> <u>rá</u> <u>hoseē</u>.

woman good is   she   say he Joseph

is a fine woman," Joseph said.

32.   "wáʔá ʰkatɪ́rá ˈáhilɪ́ ʰkée ˈdikorā ˈqa̰ʔá̰rácã ʰkúʔwárā ʰqedā|

22.   <u>wáʔá</u>, <u>katɪ́</u> <u>rá</u> <u>ahilɪ́</u>.   23.   <u>kée</u>   <u>diko</u>   <u>rá;</u>

         good   say he angel   c.a.-went-out return he

22.   "O.K.," said the angel.   23.   He left and went off again

                                ˈčị́ʔiñamaˈriā↓

<u>qá̰ʔá̰</u>   <u>rá</u> <u>čɪ́</u> <u>kúʔwá</u>   <u>rá</u> <u>qedā</u> <u>čị̰ʔį</u> <u>ña</u> <u>mariā</u>.

c.a.-went he thing i.a.-give he account to   her Mary

to tell Mary what had happened.

33.   ʰkḗča ʰkatɪ́rá| čɪ́ñámá ˈriātɪ́|

24.   <u>kḗčáʔa</u>   <u>katɪ́</u> <u>rá</u> <u>čị̰ʔį</u> <u>ña</u> <u>mariā</u>, <u>wátɪ́</u>

         c.a.-began say he to   her Mary   because

24.   He began to tell Mary that

ñá ʰkɪ́čirāhóˈseē| ˈwātɪ́| ˈlaʔdā ʰšá̰á̰ ˈsáʔmarā↓

<u>ñá</u> <u>kɪ́či</u>   <u>rá</u> <u>hoseē</u>, <u>wátɪ́</u>   <u>laʔdá</u> <u>šá̰á̰</u> <u>saʔma</u> <u>rá</u>.

not i.a.-come he Joseph because torn   very clothes he

Joseph wouldn't come because his clothes were all torn

         34.   ˈyúmá ʰšá̰á̰ ˈsáʔmarā↓   35.   ˈmekū ʰšá̰á̰ ˈdéʔerā↓

         25.   <u>yúmá</u> <u>šá̰á̰</u> <u>saʔmn</u> <u>rá</u>.   26.   <u>mekū</u>   <u>šá̰á̰</u>

               dirty very clothes he   spotted   very

and 25.   dirty, and   26.   he was all dusty.

36.   ta'yoʔō'wātíʻʻñą́ʔą'waʔā'dīčakų↓

dé ʔe	rá,
c.a.-look	he

taa	yoʔō	wátí	ñąʔą	wáʔá	dīča	kuų.
and you		because	woman	good	true	art-thou

And you--you are a fine woman.

37.   ñąʔąʻʻtakikų↓   38.   ʻʻñą́ą́'kaa'rākątá'kīčirā|

27.	ñąʔą	taki	kuų.
	woman	pretty	art-thou

28.	ñą́ą́	kaa	rāką́,	taa
	what	lies	he-that	and

27.   You are pretty.   28.   And look at that fellow

nú'daā'yoʔō| 'katīrá↓

kīči	rá	nų́ų́	daā	yoʔō,	katī	rá.
i.a.-come	he	face	sit	thou	say	he

if he comes here to see you," he said.

39.   ʻʻwáʔá'katīñámá'riā↓   40.   taní|

29.	wáʔá,	katī	ña	mariā,
	good	say	she	Mary

	taa	ní
	and	c.a.

29.   "O.K.," said Mary.

ʻʻtáwa'tiñu'diko'tukuñačīrá'áhllī↓

táwa	tiñu	diko	tuku	ña	čiʔį	rá	ahllī.
c.a.-send-out	work	back	another	she	d.o.	he	angel

She sent the angel back again.

41.   ʻʻqąʔądóʻʻkatī'yūʔú| ná'kīčirā|

30.	qąʔą	do,	katī	yúʔú.
	go	you	say	I

31.	ná	kīči	rá.
	let	i.a.-come	he

30.   "Go," I said.   "Have him come.

ʻiʔya'iyōʻʻsáʔmatíqákú'dičirātaqá'kīčl|

32.	iʔya	iyō	saʔma,	wátí	qá	kúdiči	rá,	taa
	here	are	clothes	because	i.a.	i.a.-put-on	he	and

32.   Here are some clothes for him to put on and

'deʔerā| nú'kanē↓

qá   kĩči   de?e rá nų́ų́ kanē.
i.a. i.a.-come see he face call-I
come to see me.

42.   tu'kạ?ạ 'są̄ą́nųrā̃čá'la?dā'sá?marā|

33.   tu kạ?a šą́ą́ nų́ų́ rá čí́ la?dá sa?ma   rá,
       if speak very face he that torn   clothes he

33.   If he is ashamed of his torn clothes,

'i?ya'iyō'sá?ma'wa?ātíwákú'dičirā↓

i?ya iyō sa?ma wá?á, wátí́ qá kúdiči   rá.
here are clothes good   because i.a. i.a.-put-on he

here are good clothes for him to put on."

43.   'čáką́ "čā?ñá'sá?mačirā'áhilĩta'kée'dikorā'qą̃?ą́rá↓

34.   čĩ́ką́   ča?ā ña sa?ma či?í rá ahilĩ,
       thing-that give she clothes to   he angel

34.   That is why she gave the clothes to the angel.

taa kée   dĩko rá; qą́?ą́   rá.
and c.a.-went-out back he   c.a.-went he

And he left and went out again.

44.   'kétarā'áhilĩnú'idirāhó'see↓

35.   kéta   rá ahilĩ nų́ų́ idi rá hosee,
       c.a.-arrive he   angel face stand he Joseph

35.   He arrived where Joseph was

45.   ta'kéča'katí'dĩko'tukurā|

       taa kéčá?a   katí dĩko tuku rá,
       and c.a.-began say   return again he

       and he began to tell him again,

ná "kų́?ų́tíkú'dé?ų|

ná kų́?ų́,   wátí́ kų́?ų́ dé?ų
let i.a.-go-thou because go   i.a.-see-thou

"Let's go and you will see

tí'kunǐ'nǐniñama'riā'čí?u̯↓   46.   'katǐrá↓

<u>wátǐ</u>   <u>kunǐ</u> <u>nini</u> <u>ña</u> <u>mariā</u> <u>čị?ų</u>,   <u>katǐ</u> <u>rá</u>.

because want must she Mary to-thee   say he

that Mary really wants to see you," he said.

47.   "čákạ̈nǐ'kí?įrāhó'seē'sá?ma'nạạrā'áhilǐ|

36.   <u>čǐká̧</u>   <u>nǐ</u> <u>kí?į</u>   <u>rá</u> <u>hoseē</u> <u>sa?ma</u>   <u>nạạ</u>

       thing-that c.a. c.a.-took he Joseph clothes carry

36.   That is why Joseph took the clothes that the

            tanǐčákú'dǐčirā↓

<u>rá</u> <u>ahilǐ</u>,   <u>taa</u> <u>nǐ</u> <u>čákúdǐči</u>   <u>rá</u>.

he angel,   and c.a. c.a.-put-on he

angel carried and he put them on.

48.   tanǐ'kéerāta'qá̧? á̧rá↓

         <u>taa</u> <u>nǐ</u> <u>kée</u>   <u>rá</u>, <u>taa</u> <u>qá̧?á̧</u>   <u>rá</u>,

         and c.a. c.a.-went-out he and c.a.-went he

         He went out   and left.

49.   ta'kétarā| ta'keča'katǐrá|

         <u>taa</u> <u>kéta</u>   <u>rá</u>, <u>taa</u> <u>kečá?a</u>   <u>katǐ</u> <u>rá</u>,

         and c.a.-arrive   he   and c.a.-begin say he

         When he arrived,   he began by saying,

"ñá̧á̧kučā"kúu̯čǐ↓   50.   ta'yú?ú| rá'da?wǐ↓

<u>ñá̧á̧</u> <u>kuu</u> <u>čǐ</u> <u>kuu̯</u>   <u>čị?ǐ</u>,   <u>taa</u> <u>yú?ú</u> <u>rá</u> <u>da?wǐ</u>

what is   thing art-thou to-me   and I   he poor

"What do you want with me? Look at me.   Poor me--

51.   "dasi'kaǐtá'yo?ō'ñá̧?a̧'wa?ā'dǐčaku̯↓

         <u>dasi</u> <u>kaǐ</u>,   <u>taa</u> <u>yo?ō</u> <u>ña̧?a̧</u> <u>wá?á</u> <u>dǐča</u> <u>kuu̯</u>,

         messy lie-I and thou woman good true art-thou

         I am all messy. And you--you are a real fine woman,"

52. ᴵkatĬráhóᴵseēc̃ĭñá↓ 53. ta ᴵᴵkéc̃a ᴵkatĬñámá ᴵriā|

katĬ rá hoseē c̃ị?ị ña, taa kéc̃á?a katĬ ña marĬā,

say he Joseph to her and c.a.–begin say she Mary

Joseph said to her. Mary said,

ᴵtʃʃ| ná ᴵᴵtʃʃ̰| tú ᴵyóō ᴵtú?uya↓

wátĬ ná tʃʃ̰ túyóō tu?u Ya.

because let i.a.–touch tree cane this

"Touch this cane pole.

54. tuᴵᴵkána ᴵĬtã̌c̃ĭ| c̃ị?ụ ᴵkuĬ↓

37. tu kána Ĭtá c̃ĭ, c̃ị?ụ kuĬ,

if i.a.–sprout flower it to–thee am–I

37. If flowers sprout out, I am yours.

55. tʃᴵdi?irā ᴵdekū ᴵĬ?ya| c̃a ᴵkĭc̃i ᴵtʃịrātarac̃ĭ↓

wátĬ di?i rá dekū i?ya c̃a kĭc̃i

because all he sit here already c.a.–came

All these fellows sitting here have come

56. taᴵᴵñá?ni ᴵĬtã̌c̃ĭ ᴵkána↓

tʃị rá taa rá c̃ĭ, taa ñá?ni Ĭtá c̃ĭ

c.a.–touched he and he it and no flower it

and touched it and nothing has

57. ᴵsoko ᴵyo?ōná ᴵᴵtʃị̌c̃ĭ↓

kána, soko yo?ō ná tʃʃ̰ c̃ĭ.

c.a.–sprouted but you let i.a.–touch it

happened. But you––come touch it.

58. tuᴵᴵkána ᴵĬtã̌c̃ĭ ᴵc̃ị?ụkuĬ↓

38. tu kána Ĭtá c̃ĭ, c̃ị?ụ kuĬ,

if i.a.–sprout flower it to–thee am–I

38. If flowers sprout, I am your's"

59. ᴵkatĬñámá ᴵriā↓ 60. ᴵᴵc̃ákákuc̃ãnĭ ᴵkĭc̃irā|

katī̠ ña marīā.

say she Mary

said Mary.

39. čī́ka̠   kuu čí̠ ní̠

    thing–that is   it c.a.

39.   For that reason

hó'seētánī''tī̠rātú'yóō'ṭú̠?ukạtasá'daarāta-

kī́ci   rá hoseē,   taa ní̠ tī̠í̠   rá túyóō

c.a.–came he Joseph   and c.a. c.a.–touched he tree

Joseph came and touched that cane pole.

ṭu̠?u ka̠,   taa sádaa   rá,   taa

cane that and c.a.–made–go–up he   and

He ran his hand up and

sá'nu̠u̠'dikorāta''kánani'ītǎčí↓

sánu̠u̠   diko rá, taa kána   ni

c.a.–made–go–down return he and c.a.–sprouted just

back down again and flowers sprouted out.

     61.   ''taki 'šā̠á̠'ītǎčíní'kána↓

ītá   čí̠.   40.   taki šā̠á̠ ītá   čí̠ ní̠ kána,

flower it   pretty very flower it c.a. c.a.–sprouted

     40.   The flowers that sprouted were very pretty.

62.   'taa| sání'kéeniña↓

     taa sá ní̠ kée   ni ña,

     and just c.a. c.a.–came–out just she

     And   so Mary left

63.   ta''qá̠?á̠ñarā↓

     taa qá̠?á̠   ña rá,

     and c.a.–went she him

     with him. And he said,

64.   ta'kěča'katīrátí|

     taa kěčá?a   katī rá,

     and c.a.–began say   he

     ñá 'ku̠?ú̠|

wátí̠   ñá ku̠?ú̠,

because not i.a.–go–thou

"Don't go because,

ˈwatˤⁱˈyūʔúráˈdaʔwˤⁱˈráʃˈdaʔwˤⁱˈkuˤⁱˈñáʔni ˈweʔⁱˈñáʔni↓

wátʃ	yúʔú	rá	daʔwˤⁱ	ráʃ	daʔwˤⁱ	kuˤⁱ.	41.	ñáʔni	weʔⁱ.
because	I	he poor	man	poor	am-I			no	house-my

I am a poor man.   41.   I don't have a

		65.	ˈiyē ˈtˤⁱčⁱˈkūʔūsa ⁿtⁱñúⁱ↓

42.	ñáʔni.	43.	iyē	tⁱčⁱ	kūʔū;
	no		am-I	stomach	forest

42.	house--really.	43.	I live in the forest

		66.	ñáⁿkū̯ʔų̯čⁱtⁱˈráʃˈdaʔwⁱkuˤⁱˈwáʔáˈyoʔō-

satⁱñú	ⁱ.	44.	ñá	kų́ʔų́	čį̯ʔĮ̯,	wátʃ
make-business	I		not	i.a.-go-thou	with-me	because

		44.	Don't go with me because
where I work.			

ˈñáʔą̯ˈwaʔā̯ˈdⁱčakų̯|

ráʃ	daʔwˤⁱ	kuˤⁱ.	45.	wáʔá.	46.	ˈyoʔō̄	ñaʔą̯	wáʔá	dⁱča
man	poor	am-I		good		thou	woman	good	true

		45.	O.K.	46.	You are a fine woman,"
I'm a poor man.					

	ⁿkatⁱrá↓	67.	sowáⁿkų́ʔⁱčų̯tⁱˈčį̯ʔų̯kuˤⁱ↓

kuų̯,	katⁱ	rá.	47.	soko	qá	kų́ʔĮ̯	čį̯ʔų̯,
art-thou	say he			but	i.a.	i.a.-go-I	with-thee

		47.	"But I will go with you
he said.			

wátʃ	čį̯ʔų̯	kuˤⁱ.
because	for-thee	am-I

because I am yours.

<p>68.   ˈčáką̯nⁱˈkána ˈⁱtáˈčéʔⁱčánⁱⁿtⁱų̯čⁱ↓</p>

48.	čⁱ́ką́	nⁱ	kána	ⁱtá	čⁱ́yá	čⁱ́	nⁱ
	thing-that	c.a.	c.a.-sprout	flower	this	thing	c.a.

48.   That is why the flowers sprouted when

<p>69.   ⁿkatⁱ| ñámáˈriačⁱrā̄↓</p>

tíu̧.   čí,   katǐ ña mariā či̧ʔi̧ rá,

c.a.-touch-thou it   say she Mary to   he

you touched it,"   Mary said to him.

70.   tará ˈqíʔná| ké ˈˈčáʔanika ˈkani ˈta̧ʔa̧ ˈmaarātarā-

        taa rá qíʔná kečáʔa   ni   ka   kani

        and he demon c.a.-begin restrictive additive hit

        And the demons--they began to fight

ˈwātíñáni ˈni̧ʔi̧fra|

taʔa̧   maa rá taa rá, wátí   ñá ní   ni̧ʔí   rá

companion this he and he   because not c.a. c.a.-get he

each other because they did not get

číñama ˈriā↓

či̧ʔi̧ ña mariā.

d.o. she Mary

Mary.

71.   ˈˈčáķákuča ˈoráníkaké ˈˈčáʔa|

49.   číká̧   kuu čí   orā ni ka̧ kečáʔa

        thing-that is   thing hour just that c.a.-begin

49.   That is why they then began

ˈduku ˈkaʔnlrā ˈqíʔná| čirāhóˈseē   číñámá ˈriā↓/

duku ka̧ʔni rá qíʔná či̧ʔi̧ rá hoseē či̧ʔi̧ ña mariā.

look kill   he demon d.o. he Joseph d.o. she Mary

to look for a way to kill Joseph and Mary.

5.2. Grammatical Analysis

     G1 is a simple centered sentence. As such it contains a single clause that is independent transitive in basic order. The clause begins with an independent conjunction (taa ˈandˈ) that is followed by a closed verb phrase (kečáʔa katǐ ña ˈbegan say sheˈ= ˈshe began to sayˈ) containing an auxiliary verb, main verb, and pronoun subject; a subject noun (mariā ˈMaryˈ); an adverbial pronoun phrase (či̧ʔi̧ rá qíʔná ˈto him demonˈ = ˈto the demonˈ) containing a marker, pronoun head, and noun modifier; and an object that in this sentence is a quotation introduced by wátí ˈbecauseˈ. The quotation is itself a complex centered sentence containing a dependent transitive clause and

an independent transitive clause in this order. The first clause contains a dependent conjunction (tu̱ 'if'), a subject pronoun phrase consisting of a question marker and a pronoun (daa̱ do 'where you' = 'which one of you'), a verb (kunī̱ 'want'), and an object-marker inflected for first person (c̆i̱ʔi̱ 'd.o.-me'). The second clause contains a verb phrase (ná̱ tí̱ do 'let will-touch you' = 'come touch!') consisting of a preverb, a verb, and a pronoun subject; and an object noun phrase (tú̱yóō̱ tu̱ʔu iti Ya 'cane smooth dry this' = 'this dry cane pole') whose center contains a noun phrase (tú̱yóō̱ tu̱ʔu 'cane smooth') of noun center followed by noun attribute. The modifiers of the object phrase are adjective (iti 'dry') and pronoun (Ya 'this'). The center of the embedded noun phrase (tú̱yóō̱ 'cane') is a derived noun containing a prefix tú̱- (tree marking prefix) and a noun yóō̱ (meaning uncertain).

G2 is a continuation of the quotation but grammatically independent. It is a simple centered sentence whose clause is independent transitive in emphatic order. The object phrase which occurs first is a complex centered sentence whose first clause is dependent intransitive and second clause is independent equational. The dependent clause (tu̱ ní̱ c̆áa i̱tá c̆í̱ 'if c.a. new flower it' = 'if a flower buds') consists of a dependent conjunction; a verb phrase containing a preverb and a verb; and a subject noun phrase containing a noun center and a pronoun modifier. The independent clause contains a pronoun phrase (c̆i̱ʔi̱ do 'to you' = 'yours') consisting of a marker and pronoun center and a verb (kuī̱ 'am-I' = 'I am') inflected for first person. The main verb phrase of the sentence (katī̱ ña̱ 'say she' = 'she said') contains a verb and a pronoun subject.

G3 is also a simple centered sentence. Its independent clause is in emphatic order and consists of the object quotation (wá̱ʔá̱ 'good'), the closed verb phrase (katī̱ rá 'say he' = 'he said') consisting of verb and pronoun, and the noun subject (qí̱ʔná̱ 'demon') in agreement with the pronoun of the verb phrase.

G4 is a compound centered sentence whose first clause is independent intransitive and whose second clause is independent transitive. The intransitive clause contains a single closed verb phrase (c̆á̱ʔá̱ rá 'went he' = 'he went'), while the transitive one contains an independent conjunction, a closed verb phrase (tí̱i̱ rá 'touched he' = 'he touched'), and an object noun phrase (tú̱yóō̱ tu̱ʔu 'cane smooth' = 'smooth cane').

G5 is also a compound centered sentence containing two clauses. In this case both are independent transitive. The first one contains a closed verb phrase (sádaa rá 'make-rise he' = 'he lifted') followed by the object pronoun c̆í̱ 'it', and the second one contains an independent conjunction followed by a closed verb phrase (sánu̱u̱ diko rá 'make-lower return he' = 'he lowered it again') consisting of the verb center, a modifier, and a subject pronoun. The verbs of both clauses are derived and contain the derivational prefix sa- (causative).

G6 is a simple centered sentence; its clause is independent intransitive in emphatic order. The subject noun phrase (ñá̱ʔni i̱tá c̆í̱ 'none flower its' = 'none of its flowers') contains a unit numeral modifier, a noun center, and a pronoun possessor; and the verb phrase contains a single verb (kána 'sprouted') in the completive aspect.

G7 is a simple centered sentence containing an independent intransitive clause.
The open verb phrase (čá̰ʔá̰ tuku 'went another' = 'went again') contains a verb
center and a general numeral modifier, and the subject pronoun phrase contains a unit
numeral modifier and a pronoun center.

G8 is simple centered and its clause is independent transitive.

G9 is like G5 except that the pronoun object of the first clause and the verb modi-
fier of the second clause do not occur in G9.

G10 is identical to G6.

G11 is a compound centered sentence with three clauses: independent intransitive,
independent transitive in emphatic order, and independent intransitive in emphatic
order. The first clause is introduced by the distal demonstrative pronoun číká 'thing-
there' or 'that thing' that is composed of the pronoun čí 'it' and the pronoun ka
'there', followed by a closed verb phrase (čiʔi šáá rá 'die angry he' = 'he is very
angry') containing an active verb center, a stative verb modifier, and a pronoun sub-
ject; and a noun object (tísíʔi 'anger'). The second clause contains an independent
conjunction, a subject pronoun phrase (diʔi rá 'all he' = 'all of them') consisting of a
numeral modifier and a pronoun center, a closed verb phrase (ní tíí 'c.a. touched')
consisting of a preverb and a verb center, and a pronoun object (cí 'it'). The third
clause contains an independent conjunction followed by the same form as G10 and G6.

G12 is a simple centered sentence whose single clause is independent equational.
The prelink is číká 'it-there'; the link is kuu 'is'; and the postlink is the pronoun
phrase (čí ní táči ña maria tiñu čiʔi rá hoseē núú idi rá; sata rá wítú 'it
c.a. sent she Mary work to he Joseph face stand he cut he board' = 'Mary sent a
messenger to Joseph where he was working--cutting wood'). This pronoun phrase
contains a pronoun center (čí) followed by an attributive verb phrase that is an inde-
pendent transitive clause. The clause consists of a closed verb phrase (ní táči ña
'c.a. sent she' = 'she sent') containing a preverb, a verb center, and a pronoun sub-
ject; a subject noun (maria 'Mary') agreeing with the pronoun in the verb phrase;
an object noun (tiñu 'work'); an adverbial pronoun phrase (čiʔi rá hoseē 'to him
Joseph' = 'to Joseph') containing a marker, a pronoun center, and a noun attribute;
and a locative noun phrase (núú idi rá; sata rá wítú 'face stand he cut he board'=
'where he stood cutting wood') containing a locative noun center (núú 'face') followed
by a nonlinked compound centered sentence. The two clauses of this sentence are
independent intransitive and independent transitive. The first contains simply a
closed verb phrase (idi rá 'stand he' = 'he stood'), and the second contains a
closed verb phrase (sata rá 'cut he' = 'he cuts') followed by an object noun (wítú
'board').

G13 is a simple centered sentence; its only clause is independent transitive. It
contains a closed verb phrase (táwa tiñu ña 'send work she' = 'she ordered')
consisting of a verb center, a noun attribute, and a pronoun subject; and an object

pronoun phrase (čị?ị rá ahilĨ 'd.o. him angel' = 'the angel') consisting of a marker, a pronoun center, and a noun attribute.

G14, likewise, is a simple centered sentence. Its clause, independent transitive, consists of a verb phrase (kečá?a katĨ ña 'began say she' = 'she began to say') containing an auxiliary verb, a main verb, and a pronoun subject; and an object quotation that is a simple centered sentence introduced by wátĨ 'because'. The clause contained in the embedded sentence is independent transitive. It contains a verb phrase (qá dé?e do 'l.a. will-see you' = 'you will see') consisting of a preverb, a verb center, and a pronoun subject; and a locative noun phrase (núú̧ idi rá hoseē 'face stand he Joseph' = 'where Joseph stands') consisting of a locative noun center (núú̧ 'face') followed by a simple centered sentence. This sentence contains an independent intransitive clause that, in turn, contains a closed verb phrase (idi rá 'stand he ' = 'he stands'), and a noun subject (hoseē 'Joseph') that agrees in gender with the pronoun rá 'he'.

G15 is a simple centered sentence with an independent transitive clause in emphatic order. The object quotation is a complex centered sentence with an independent intransitive clause followed by a dependent transitive one. The first clause contains a closed verb phrase (ná kĩči ší?ná rá 'let will-come first he' = 'let him come first') that consists of a preverb, a verb center, a numeral attribute, and a pronoun subject. The second clause contains a dependent conjunction (wátĨ 'because'); a verb (kunĨ 'want'); a pronoun subject (yú?ú 'I'); an object noun phrase (iị tiñu 'one work' = 'a business') consisting of a unit numeral attribute and a noun center; and an adverb phrase (čị?ị rá 'with him') consisting of a marker and a pronoun center. After the object quotation of the main sentence comes the closed verb phrase (katĨ do 'say you' = 'say!').

G16 is the same as G3 except that the noun subject is ahilĨ 'angel' instead of qí?ná 'demon'.

G17 is a compound centered sentence whose four clauses are independent intransitive (first three) and independent transitive. The first clause contains a closed verb phrase (kée rá 'left he' = 'he left'); the second contains a closed verb phrase without intervening link (qá?á rá 'went he' = 'he went'); the third contains an independent conjunction, a verb phrase (kéta rá 'arrived he' = 'he arrived'), and a locative noun phrase that is identical to that of G12; and the fourth contains an independent conjunction, a closed verb phrase (kečá?a katĨ rá 'began say he' = 'he began to say'), and an object quotation that is a complex centered sentence containing an independent intransitive clause and a dependent transitive one. The intransitive clause contains a vocative noun (hoseē 'Joseph'), an open verb phrase (kú?ú̧ ší?ná 'go first') with a verb center and a numeral attribute; the transitive clause being dependent contains a dependent conjunction (wátĨ 'because'), a verb phrase (kú?ú̧ dé?ụ 'will-go will-see-thou' = 'go thou and see!'), containing an auxiliary verb and a main verb inflected for second person, and an object (ñą́ą́ kuu ña mariā čị?ụ 'what is she Mary to-thee' = 'what Mary wants with thee') that is a simple centered sentence

with an independent equational clause. It contains a question marker prelink (ñáá 'what'), the equational verb phrase (kuu ña 'is she'), a noun subject (mariā 'Mary'), and an adverb marker (čị?ụ 'to-thee') inflected for second person.

G18 is a compound centered sentence with two independent transitive clauses. The first clause consists of a closed verb phrase (duku tụ?ụ ña 'look word she' = 'she is asking') containing a verb center, a noun attribute, and a pronoun subject; and an inflected adverb marker. The second clause consists of an independent conjunction, a verb phrase (kéčá?a katǐ rá 'began say he' = 'he started to say'), a noun subject (hoseē 'Joseph'), and an object that is a complex centered sentence containing an independent intransitive clause and a dependent stative clause with an anacoluthon. The first clause consists of a verb phrase (ñá kụ?ụ 'not will-go' = 'will not go') with a preverb and verb center, and a pronoun phrase (yú?ụ́ rá da?wǏ 'I he poor' = 'I am a poor man') with a pronoun center and an attributive pronoun phrase (rá da?wǏ 'he poor' = 'poor man') with a pronoun center and a stative verb attribute. The second clause consists of a dependent conjunction (wátǐ 'because'), a pronoun (yú?ụ́ 'I'), and after the grammatical break a stative verb phrase (la?dá šáá 'torn angry' = 'very torn') with a verb center and a stative verb attribute, and a noun subject (sa?mē 'clothes-my' = 'my clothes') inflected for first person.

G19 is a simple centered sentence with an independent stative clause. It contains only a verb phrase (yúmá šáǏ 'dirty angry' = 'very dirty') with a stative verb center and a stative verb attribute that is inflected for first person.

G20 is a compound centered sentence with an independent stative clause and an independent equational one in emphatic order. The stative clause has the same structure as G19. The equational clause consists of an independent conjunction, an emphatic distal demonstrative pronoun (ñaka 'she-there' = 'that one') in apposition with the subject, a prelink noun phrase (ña?a wá?á diča 'woman good true' = 'fine woman') with a noun center followed by two stative verb attributes, and the linking closed verb phrase (kuu ña 'is she').

G21 is a simple centered sentence with an independent transitive clause in emphatic order. The object quotation is a compound centered sentence containing an independent transitive clause, an independent intransitive clause, and an independent equational one. The first clause containing an anacoluthon consists of an object question marker (ñáá 'what'), a verb (kaa 'appear'), and a subject pronoun phrase (yú?ụ́ rá da?wǏ 'I he poor' = 'poor me') followed by two stative verb clauses in emphatic order (sa?ma la?dá 'clothes torn' = 'torn clothes' and sa?ma yúmá 'clothes dirty' = 'dirty clothes') both containing a noun subject and a stative verb. The second clause contains an independent conjunction, a verb (kụ́?ǐ 'will-go-I' = 'I will go') inflected for first person, and a locative noun phrase (nụ́ụ daā ñaka 'face sit she-that' = 'where that woman is') consisting of a noun center and an intransitive clause of verb center and pronoun subject. The third clause is like its predecessor in G20 except that here only one stative verb follows the noun center (ña?a 'woman'). A closed verb phrase (katǐ rá 'say he' = 'he says') and noun subject (hoseē 'Joseph') follow the object quotation described above.

G22 is identical to G16.

G23 is an unlinked compound centered sentence whose two clauses are independent intransitive. The first clause is a closed verb phrase (kée diko rá 'went-out return he' = 'he went out again') containing a verb center, a modifier attribute, and a pronoun subject. The second clause consists of a closed verb phrase (qá?á rá 'went he' = 'he went') and adverbial pronoun phrase (čí kú?wá rá qedā či?i ña mariā 'it gave he account to her Mary' = 'he related it to Mary') containing a pronoun center (čí 'it') followed by an independent transitive clause that modifies it. The clause contains a closed verb phrase (kú?wá rá 'gave he' = 'he gave'), a noun object (qedā 'account'), and an adverbial pronoun phrase (či?i ña mariā 'to her Mary' = 'to Mary') with a marker, pronoun center, and noun attribute.

G24 is a simple centered sentence with an independent transitive clause. It consists of a verb phrase (kečá?a katī rá 'began say he' = 'he began to say'), an adverbial pronoun phrase (či?i ña mariā 'to her Mary' = 'to Mary'), and an object quotation that is a complex centered sentence introduced by wátí 'because'. The two clauses of the complex centered sentence are independent intransitive and dependent stative. The intransitive clause contains a verb phrase (ñá kíči rá 'not will-come he' = 'he will not come') and a noun subject (hoseē 'Joseph'); the stative clause contains a dependent conjunction (wátí 'because'), a stative verb phrase (la?dá šáá 'torn angry' = 'very torn'), and a subject noun phrase (sa?ma rá 'clothes he' = 'his clothes') consisting of a noun center and a pronoun attribute.

G25 is a simple centered sentence with an independent stative clause with the same structure as that of the stative clause in G24 except that this one is independent.

G26 is a complex centered sentence with an independent transitive clause and an independent equational clause in emphatic order. The transitive clause consists of an open stative verb phrase (mekū šáá 'spotted angry' = 'very spotted') that contains a stative verb center and a stative verb attribute and that is attributive to the closed active verb phrase (dé?e rá 'appear he' = 'he appears'). The equational clause consists of an independent conjunction, a pronoun subject (yo?ō 'thou'), and the pre-link noun phrase (ña?a wá?á dīča 'woman good true' = 'fine woman') and the equation link inflected for second person introduced by wátí 'because'.

G27 is a simple centered sentence with an independent equational clause that contains a noun phrase (ña?a taki 'woman pretty' = 'pretty woman') with a noun center and a stative verb attribute, and an inflected verb.

G28 is a simple centered sentence whose independent transitive clause is in emphatic order. Its object quotation is a compound centered sentence with an independent transitive clause and an independent intransitive clause. The first clause contains an object question marker (ñáá 'what'), a verb (kaa 'appear'), and a pronoun subject (ráká 'he-that' = 'that fellow'); and the second clause contains an independent conjunction, a closed verb phrase (kíči rá 'will-come he' = 'he will come'), and a locative noun phrase (núú daā yo?ō 'face sit thou' = 'where thou art') whose center

is modified by an intransitive clause (daā yo?ō 'sit thou' = 'thou art'). The closed
verb phrase (katĪ rá 'say he' = 'he says') follows the object quotation.

G29 is a compound centered sentence with two independent transitive clauses; the
first of which is in emphatic order and has the same structure as G3, G16, and G22.
The second clause consists of an independent conjunction; a closed verb phrase (nĪ
táwa tiñu tuku ña 'c.a. sent work another she' = 'she sent again') containing a
preverb attribute, a verb center, a noun attribute, a numeral attribute, and a pronoun
subject; and an object pronoun phrase (či?i rá ahilĪ 'd.o. him angel' = 'the angel')
containing a marker, a pronoun center, and a noun attribute.

G30 is a simple centered sentence with an independent transitive clause in empha-
tic order. The object quotation is a closed verb phrase (qa?ā do 'go you' = 'go!')
followed by the verb (katĪ 'say') and the subject pronoun (yú?ú 'I').

G31 is a simple centered sentence with an independent intransitive clause that is
a closed verb phrase (ná kĨči rá 'let will-come he' = 'let him come') containing a
preverb, a verb center, and a pronoun subject.

G32 is a complex centered sentence with an independent intransitive clause in
emphatic order, a dependent transitive clause, and an independent transitive clause.
The first clause contains a locative adverb, a verb, and a noun subject. The second
clause contains a dependent conjunction (wátí 'because') and a closed verb phrase
(qá kúdiči rá 'i.a. will-be-clothed he' = 'he will get dressed') containing a pre-
verb, a verb center, and a pronoun subject. The incompletive stem of the verb is
formed by ku- 'be' followed by the continuative stem. And the third clause contains
an independent conjunction; a closed verb phrase (qá kĨči de?e rá 'i.a. will-come
see he' = 'he will come to see') consisting of a preverb attribute, an auxiliary verb
attribute, a main verb center, and a pronoun subject attribute; and a locative noun
phrase (núú kanē 'face call-I' = 'where I call') consisting of a locative noun center
and an active verb attribute inflected for first person.

G33 is a complex centered sentence with a dependent intransitive clause, an
independent intransitive clause in emphatic order, and a dependent transitive clause.
The first clause consists of a dependent conjunction (tu 'if'), an open verb phrase
(ka?a šáá 'speak angry' = 'say a lot'), a subject noun phrase (núú rá 'face he' =
'his face'), and an adverbial pronoun phrase (čí la?dá sa?ma rá 'it torn clothes
he' = 'his clothes are torn') that consists of a pronoun head followed by a stative
clause with a stative verb center, and a subject noun phrase (sa?ma rá 'clothes he'
= 'his clothes'). The second clause is like the first clause of G32 except that here
the subject noun center is modified by wá?á 'good'. The third phrase is identical to
the second of G32.

G34 is a compound centered sentence with an independent transitive clause and
two independent intransitive clauses without an intervening link. The transitive clause
consists of a pronoun (čīkã 'it-that' = 'that thing'), a closed verb phrase (ča?ā ña
'give she' = 'she gives'), and object noun (sa?ma 'clothes'), and an adverbial pro-

noun phrase (čǐʔį rá ahilĪ 'to he angel' = 'to the angel'). The second clause consists of an independent conjunction (taa 'and') and a closed verb phrase (kée diko rá 'departed return he' = 'he departed again') with a verb center, modifier attribute, and pronoun subject attribute. The third clause consists of a closed verb phrase (qáʔá rá 'went he' = 'he went').

G35 is a compound centered sentence with an independent intransitive clause and an independent transitive clause. The intransitive clause consists of a closed verb phrase (kéta rá 'arrived he' = 'he arrived'), a subject noun (ahilĪ 'angel'), and a locative noun phrase (núų̄ idi rá hoseē 'face stand he Joseph' = 'where Joseph was') with a locative noun center (núų̄ 'face') and an intransitive clause that contains a closed verb phrase (idi rá 'stand he' = 'he stands') and a noun subject (hoseē 'Joseph'). The transitive clause consists of an independent conjunction; a closed verb phrase (kečáʔa katĪ diko tuku rá 'began say return another he' = 'he began to say again') containing an auxiliary verb attribute, a main verb center, a modifier attribute, a numeral attribute, and a subject pronoun attribute; an object quotation that is a complex centered sentence; and a reiterated closed verb phrase (katĪ rá 'say he' = 'he says'). The complex centered sentence (object quotation) contains an independent intransitive clause and two dependent transitive clauses. The first clause is a closed verb phrase (ná kų́ʔų́ 'let will-go-thou' = 'go!') containing a preverb attribute and an incompletive verb inflected for second person; the second clause consists of a dependent conjunction (wátĪ 'because') and a closed verb phrase (kų́ʔų́ déʔų 'will-go will-see-thou' = 'thou wilt go to see') containing an auxiliary verb attribute and a main verb center inflected for second person; and the third clause consists of a dependent conjunction (wátĪ 'because'), a closed verb phrase (kunĪ nini ña 'want necessary she' = 'she really wants') (containing a verb center, a stative verb attribute, and a pronoun subject attribute), a subject noun (mariā 'Mary'), and an adverb marker (čįʔų 'd.o. -thee') inflected for second person.

G36 is the most involved compound centered sentence in this text. It contains two independent transitive clauses, three independent intransitive clauses, and two transitive clauses in this order. The first clause is in emphatic order and contains a distal demonstrative pronoun (čǐká 'it-that' = 'that thing'), a closed verb phrase (nĪ kǐʔį rá 'c.a. took he' = 'he took'), a noun subject (hoseē 'Joseph'), and a noun object (saʔma naa rá ahilĪ 'clothes carry he angel' = 'the clothes that the angel carried') that consists of a noun center and a transitive clause attribute (naa rá ahilĪ 'carry he angel' = 'the angel carried') with a closed verb phrase and noun subject. The second clause contains an independent conjunction and a closed verb phrase (nĪ čákúdǐči rá 'c.a. be-clothed he' = 'he got dressed') whose verb stem consists of the completive derivational prefix (čá-) that precedes the incompletive stem (kúdǐči 'be-dressed') described in G32. The third clause contains an independent conjunction and a closed verb phrase (nĪ kée rá 'c.a. left he' = 'he left'). The fourth and fifth clauses contain an independent conjunction and a closed verb phrase (qáʔá rá 'went he' = 'he went' and kéta rá 'arrived he' = 'he arrived', respectively). The sixth clause contains an independent conjunction, a closed verb phrase (kečáʔa katĪ rá 'began say he' = 'he started to say'), an object quotation, and a reiterated closed verb phrase (katĪ rá 'say he' = 'he says') with noun subject

(hoseē 'Joseph') and adverbial pronoun phrase (čį?į ña 'to her'). The object quo-
tation is a compound centered sentence with an independent equational clause, an
independent intransitive clause in emphatic order, and an independent equational clause
in emphatic order. The first of these three clauses contains a prelink subject question
marker (ñáá 'what'), a link (kuu 'is'), and a postlink pronoun phrase (čí kuu čį?į̧
'it art-thou to-me' = 'dost thou want with me') containing a pronoun center that is
prelink of the clause that follows it and whose center is the verb (kuu 'art-thou')
inflected for second person that is followed by the adverbial marker (čį?į̧ 'to-me')
inflected for first person. The second of these three clauses contains an emphatic
subject pronoun phrase (yú?ú rá da?wĪ 'I he poor' = 'poor me') and a stative verb
attribute (dasi 'messy') and an active verb center (kaĪ 'appear-I' = 'I appear')
inflected for first person and agreeing with the emphatic subject pronoun phrase. The
third of these three clauses contains an independent conjunction, an emphatic subject
pronoun (yo?ō 'thou'), a prelink noun phrase (ña?a wá?á diča 'woman good true' =
'fine woman'), and a verb (kuu 'art-thou' = 'thou art'). The last of the seven main
clauses of the sentence contains an independent conjunction, a closed verb phrase
(kēčá?a katĪ ña 'began say she' = 'she said'), a noun subject (mariā 'Mary'),
and an object quotation that is a simple centered sentence introduced by wátĪ 'because'.
It contains an open imperative verb phrase (ná tĬ 'let will-touch' = 'let touch'),
and an object noun phrase (túyóō tu?ú Ya 'cane smooth this' = 'this cane pole') with
a noun center, noun attribute, and neutral demonstrative pronoun.

G37 is also a complex centered sentence. Its clauses are dependent intransitive,
independent equational in emphatic order, dependent transitive in emphatic order,
independent intransitive in emphatic order, and independent transitive in emphatic
order. The first clause contains a dependent conjunction (tu 'if'), a verb (kána
'will-sprout'), and a subject noun phrase (ĺtá čĺ 'flower it = 'its flower'). The
second clause contains an inflected adverbial marker (čį?u 'to-thee') and an inflected
equational verb (kuĪ 'am-I' = 'I am'). The third clause contains a dependent con-
junction (wátĪ 'because'); an emphatic subject pronoun phrase (di?i rá dekū i?ya
'all he sit here' = 'all of them sitting here') that consists of a numeral attribute, a
pronoun center, an active verb attribute, and a locative adverb attributive to the pre-
ceding verb; an open verb phrase (ča kĬči tĬ 'already came touched' = 'already
came and touched') of preverb, auxiliary verb attribute, and main verb center; a sub-
ject pronoun phrase (rá taa rá 'he and he' = 'they') of pronoun, conjunction, pro-
noun; and a pronoun object (čĺ 'it'). The fourth clause (taa ñá?ni ĺtá čĺ kána
'and none flower it sprouted' = 'and none of its flowers sprouted') is identical with
the last clause of G11. The last clause contains a dependent conjunction (soko 'but'),
an emphatic subject pronoun (yo?ō 'thou'), an open verb phrase (ná tĬ 'let will-
touch' = 'let touch'), and an object pronoun (čĺ 'it').

G38 is a simple centered sentence with an independent transitive clause in empha-
tic order. Its object quotation is a complex centered sentence with a dependent
intransitive clause and an independent equational clause. The dependent clause con-
tains a dependent conjunction (tu 'if'), a verb (kána 'will-sprout'), and a subject
noun phrase (ĺtá čĺ 'flower it' = 'its flowers'), and the independent clause contains
a prelink inflected marker (čį?u 'to-thee' = 'thine'), and an inflected link (kuĪ 'am-

I' = 'I am'). Following this object come the verb phrase (katī̠ ña 'say she' = 'she says') and the noun subject (marī̠a 'Mary').

G39 is a compound centered sentence with an independent equational clause, three independent transitive clauses, and an independent intransitive clause. The first clause contains a prelink demonstrative pronoun (čḭ́ká 'it-that' = 'that thing'), a linking verb (kuu 'is'), and a postlink pronoun phrase (čḭ́ nḭ́ kḭ̃́cḭ rá hoseē 'it c.a. came he Joseph' = 'Joseph came') that consists of the pronoun center followed by an intransitive clause of closed verb phrase and noun subject. The second clause contains an independent conjunction, a closed verb phrase (nḭ́ tḭ̃́ḭ rá 'c.a. touched he' = 'he touched'), and an object noun phrase (tú̠yóō tu̠ʔu ka 'cane smooth that' = 'that cane pole'). The third and fourth clauses contain an independent conjunction and closed verb phrases (sádaa̠ rá 'made-rise he' = 'he raised' and sánu̠u diko rá 'made-lower return he' = 'he lowered', respectively). The fifth clause contains an independent conjunction, an open verb phrase (kána ni 'sprouted just' = 'just sprouted'), and, in addition, a subject noun phrase (ḭ́ta čḭ́ 'flower it' = 'its flowers').

G40 is a compound centered sentence with an independent stative clause, two independent intransitive clauses, and an independent transitive clause. The first clause contains an open stative verb phrase (taki šáá̠ 'pretty angry' = 'very pretty') and a subject noun phrase (ḭ́tá čḭ́ nḭ́ kána 'flower it c.a. sprouted' = 'its flowers sprouted') consisting of a noun center, a pronoun attribute, and a verb phrase attribute (nḭ́ kána 'c.a. sprouted'). The second clause contains an independent conjunction and a closed verb phrase (sá̠ nḭ́ kée ni ña 'immediately c.a. left just she' = 'she just left right now') that has two preverb attributes, a verb center, a restrictive marker attribute, and a subject pronoun attribute. The third clause contains an independent conjunction, a closed verb phrase (q̠á̠ʔá̠ ña 'went she' = 'she went'), and a pronoun object (rá 'him'). The fourth clause contains an independent conjunction, a closed verb phrase (kečá̠ʔa katī̠ rá 'began say he' = 'he began to say'), and an object quotation that is a complex centered sentence introduced by wátḭ́ 'because' with an independent intransitive clause and a dependent equational clause in emphatic order. The first clause within the quotation contains only a closed verb phrase (ñá kú̠ʔú̠ 'not will-go-thou' = 'don't go!'); the other clause contains a dependent conjunction (wátḭ́ 'because'), a subject noun phrase (yú̠ʔú rá daʔwḭ̄ 'I he poor' = 'poor me'), a prelink noun phrase (rá̠ḭ́ daʔwḭ̄ 'man poor' = 'poor man'), and an inflected link (kuḭ̄ 'am-I' = 'I am').

G41 and G42 are clause fragments. G41 is a noun phrase (ñá̠ʔni weʔḭ̄ 'none house-I' = 'I don't have a house') with a numeral attribute and noun center. G42 consists solely of the numeral (ñá̠ʔni 'none').

G43 is a compound centered sentence whose two independent transitive clauses have no link. The clause contains an inflected verb (iyē̠ 'am-I' = 'I am'), and a locative noun phrase (tḭ̃́cḭ́ kū̠ʔu̠ 'stomach woods' = 'in the woods') consisting of locative noun center and noun attribute. The second clause contains a closed verb phrase (satḭ̃́nú ḭ́ 'make-work I' = 'I work') in which ḭ́ 'I' is the familiar pronoun. satḭ̃́nú 'work' is composed of the derivational prefix sa- followed by the noun tḭ̃́nú 'work'.

G44 is a complex centered sentence with an independent intransitive clause and a dependent equational clause. The intransitive clause contains a closed verb phrase (ñá kų́ʔų́ 'not will-go-thou' = 'don't go!') and an inflected adverb marker (čįʔį 'with-me'). The equational clause contains a dependent conjunction (wátí 'because'), a prelink noun phrase (ráí daʔwĭ 'man poor' = 'poor man') and an inflected verb link (kuĭ 'am-I' = 'I am').

G45 is a simple centered sentence with a stative clause that contains an open stative verb phrase (wáʔá 'good').

G46 is a simple centered sentence; it is an independent transitive clause in emphatic order. The object quotation, very similiar to the second clause of G20, is a simple centered sentence with an independent equational clause in emphatic order containing a subject pronoun (yoʔō 'thou'), a prelink noun phrase (ñaʔa wáʔá dìča 'woman good true' = 'fine woman') and an inflected link (kuų 'art-thou' = 'thou art'). A closed verb phrase (katĬ rá 'say he' = 'he says') follows the object.

G47 is the only complex uncentered sentence in the text. It contains a dependent intransitive clause and a dependent equational clause. The intransitive clause contains a dependent conjunction (soko 'but'), a closed verb phrase (gá kų́ʔí 'i.a. will-go-I' = 'I will go'), and an inflected adverbial marker (čįʔu 'with-thee'); and the equational clause contains an inflected prelink (čįʔu 'to-thee' = 'thine') and a verb link (kuĬ 'am-I' = 'I am') after the dependent conjunction (wátí 'because').

G48 is a complex centered sentence containing an independent transitive clause in emphatic order, an independent intransitive clause in emphatic order, and a dependent transitive clause. The first clause contains an object quotation that consists of an emphatic demonstrative pronoun (číká 'it-that' = 'that thing'), an open verb phrase (nĭ kána 'c.a. sprouted'), and a subject noun phrase (ĭtá číyá čí nĭ tĭu čí 'flower it-this c.a. touched-thou it' = 'this flower that thou touched') consisting of a noun center, pronoun attribute, and attributive pronoun phrase (čí nĭ tĭu čí 'it c.a. touched-thou it' = 'that thou touched') in which čí 'it' is the pronoun center and the clause is attribute; a closed verb phrase (katĬ ña 'say she' = 'she says'); a subject noun (mariā 'Mary'); and an adverbial pronoun phrase (čįʔį rá 'to him'). The second clause contains an independent conjunction; a subject pronoun phrase (rá qíʔná 'he demon' = 'the demon') with a pronoun center and a noun attribute; an open verb phrase (kečáʔa nĭ ká kani taʔa 'began just more hit companion' = 'just began to fight each other') with an auxiliary verb attribute, an attributive restrictive marker, an attributive additive marker, a verb center, and a noun attribute; and a subject pronoun phrase (maa rá taa rá 'this he and he' = 'they') with a general numeral attribute and two coordinate pronoun centers joined by a conjunction. The third clause contains a dependent conjunction (wátí 'because'); a closed verb phrase (ñá nĭ nĭʔí rá 'not c.a. found he' = 'he did not find') with two preverb attributes, a verb center, and a pronoun subject; and an object pronoun phrase (čįʔį ña mariā 'd.o. her Mary' = 'Mary').

G49 is a simple centered sentence with an independent equational clause. Its pre-
link is the demonstrative pronoun číká 'it-that' = 'that thing'; its link is the verb
kuu 'is'; and its postlink is the pronoun phrase čí orā ni ka kečáʔa duku kaʔni
rá qíʔná čiʔi rá hoseē čiʔi ña marīā 'it hour just that began look kill he demon
d.o. he Joseph d.o. she Mary' = 'just at that moment he began to look for a way to kill
both Joseph and Mary'. Everything following čí 'it' is an independent transitive
clause in emphatic order. The constituents of the clause are: a locative noun phrase
(orā ni ka 'hour just that' = 'that moment') with a noun center, a restrictive marker
attribute, and a pronoun attribute; a closed verb phrase (kečáʔa duku kaʔni rá
'began look kill he' = 'he began to look for a way to kill') with an auxiliary verb
attribute, a main verb center, an active verb attribute, and a subject pronoun attribute;
a subject noun (qíʔná 'demon'); and an object pronoun phrase (čiʔi ra hoseē čiʔi
ña marīā 'd.o. he Joseph d.o. she Mary' = 'Joseph and Mary') with an object marker
attribute, a pronoun center, a noun attribute, and a second pronoun phrase of the same
shape as the first and in apposition with it.

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